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Cotutelle with the University of Kent

Division of Human and Social Sciences School of Anthropology and Conservation

The Appropriation and Circulation of Evolutionary Science in the Contemporary US and English-Speaking Manosphere

By Louis BACHAUD

In Fulfillment of the Requirements for PhD in Anglophone Studies and Anthropology

Supervised by Hélène QUANQUIN and Sarah JOHNS

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L'appropriation et la circulation des sciences

évolutionnaires dans la manosphère

contemporaine étatsunienne et anglophone

Par Louis BACHAUD

Thèse de doctorat en études anglophones et en anthropologie

Sous la direction de : Hélène QUANQUIN et Sarah JOHNS

Soutenue le 17 décembre 2024 :

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Title : The Appropriation and Circulation of Evolutionary Science in the Contemporary US and English-Speaking Manosphere.

Abstract : The manosphere is a collection of antifeminist men's groups. They are united by their enthusiasm for Darwinian evolution, especially around issues of sex differences. This research examines manosphere appropriations of evolutionary science from three angles. Firstly, it assesses the scientific literacy of manospherians with a survey, revealing relatively high levels of college science education and scientific literacy. Secondly, through qualitative discourse analysis, it thoroughly reviews the appropriations of evolutionary science found in the manosphere. Overall, manospherians tend to disproportionately apply biological theories to women, making for a uniform and strongly deterministic view of female behavior. Moreover, they also create their own evolutionary hypotheses to make sense of the world through a Darwinian lens. Yet, appropriations of evolutionary science vary between manosphere communities, depending on their political aims and narratives. Running through all these appropriations however is a presence of misogynistic biases, as well as exaggeration and simplification of academic research results. To understand this phenomenon better, this work finally explores scientific knowledge circulation and acquisition in the manosphere.

Keywords : Manosphere; Sex Differences; Evolutionary Biology; Evolutionary Psychology; Men's Rights Activists; Pickup-Artists; The Red Pill; MGTOW; Incels. **Word Count:** 192,700.

Titre : L'appropriation et la circulation des sciences évolutionnaires dans la manosphère contemporaine étatsunienne et anglophone.

Résumé : La manosphère est un ensemble de groupes d'hommes masculinistes. Ils sont unis par leur enthousiasme pour l'évolution darwinienne, particulièrement au sujet des différences femmes/hommes. Dans cette recherche, l'appropriation masculiniste des sciences évolutionnaires est étudiée sous trois angles. Premièrement, une quantification par sondage de la culture scientifique de ces hommes révèle des niveaux de connaissance et d'éducation scientifique dans le supérieur assez élevés. Deuxièmement, par l'analyse qualitative de discours, les appropriations idéologiques des sciences évolutionnaires dans la manosphère sont étudiées. Cette analyse révèle que les théories biologiques du comportement sont disproportionnément appliquées aux femmes, d'une manière simpliste, ce qui crée une vision totalement homogène du comportement féminin. De plus, ces militants en ligne créent leurs propres hypothèses évolutionnaires pour expliquer le monde par un prisme darwinien. Cependant, ces appropriations varient selon les communautés, en fonction de leurs objectifs et de leurs récits politiques. Au-delà de toutes ces variations, on retrouve dans chaque communauté la présence de biais misogynes, et d'interprétations exagérées ou erronées des résultats de recherche provenant des sciences évolutionnaires. Enfin, pour mieux comprendre les mécaniques du phénomène, ce travail explore l'acquisition et la circulation des savoirs scientifiques dans la manosphère.

Mots clefs : Manosphère ; masculinisme ; différences femmes/hommes ; biologie évolutionnaire ; psychologie évolutionnaire ; Pickup-Artists ; The Red Pill ; MGTOW ; incels. **Nombre de mots :** 192 700.

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Trigger Warning

The present dissertation focuses on Internet communities, collectively known as "the manosphere," and contains citations as well as hyperlinks towards Internet content. This content can be potentially shocking, with slurs and profanity, calls to violence, misogyny, homophobia, antisemitism, or racism. However, in order to faithfully render phenomena, I believe it is important to depict people and communities through their own words. Therefore, when cited, such shocking or hateful content was not edited or sanitized. Likewise, the hyperlinks can lead to potentially disturbing web pages.

Notes on the Text

1) Citing Internet Content

For online content citations, two separate cases were established. On the one hand, full citations are provided for public activists and content creators, such as writers, bloggers or YouTubers. On the other hand, posts and comments from pseudonymous Internet users, such as found on forums or social media, were subjected to enhanced data protection measures. In the dissertation, they are fully anonymized, and no hyperlinks towards the original web pages are provided. Such citations are followed by parentheses, with the manosphere community of the poster, and the year of the post—e.g., (incel, 2014).¹

The first PhD dissertation on the manosphere was written by Mary Lily and published in 2016. In her analysis of manosphere content, she strove to "capture the language as it is," and to "represent the discourse most accurately in all its colours."² For that reason, she refrained from the use of 'sic' after grammatical, spelling and syntax errors. I will adopt the same practice: cited content should be assumed to be accurately reproduced, and all emphases (bold/italics) in quotes should be assumed to be original unless stated. Lastly, the cited material contains an abundance of Internet/manosphere jargon. A glossary of terms is therefore provided in the Appendixes.³

2) Writing about the Manosphere: Word Choices

The manosphere is divided into various subgroups, with their respective platforms, jargon, and ideology, which are detailed in Chapter I: The Manosphere. There is however no accepted term to refer to those. For agreeability of reading, they are interchangeably referred to as manosphere "groups," "branches," and "communities" throughout the dissertation. These words have different meanings and connotations, none of which is exactly suited to the purpose. Moreover, terms such as "community" are notoriously blurry.⁴ However, for ease of reading, I decided to use pre-existing and easily understandable vernacular terms.

Referring to the people of the manosphere, the writers, posters, and commenters, is not straightforward either. Again, no word perfectly fits the purpose. For example, speaking of manosphere "members" conveys a misleading impression of institutionalized membership. I am

¹ These Data Protection measures were ethically approved by the Universities of Kent and Lille (Ethics ID respectively 8-PGR-20/21 and QSMDC 2021-478-S91). For more details on the Ethics Protocol and rationale behind those decisions, see Appendix 3, 468. These measures were declared compliant with the European General Data Protection Regulation (GDPR) after submission by the University of Lille's Data Protection Officer, see Appendix 4, 478.

² Mary Lily, "'The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere" (PhD dissertation, University of Ottawa, 2016), <u>http://dx.doi.org/10.20381/ruor-5184</u>.

³ See Appendix 30, 586.

⁴ There is no agreement on empirical criteria to define what communities really are. In his classic investigation of the concept, sociologist George Hillery analyzed ninety-four different academic definitions of "community" and found widespread disagreements and contradictions. He concluded: "There is one element [...] which can be found in all of the concepts [...]: all of the definitions deal with people. Beyond this common basis, there is no agreement." George Hillery jr., "Definitions of Community: Areas of Agreement," *Rural Sociology* 20, no. 2 (1955): 111–23, 117. Yet, the concept has proved influential in many fields of social analysis since, e.g., Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism* (London and New York: Verso, 1983). I will be using the word throughout this dissertation, particularly when foregrounding the collective aspects of manosphere groups.

thus using the word "manospherian" throughout the dissertation. It is a rare term in the manosphere itself, because people usually identify by their subgroup-affiliation, and might not even recognize or appreciate that label. Yet, it has been used by prominent manosphere writers,⁵ and on popular online platforms.⁶ Although far from perfect, it is the most parsimonious and appropriate option.

There are women in the manosphere.⁷ However, it overwhelmingly attracts men, and is centered around their interests and perspectives. Consequently, the term "manospherian" is used with the masculine grammatical gender in this dissertation. Indeed, systematic use of the gender-neutral form would convey a misleading impression. When discussing a citation from a pseudonymous manospherian, he will be assumed to be male, unless there are clear indications of the contrary.

3) Writing about the Manosphere: Typographical Choices

"Manosphere" can be written with or without a capital letter. Since it has now entered the Cambridge Dictionary without capitalization, this dissertation follows suit.⁸ Moreover, uncapitalized uses of the term have now widely overtaken capitalized uses.⁹ For manosphere communities, the ones that have commonly used acronyms, i.e., Men's Rights Activists (MRAs), Pickup-Artists (PUAs), The Red Pill (TRP), and Men Going Their Own Way (MGTOW), are capitalized. Incels is the only group name without an acronym, and is therefore not capitalized.¹⁰

4) Archived URLs

To avoid obsolescence of cited URLs, these were archived. With archival, the webpage is stored by a third-party host and accessible with a new URL, even if the original webpage becomes inaccessible. This is particularly important for manosphere research, since there are a lot of platform bans and migrations, and hyperlinks thus become obsolete very fast. Archival was done with The Internet Archive, a well-established free nonprofit service, which has already stored more than 800 billion web pages.¹¹ Instead of access dates, footnotes throughout the dissertation therefore refer to archival dates of the cited webpages. Sometimes, webpage display is poor on the Internet Archive; thankfully, archived URLs contain useful information, including original URLs, as detailed in figure 0.1 below:

¹⁰ For definitions of all these groups, see Chap I, B, 52-67.

⁵ E.g., Paul Elam, *Men. Women. Relationships: Surviving the Plague of Modern Masculinity* (London: LPS Publishing, 2019).

⁶ E.g., Incels.wiki, "Nice Guy," <u>https://web.archive.org/web/20230601192006/https://incels.wiki/w/Nice guy</u>, archived June 1, 2023.

⁷ Most notably among Men's Rights Activists, for more details on female manospherians, see Chap. I, 56. ⁸ Cambridge Online Dictionary, "Manosphere",

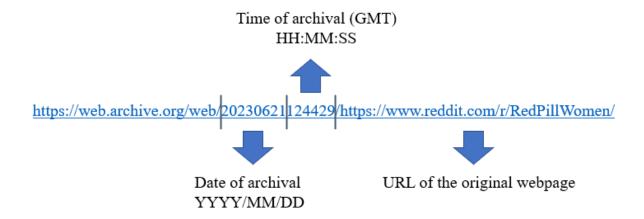
https://web.archive.org/web/20230116130323/https://dictionary.cambridge.org/dictionary/english/manosphere, archived January 16, 2023.

⁹ Uses of the capitalized and uncapitalized term in a corpus of millions of digitized books are compared here with Google Ngram:

https://web.archive.org/web/20230621150501/https://books.google.com/ngrams/graph?content=Manosphere%2C+m anosphere&year start=2010&year end=2019&corpus=en-2019&smoothing=3, generated and archived June 21, 2023. For more details on Google Ngram, see footnote n°201, 51.

¹¹ <u>https://archive.org/</u>, accessed June 21, 2023 (The Internet Archive's webpages themselves cannot be archived).

Figure 0.1: Reading an Internet Archive URL



With the development of Internet research, citing archived URLs should become the norm, to maintain durability and relevance of academic work. Admittedly, this depends on the durability of The Internet Archive itself, but this non-profit has been operating since 1996 and is well-funded.¹²

5) Website and Platform Names

One of the challenges of Internet research is the fast pace of online change. Such change can result in name changes for websites. This was the case for the main incel forum, incels.is (Iceland), which has changed servers and used to be called incels.me (Mexico) and incels.co (Columbia). Likewise, US social media company Twitter was renamed X in July 2023. For ease of reading, I refer to those websites by the names they had throughout most of the research in my most of my sources, i.e., incels.is, and Twitter.

6) Referencing

Referencing was done following the Chicago Manual of Style, 17th edition, with footnotes and a bibliography.¹³

¹² For a list of funders, see <u>https://archive.org/about/</u>, accessed June 21, 2023 (The Internet Archive's webpages themselves cannot be archived). In the few cases where archival did not function with the Internet Archive, another similar service called archive.today was used. See, <u>https://archive.is/</u>, accessed June 21, 2023 (archive.today's homepage itself cannot be archived). URLs from that archive do not contain intelligible information.

¹³ University of Chicago Press, *The Chicago Manual of Style*, 17th ed. (Chicago and London: University of Chicago Press, 2017). See Cited Materials and Bibliography, 407.

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INTRODUCTION:

Biological Sex Differences, Gender Politics, and the Manosphere

In July 2017, US Google engineer James Damore circulated a memo on the company's internal mailing list entitled "Google's Ideological Echo Chamber."¹⁴ In the memo, the young employee questioned the California tech giant's diversity and affirmative action policies. To him, the company wrongly assumed that the absence of women from software engineering and leadership positions was necessarily due to discrimination. Citing scientific research in his footnoted argument, Damore laid out another explanation: maybe some gender differences in career achievement were due to biological sex differences. "I'm simply stating that the distribution of preferences and abilities of men and women differ in part due to biological causes and that these differences may explain why we don't see equal representation of women in tech and leadership," he wrote.¹⁵ By using the term "biological," Damore meant that those differences could not be assumed to be "just socially constructed" for a variety of reasons:

"They're universal across human cultures

They often have clear biological causes and links to prenatal testosterone

Biological males that were castrated at birth and raised as females often still identify and act like males

The underlying traits are highly heritable

They're exactly what we would predict from an evolutionary psychology perspective"¹⁶

Despite stressing these "biological causes," Damore did not endorse the status quo of male overrepresentation at Google. Instead, he suggested measures which took into account what he saw as fundamental differences between the sexes:

"Women on average are more prone to anxiety.

• Make tech and leadership less stressful. Google already partly does this with its many stress reduction courses and benefits.

Women on average look for more work-life balance while men have a higher drive for status on average

 Unfortunately, as long as tech and leadership remain high status, lucrative careers, men may disproportionately want to be in them. Allowing and truly endorsing (as part of our culture) part time work though can keep more women in tech."¹⁷

After the memo was leaked in the media, provoking a flurry of outrage, Damore was fired by Google. In an internal note, the company's CEO Sundar Pichai justified this decision: "To suggest a group of our colleagues have traits that make them less biologically suited to that work is offensive and not OK," he wrote.¹⁸ Damore soon became an Internet and media celebrity, wrote

¹⁴ To see the memo's text, James Damore, "Google's Ideological Echo Chamber," July 2017, <u>https://web.archive.org/web/20170809021151/https://diversitymemo.com/</u>, archived July 8, 2024.
¹⁵ Ibid.

¹⁶ Ibid.

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¹⁷ Ibid.

¹⁸ Cited in Paul Lewis, "'I See Things Differently': James Damore on His Autism and the Google Memo," *The Guardian*, November 7, 2017,

his story for the *Wall Street Journal*,¹⁹ was interviewed in the *Guardian*²⁰ and was invited by many conservative and Alt-Right pundits on their YouTube channels.²¹ Scientists weighed in on the memo's evidence, with evolutionary scientists supporting some of its main assumptions, and others rejecting it.²² The Google memo scandal thus became embroiled in much broader ideological-cumscientific debates around the biology of sex differences. On the one hand, Google seemed to stand publicly for the feminist gender constructionist perspective, according to which discrimination and social factors could account for most, if not all gender differences in personality, skills, and subsequent career choices and outcomes. This position is often labeled by its critics as the "blank slate," i.e., the idea that human behavior can be explained by cultural forces alone, and that biology is irrelevant to account for the life of our uniquely complex species.²³ On the other hand, rightwing pundits joined with Damore in insisting that innate sex differences could explain patterns of employment. To make their case, evolutionary psychology—which is explicitly mentioned in the memo—was the discipline of choice.²⁴

However, when writing his memo, Damore did not solely base his argument on the state of the art of evolutionary science. He also explained Google's concerns for gender equality in the workplace by the fact that "humans are generally biased towards protecting females," which "likely evolved because males are biologically disposable."²⁵ Yet, this argument about male disposability does not stem from evolutionary science, but from the writings of Warren Farrell, a key figure of

https://web.archive.org/web/20240708161543/https://www.theguardian.com/technology/2017/nov/16/james-damore-google-memo-interview-autism-regrets, archived July 8, 2024.

¹⁹ James Damore, "Why I Was Fired by Google," *Wall Street Journal*, August 11, 2017, <u>https://web.archive.org/web/20240708161908/https://www.wsj.com/articles/why-i-was-fired-by-google-</u> 1502481290, archived July 8, 2024.

²⁰ Lewis, "I See Things Differently."

²¹ Such as Canadian psychologist and popular author Jordan Peterson and Canadian white nationalist podcaster Stefan Molyneux. For more on Jordan Peterson, see footnote n°208, 52. The Alt-Right (for Alternative Right) is defined by scholars as "an international set of groups and individuals, operating primarily online though with offline outlets, whose core belief is that 'white identity' is under attack from pro-multicultural and liberal elites and socalled 'social justice warriors' (SJWs) who allegedly use 'political correctness' to undermine Western civilisation and the rights of white males. Put simply, the 'Alternative Right' is a far right, anti-globalist grouping that offers a radical 'alternative' to traditional/establishment conservatism.[...] All reject what they believe to be the left-wing, liberal democratic, cultural hegemony in Western society and the rights derived from it. They reject what leading alt-right figure Jared Taylor has called the 'dangerous myth' of equality which, in practice, means opposition to, *inter alia*, the rights of women, LGBT+ persons and ethnic and religious minorities or, if not these rights, at the very least the movements themselves that seek to advance those rights, such as feminism," Patrick Hermansson et al., *The International Alt-Right: Fascism for the 21st Century*? (London and New York: Routledge, 2020), 2.

²² For sympathetic reactions to the memo, see Lee Jussim et al., "The Google Memo: Four Scientists Respond," *Quillette*, August 7, 2017, <u>https://web.archive.org/web/20240701074238/https://quillette.com/2017/08/07/google-memo-four-scientists-respond/</u>, archived July 1, 2024; for a critical reaction, see Suzanne Sadedin, answer to "What do scientists think about the biological claims made in the document about diversity written by a Google employee in August 2017?," Quora, <u>https://archive.is/02Isy</u>, archived July 8, 2024.

²³ This concept was popularized by the massively influential book of Harvard psychologist Steven Pinker, *The Blank Slate: The Modern Denial of Human Nature* (New York: Penguin Books, 2002).

²⁴ The evolutionary behavioral sciences, including evolutionary psychology, are presented in Chap. II, B, 115-120.

²⁵ Damore, "Google's Ideological Echo Chamber." For a scientific critique of this male disposability narrative, see Chap. V, A, 230-236.

the antifeminist Men's Rights movement who will be a recurring character in this dissertation.²⁶ As revealed by the *Guardian*, Damore, who self-identifies as a libertarian-leaning centrist, had indeed read Farrell's 1993 *The Myth of Male Power*, in which feminist frameworks are turned upside down and society is presented as impervious to male suffering and prone to put women on pedestals.²⁷

From the ideological crucible of the early Men's Rights movements, whose roots stretch back to the 1970s, and with the rise of the Internet in the 1990s, an online conglomerate of antifeminist men's groups known as the "manosphere" emerged.²⁸ Among these groups is the "Red Pill" community, where heterosexual men share seduction, dating, and relationship advice based on an adversarial vision of gender dynamics grounded in evolutionary psychology. On Reddit, one of the manosphere's favorite social media platforms, the Damore controversy was heavily discussed, becoming the Red Pill community's most popular discussion thread of all time. Among the hundreds of men discussing the events, there was unanimous agreement that the Google engineer was fired for stating uncomfortable biological truths that are common knowledge in the manosphere, as expressed by one of them: "This is what happens when truth is spread, targeted attempts at silencing it." (TRP, 2017)

Indeed, although the manosphere is home to various communities and subgroups with different agendas and interests, these are united by their enthusiasm for biological accounts of sex differences.²⁹ Men's Rights Activists claim that males are biologically disposable, which results in unfavorable cultural norms towards men. Dating coaches of the Pickup-Artist (PUA) community write book-length guides aiming to teach men how to leverage fundamental psychological differences between men and women in their seduction endeavors. Involuntary celibates (incels) attribute their celibacy to the inferior genes which doom them to a life of sexual rejection by choosy females.³⁰ In all those cases, both the rank-and-file and key ideologists in those groups claim to be grounding their ideas in scientific research, chief among which is evolutionary scientific research. In those spaces, feminism, gender constructionism, and the "blank slate" are lambasted as politically motivated wishful thinking which does not fit available data.

At the core of this political divide lies the perennial nature vs nurture debate: can psychological and behavioral differences between human groups, or between men and women be attributed to environmental factors, such as climate, parenting, or nutrition, or by heritable genetic differences? Virtually all scientists studying these issues now agree that this dichotomous framing of the question is too simplistic, as expressed by evolutionary biologist Suzanne Sadedin in her critique of the Damore memo:

²⁶ Warren Farrell (born in New York in 1943) is a political scientist turned writer and activist who has dedicated his life to writing about and discussing gender issues. For historical details about Farrel's activism, see Chap. I, A, 33. For details on the interview I conducted with him, Chap. III, C, 161.

²⁷ Lewis, "'I See Things Differently.'" Warren Farrell, *The Myth of Male Power: Why Men Are the Disposable Sex* (London: Fourth Estate, 1994). For more details on Farrell's *Myth of Male Power*, see Chap. I, 41-42.

²⁸ For a history and genealogy of the contemporary manosphere, see Chap. I, 30.

²⁹ The historical, ideological, and organizational features of each community are described in Chap. I, B, 50.

³⁰ A group-by-group breakdown of manosphere appropriations of evolutionary science is provided in Chap. V, 228.

"This nature versus nurture dichotomy is completely outdated and nobody in the field takes it seriously. Rather, modern research is based on the much more biologically reasonable view that neurological traits develop over time under the simultaneous influence of epigenetic, genetic and environmental influences. Everything about humans involves both nature and nurture."³¹

As an empirical question, the nature vs nurture, or sex vs gender debate is therefore extremely difficult to unravel. When men and women diverge on a given trait such as competitiveness, this could be caused by a combination of factors, some of which are considered "biological" (such as testosterone levels or sex drive) and some of which are considered "cultural" (such as gendered socialization or institutional norms). In fact, this biological vs cultural dichotomy, while intuitive, is too simplistic to account for the myriads of ways in which all these factors interact with each other: for example, genes can be activated or not depending on the environment (which is called "gene expression"), hormone levels are highly reactive to different situations, etc.³² Throughout this work, I will refer to this hegemonic view in the life sciences as the "interactionist" framework or model, as illustrated by Sadedin's arguments.

However, what is at core an empirical question has long also been a political one. As a reaction to scientific racism, eugenics, and particularly after the horrors of Nazism, most hereditarian or biological accounts of human behavior were discredited and seen as inherently reactionary and dangerous in the post-WWII era.³³ Yet, science kept on developing. Today, a variety of fields, propelled by advances in genetics, statistics, evolutionary theory, endocrinology, or cognitive science, study human behavior and societies through a Darwinian lens. In the evolutionary behavioral sciences, Charles Darwin's theory of evolution by natural selection remains the theoretical cornerstone to understand human life, just as it sheds light on every living organism, from viruses and bacteria to plants and nonhuman animals. From the 1960s onwards, in the political debates around the science of sex and gender, these disciplines have proved very controversial, since they explicitly link human behavior to genetics via evolutionary theory.³⁴ As shown by the polarized reactions to the Damore memo, these ideological "science wars" are still raging today, with different sides picking opposing exaggerated views, whether progressives' "blank slate" or the extreme biological determinism of the manosphere.³⁵

In the present dissertation, I aim to explore the manosphere side of the phenomenon. Indeed, there has been growing attention to this nebulous assemblage of antifeminist men's groups from researchers and the press,³⁶ as their ideology has spread and mutated online, and as a few

³¹ Suzanne Sadedin, answer to "What do Scientists Think about the Biological Claims Made in the Document about Diversity Written by a Google Employee in August 2017?," Quora, <u>https://archive.is/02Isy</u>, archived July 8, 2024. ³² This crucial point is developed at length in Chap. II, A, 109-111.

³³ This history is sketched in Chap II, 94.

³⁴ These controversies are reviewed and analyzed throughout Chap II, 94.

³⁵ For contemporary political controversies surrounding scientific research, see Alice Dreger, *Galileo's Middle Finger* (New York: Penguin Press, 2015). For academic conflict between pro-science advocates and critical scholars in the social sciences and humanities, see Ullica Segerstråle, ed., *Beyond the Science Wars: The Missing Discourse about Science and Society* (Albany: State University of New York Press, 2000).

³⁶ For an exhaustive literature review of manosphere research, see Chap I, C, 79.

radicalized men have committed terror attacks.³⁷ But little is known about the vision of human nature underlying these groups' ideologies. Yet, one cannot but help be struck by the popularity of evolutionary science in those online spaces. The manosphere is home to enthusiastic Darwinians, who could not be further from the creationist beliefs of the US evangelical Right.³⁸ Whether discussing social structures or individual behavior, manosphere discourse offers to the curious lay reader a bizarre worldview where humans are often reduced to competing genes and reproductive strategies. This type of thinking, however, is quite familiar to evolutionary scientists, who employ it on a daily basis. Discussing the manosphere in a 2024 *Boston Globe* article, UC Santa Barbara evolutionary psychologist Daniel Conroy-Beam thus wrote: "Peering into the manosphere has been like walking through a funhouse mirror version of my science. The manosphere view of evolutionary psychology is distorted, filtered, selective, and embellished."³⁹

How exactly is evolutionary psychology distorted in manosphere discourse and ideology? How are Darwinian principles invoked to support these groups' antifeminist political agenda? These were guiding questions throughout this research. Looming even larger over these queries, as over the Damore controversy, is the issue of sex differences, and the view of women promoted by evolutionary science: is it inherently sexist, and if not, why is it so amenable to being appropriated in sexist ways? Indeed, it is clear that the manosphere is home to high levels of misogyny, with one of its main platforms even listed as a "hate group" by the Southern Poverty Law Center for its "vilification of women."⁴⁰ Oftentimes, this misogyny is framed by manospherians as a simple reminder that "men and women are different." In fact, Suzanne Sadedin, the evolutionary biologist who criticized the Damore memo, acknowledged that "some parts seemed very reasonable," and that "[t]o an evolutionary biologist, the idea that sex differences are purely socially constructed is simply implausible."⁴¹ However, she still called the memo "despicable trash" for its sexism and "hints of racism," which she argued had more to do with a "covert alt-right agenda" than with the state of scientific research.⁴²

Clearly, the issue is more complex than just accepting or rejecting the idea of biological differences between the sexes. Life sciences keep on amassing evidence of sex differences. For instance, the more we learn about the impact of hormones on behavior, the more behavioral sex differences will be uncovered, as males and females have different hormonal configurations and

³⁷ For a review of incel-motivated deathly attacks, estimating the death toll at around 50 since 2014, see Bruce Hoffman, Jacob Ware, and Ezra Shapiro, "Assessing the Threat of Incel Violence," *Studies in Conflict & Terrorism* 43, no. 7 (2020): 565–87, <u>https://doi.org/10.1080/1057610X.2020.1751459</u>.

³⁸ US creationist opposition to Darwinian evolution is addressed in Chap II, B, 131.

³⁹ Daniel Conroy-Beam, "How the Incels Warped My Research," *The Boston Globe*, May 16, 2024, <u>https://web.archive.org/web/20240615015137/https://www.bostonglobe.com/2024/05/16/opinion/evolutionary-</u>psychology-incel-manosphere/, archived June 15, 2024.

⁴⁰ Southern Poverty Law Center, "The Year in Hate: Trump Buoyed White Supremacists in 2017, Sparking Backlash Among Black Nationalist Groups,"

https://web.archive.org/web/20221123111508/https://www.splcenter.org/news/2018/02/21/year-hate-trump-buoyed-white-supremacists-2017-sparking-backlash-among-black-nationalist, archived November 23, 2022.

 ⁴¹ Suzanne Sadedin, answer to "What do Scientists Think about the Biological Claims Made in the Document about Diversity Written by a Google Employee in August 2017?," Quora, <u>https://archive.is/02Isy</u>, archived July 8, 2024.
 ⁴² Ibid.

responses.⁴³ Evolutionary theory is the grand theoretical framework which allows to guide scientific investigations and explanations for those differences, stating that over time, males and females have evolved different physical and behavioral traits to face their respective reproduction and survival challenges. This empirical knowledge is descriptive, and does not prescriptively dictate any course of action, nor validate any ideology over another. Yet, as Sadedin explains in another piece: "When it's presented to the public, that evidence mostly gets co-opted into ideological cannon fodder. Sometimes the interpretation is feminist, sometimes it's misogynistic, but **the data are neither**."

In the manosphere, enthusiasm for scientific research on sex differences is unabated. Antifeminist ideologues and pundit advance a Darwinian view of sex differences, buttressed by a mix of cutting-edge research, basic Darwinian principles, and evolutionary speculations, but also exhibiting double standards, exaggerations, and blatant misogyny. As a work of sociology of science, my research aims at disentangling this complex phenomenon. Doing so requires both a constant comparison with the scientific literature which is being thus appropriated, and a scrutiny of the specific ideological and political landscape of the manosphere, a combination which fills a gap in the manosphere research literature.

Literature Review and Research Positioning

Social scientists studying the manosphere have long recognized the importance of evolutionary sciences, and in particular evolutionary psychology, in manosphere ideology. In one of the earliest and most cited theoretical articles about the manosphere published in 2019, gender and media scholar Debbie Ging thus recognized that the "political rhetoric of the manosphere [...] is almost exclusively dominated by evolutionary psychology, which relies heavily on genetic determinism to explain male and female behavior in relation to sexual selection."⁴⁵ Two years later, in a short paper on the state of manosphere research, Ging and Murphy even included evolutionary psychology as one of the manosphere's defining features: "These formations are united in their antipathy toward feminism, their reliance on evolutionary psychology and their belief that Western civilization is under threat."⁴⁶ However, in spite of these acknowledgements, there have been very few studies specifically addressing the issue.

⁴³ E.g., Elizabeth Hampson, "Sex Differences in Cognition: Evidence for the Organizational-Activational Hypothesis"; Teresa Pigott et al., "Sex Differences in Anxiety Disorders," both in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford (New York: Oxford University Press, 2019), 43–66; 405–432.

⁴⁴ Suzanne Sadedin, answer to "What do Feminists Think of Distinct Gender Roles in Other Species, for Example, in Chickens?," Quora, <u>https://archive.is/aIDnO</u>, archived July 9, 2024.

⁴⁵ Debbie Ging, "Alphas, Betas, and Incels: Theorizing the Masculinities of the Manosphere," *Men and Masculinities* 22, no. 4 (2019): 638–57, <u>https://doi.org/10.1177/1097184X17706401</u>, 648-649.

⁴⁶ Debbie Ging and Shane Murphy, "Tracking the Pilling Pipeline: Limitations, Challenges and a Call for New Methodological Frameworks in Incel and Manosphere Research," *AoIR Selected Papers of Internet Research*, 2021, <u>https://doi.org/10.5210/spir.v2021i0.12174</u>, 1.

The earliest study of this topic is communication scholar Amanda Denes's critique of the most classic seduction guide in the manosphere.⁴⁷ Analyzing this text called *The Mystery Method*, she rightly points out that "it is clear from the beginning that this text operates within an evolutionary, essentialist perspective of the female sexual experience."⁴⁸ In fact, her research question on this text is, to my knowledge, the closest one to my own: "How is science used (and abused) to understand women's sexuality?"⁴⁹ The study provides an astute deconstruction of the problematic approach to women's consent found in the seduction guide, in which biology is used to depict female sexuality as fixed and monolithic, and thus as easy to control and manipulate for male readers.⁵⁰ This was also found by sociologist Rachel O' Neill during her ethnographic immersion inside the London branch of the Pickup-Artist "seduction community."⁵¹ As part of her observations and interviews, she noted how these men claimed to possess biological truths about women and sexuality, underpinned by evolutionary theory. This alleged expertise, she argued, functioned as a "lived ideology," which shaped these men's sense of self and gave them moral justification for pursuing their sexual urges. Lastly, in a study of the Red Pill community's discourse, sociologist Shawn Van Valkenburgh's emphasized widespread appropriation of evolutionary psychology. He does not believe however that the manosphere is based on "a superficial misrepresentation of EP," but instead accuses evolutionary scientists of being "implicated" in the construction of manosphere ideology, "thereby calling for sustained critical investigation of these supposedly value-neutral scientific discourses."52

These social scientists' research objectives are similar to mine. They apply a critical lens to manosphere discourse on sexuality and sex differences and point out the "the folk appropriation and misuse in the manosphere of evolutionary psychology,"⁵³ as "scientific theories are cherry-picked and selectively juxtaposed to create one's own truth that merely sounds scientific."⁵⁴ However, this research often shows no clear separation between criticisms of manosphere appropriations of evolutionary sciences and criticism of evolutionary sciences themselves. For example, at the end of her critique of the *Mystery Method*, Amanda Denes equates the two: "Thus, Mystery (2007), *like evolutionary theorists*, removes female agency and instead positions female sexuality as an essentialized experience that is beyond any single woman's control," she writes.⁵⁵

 ⁴⁷ Amanda Denes, "Biology as Consent: Problematizing the Scientific Approach to Seducing Women's Bodies," *Women's Studies International Forum* 34, no. 5 (2011): 411–19, <u>https://doi.org/10.1016/j.wsif.2011.05.002</u>.
 ⁴⁸ Ibid., 414.

⁴⁹ Ibid.

⁵⁰ Denes' analyses on this issue are prolonged in Chap. IV, B, 203-207.

⁵¹ Rachel O'Neill, *Seduction: Men, Masculinity, and Mediated Intimacy* (New York: John Wiley & Sons, 2018).

⁵² Shawn Van Valkenburgh, "Digesting the Red Pill: Masculinity and Neoliberalism in the Manosphere," *Men and Masculinities* 24, no. 1 (2018): 84–103, <u>https://doi.org/10.1177/1097184X18816118</u>, 92; 93. His claims are investigated in Chap. VII, D, which reviews contacts between evolutionary scientists and the manosphere, 369.

⁵³ Maddalena Cannito and Raffaella Ferrero Camoletto, "The Rules of Attraction: An Empirical Critique of Pseudoscientific Theories about Sex in the Manosphere," *Sexes* 3, no. 4 (2022): 593–607, https://doi.org/10.3390/sexes3040043, 594.

⁵⁴ Ibid.

⁵⁵ Denes, "Biology as Consent," 415 (emphasis mine). Claiming that evolutionary theory as a whole "removes female agency" is perplexing, considering the key role ascribed to female mammals' mate choice in sexual selection, a role which led some 19th-century feminists to cheer on Darwin's *Descent of Man*, as described above in Chap II, A, 99. Sarah Hrdy's research, a more recent evolutionary scientific defense of female agency, is presented in Chap II, B, 121.

In fact, throughout the article, she keeps subjecting evolutionary psychology to stereotypical charges that have been repeatedly debunked.⁵⁶ Existing social scientific research on the manosphere often presents a straw-man version of evolutionary psychology, mostly based on citing a handful of critical sources and outdated, contentious research, but rarely demonstrating firsthand knowledge of the field. This straw-man avatar of EP obscures the epistemological advances in the discipline, driven in no small part by feminist scientists within the field.⁵⁷

As a consequence, these researchers aim at deconstructing manosphere discourse on issues such as mate preferences and sex differences, but they rarely, if ever, delve into the empirical evolutionary scientific literature on these issues. For example, Cannito and Ferrero Camoletto's study of Red Pill theories is titled, "The Rules of Attraction: An Empirical Critique of Pseudoscientific Theories about Sex in the Manosphere."⁵⁸ Yet, contrary to what one could from the use of the term "empirical" in the title, they do not mention any piece of empirical sex research. This is not enough. It is my contention that instead of broad disqualifications of entire scientific fields, a detailed and precise critique of the manosphere's uses and misuses of evolutionary life sciences should be solidly grounded in state-of-the-art empirical research from those sciences. Therefore, we turn next to instances where the evolutionary scientists who produce and know this empirical research confront manosphere (mis)uses of their disciplines.

In a recent article entitled "Darwin's Illegitimate Children: How Body Language Experts Undermine Darwin's Legacy,"⁵⁹ Denault and Zloteanu, two psychology researchers, explain how self-styled online body language experts propagate unfounded information about non-verbal behavior, with the most popular YouTube video of the kind reaching 49 million views.⁶⁰ After debunking the claims of this video, they call on other researchers to do the same:

"One way to help the public evaluate what body language experts are saying is to unpack and compare their claims with actual research findings. This could, of course, displease body language experts. Yet if they appeal to science, either implicitly or explicitly, they must expect and accept

⁵⁶ Chief among which are accusations of "essentialism" and "determinism," which are addressed respectively in Chap. II, B, 127-128 and Chap. II, A, 109-111. She also mentions evolutionary psychology's "failure to acknowledge that cultural and social variables are part of the environmental mechanisms that may influence evolution," ibid., 412. This is however an inaccurate portrayal of the field, which recognizes the impact of cultural forces on Darwinian evolution, as explained by evolutionary scientist Randolph Nesse: "Old arguments pitting evolution and culture as alternatives have been replaced by formulations that recognize both as essential to any full explanation of human behavior. Furthermore, it is increasingly recognized that the causal pathways are multidirectional; selection forces shape capacities for culture, and culture gives rise to new selection forces that further shaped our ancestors in cascading process that runs away to vas complexity," Randolph Nesse, "Social Selection and the Origins of Culture," in *Evolution, Culture, and the Human Mind*, ed. Mark Schaller et al. (New York: Psychology Press, 2010), 137–50.

⁵⁷ For the role of feminist scientists in the evolutionary behavioral sciences, see Chap. II, B, 122.

⁵⁸ Cannito and Ferrero Camoletto, "The Rules of Attraction."

⁵⁹ Vincent Denault and Mircea Zloteanu, "Darwin's Illegitimate Children: How Body Language Experts Undermine Darwin's Legacy," *Evolutionary Human Sciences* 4 (2022), <u>https://doi.org/10.1017/ehs.2022.50</u>.

⁶⁰ I.e., WIRED, "Former FBI Agent Explains How to Read Body Language," YouTube.com, May 21, 2019, <u>https://web.archive.org/web/20231017142558/https://www.youtube.com/watch?v=4jwUXV4QaTw</u>, archived October 17, 2023.

scrutiny. They cannot reject the rules of science, while simultaneously using science as a source of legitimacy."61

Theirs is a remarkable example of scientists intervening to address and debunk online misuses of their area of expertise. Their line of reasoning is sound: if online content producers claim to ground their message in scientific research, they should accept having their claims scrutinized by researchers. At conferences, I keep meeting evolutionary scientists who are worried or annoyed by manosphere misuses and misrepresentations of their findings. But do these scholars engage with manosphere (mis)uses of the discipline?

For approximately ten years, the only academic article assessing uses of evolutionary psychology by manosphere communities was a very complacent one. In a 2012 issue of the Evolutionary Psychology journal, psychologists Nathan Oesch and Igor Miklousic reviewed two influential Pickup-Artist dating guides.⁶² Their objective was to confront the contents of the guides with the state of empirical research. And their conclusion was straightforward: "In conclusion, it would seem clear that there is in fact a substantial degree of psychological research to support many claims made by the [Seduction] Community," they argued.⁶³ Over and beyond empirical critique, they even supported Pickup-Artistry in general, affirming that "despite its provocative label and origins outside of academia," it was "founded on solid empirical research as well as first-hand courtship and relationship experience," and could even "lessen conflict and improve dating and relationships between men and women."⁶⁴ Yet, they did acknowledge that many of the Pickup-Artists' techniques were "not currently supported by peer-reviewed literature."⁶⁵ In conclusion, they issued a call for more thorough research, which I take up in the present dissertation: "An important area for future research would be to more closely analyze a broader spectrum of community literature and determine the scientific veracity of unsubstantiated claims."66 Understandably however, given this glowing review of manosphere seduction guides in a major evolutionary psychology journal, this was seen by critical social scientists as a sign of endorsement and conflation between academic evolutionary psychology and its online manosphere version.⁶⁷

The growing misogyny of online manosphere communities and their widespread reliance on evolutionary psychology have not gone unnoticed by evolutionary scholars.⁶⁸ In fact, in a short survey I ran on US evolutionary psychologists in 2023 (sample size: n=44), I asked them how concerned they were about "evolutionary scientific research being used to fuel sexist discourse and ideology."69 Only one reported no concern, with twenty respondents answering "a lot" (n=9) or "a

⁶¹ Denault and Zloteanu, "Darwin's Illegitimate Children," 8.

⁶² Nathan Oesch and Igor Miklousic, "The Dating Mind: Evolutionary Psychology and the Emerging Science of Human Courtship," Evolutionary Psychology 10, no. 5 (2012): 899–909, https://doi.org/10.1177/147470491201000511. ⁶³ Ibid., 905.

⁶⁴ Ibid., 901. ⁶⁵ Ibid., 905.

⁶⁶ Ibid.

⁶⁷ E.g., Van Valkenburgh, "Digesting the Red Pill," 93.

⁶⁸ The growing misogyny of manosphere communities is documented further in Chap. I, C, 92.

⁶⁹ For details on survey design and administration, see Chap. III, B, 146. Complete survey materials are reproduced in Appendix 26, 551.

great deal" (n=11). Illustrative of these concerns is the evolutionary psychology research community's recent renewed interest in the manosphere.⁷⁰ For example, Kathryn Baselice's 2023 study of the incel manosphere community features a section entitled "misuse of evolutionary psychology by incels."⁷¹ The issue, she argues, is not that incels get the scientific literature wrong, but that "they are inflexible or superficial in how they apply evolutionary principles," and "fail to consider alternative explanations or the complexity of human behavior."⁷² She goes on to demonstrate how their views are too deterministic, rightly remarking that "Incels often demonstrate the same misconceptions about evolutionary psychology that spurs debate against the field."⁷³

Recently, several evolutionary scientific content producers and popularizers have decided to engage with manosphere (mis)uses of science on social media and non-academic platforms. Alexander @datepsych on Twitter, MSc in Cognitive and Behavioral Neuroscience, runs a page where he shares research on attractiveness and dating, with 28,000 followers.⁷⁴ On his social media and his blog, he has been posting data-driven criticisms of manosphere beliefs and narratives, with titles such as "What the Manosphere Gets Wrong About Alphas and Betas," and "The Emotional Epistemology of the Red Pill."⁷⁵ Similarly, science podcaster and PhD student at the University of Melbourne's Evolution Lab Macken Murphy has recently debated Red Pill and blackpill manosphere pundits live on YouTube.⁷⁶ On his *Species* podcast, Murphy has received evolutionary researchers interested in the manosphere appropriations of science.⁷⁸ These examples show that the younger generation of evolutionary scholars is concerned about popular understanding of

⁷⁰ For example, at the 2023 Human Behavior and Evolution Society (HBES) conference in Palm Springs, California, there were two posters on incels (including mine) as well as two presentations, one of which was even granted the society's New Investigator Award for best postgraduate research. See program here, https://web.archive.org/web/20231017161900/https://conference2023.hbes.com/wp-content/uploads/2023/05/HBES-2023-Palm-Springs-Program-Book.pdf, archived October 17, 2023.

⁷¹ Kathryn Baselice, "Analyzing Incels through the Lens of Evolutionary Psychology," *Culture and Evolution* 20, no. 1 (2023): 42–58, <u>https://doi.org/10.1556/2055.2022.00016</u>, 53-54.

⁷² Ibid., 53.

⁷³ Ibid., 54.

 ⁷⁴ As
 of
 writing,
 Twitter.com,
 Alexander
 @datepsych,

 https://web.archive.org/web/20231017164736/https://twitter.com/datepsych?ref
 src=twsrc%5Egoogle%7Ctwcamp%

 5Eserp%7Ctwgr%5Eauthor,
 archived October 10, 2023.

⁷⁵ Alexander, "The Emotional Epistemology of the Red Pill," Date Psychology.com, March 16, 2023 https://web.archive.org/web/20231017165459/https://datepsychology.com/the-emotional-epistemology-of-the-red-

<u>pill/;</u> "What the Manosphere Gets Wrong About Alphas and Betas," Date Psychology.com, June 8, 2022, <u>https://web.archive.org/web/20231017165457/https://datepsychology.com/what-the-manosphere-gets-wrong-about-</u> alphas-and-betas/, both archived October 17, 2023.

⁷⁶ Entrepreneurs in Cars, "PTW # 91 – Macken Murphy – Data Driven Advice," YouTube.com, August 25, 2023, <u>https://web.archive.org/web/20240604074905/https://www.youtube.com/watch?v=Puydi_dMuyc</u>, archived June 4, 2024; hoe_math, "SEX FIGHT: Macken Murphy vs hoe_math," YouTube.com, November 3, 2023, <u>https://web.archive.org/web/20240605085044/https://www.youtube.com/watch?v=GDSsqNDjENs</u>, archived June 5, 2024. For more on these interactions and on my interview with Macken Murphy, see Chap. VII, D, 374.

⁷⁷ Including Alexander from @datepsych, incel researcher William Costello, and myself. For list of episodes, see <u>https://web.archive.org/web/20231017172438/https://pod.link/1334821500</u>, archived October 17, 2023.

⁷⁸ The most popular of these clips have reached more than hundreds of thousands of views, see <u>https://web.archive.org/web/20230905044816/https://www.tiktok.com/@mackenmurphy?lang=en</u>, archived October 17, 2023. For more details on his online interactions with the manosphere, see Chap. VII, D, 374.

the discipline, and use social media to spread research findings and dissipate misconceptions. The present research prolongs their efforts.

Social scientists and evolutionary scientists alike are aware of the need for researching manosphere (mis)uses of evolutionary life sciences. Yet, as shown by the brief literature review above, there are very few studies on the matter. Evolutionary scientists are ideally suited to criticize manosphere appropriations of science, however, they tend to approach social issues from an "ultimate" perspective, that is, by linking them to evolutionary theory.⁷⁹ This is understandably also encouraged by their career needs for publication in evolutionary science journals. Yet, there is little evidence that this approach is relevant to understand the nuts and bolts of a particular movement and ideology in its specific context.⁸⁰ On the other hand, social scientific studies put more emphasis on the political and ideological contexts of the manosphere and show greater knowledge of the state of research on the manosphere and online social movements in general. The present research aims at combining the strengths of both sides. As shown by the research of Finnish scholar Ullica Segerstråle on the sociobiology controversy of the 1970s (which was an inspiration for the present work), a sociologist or historian of science can combine their intimate knowledge of a given scientific field's methods and epistemology with their disciplinary focus on historical and sociological phenomena.⁸¹ This is the aim and ambition of this dissertation, as exemplified by its two supervisors, one a historian, and the other an evolutionary scientist.

Indeed, inquiry into manosphere (mis)use of science firstly needs to be carefully laid out in its historical, scientific, and ideological context: to understand how science fits into an ideology, this ideology itself needs to be contextualized.⁸² For example, understanding the position of manosphere antifeminists around evolved sex differences requires understanding the long-standing suspicion and opposition of feminists towards such explanations.⁸³ Beyond those canonical features of social science, the present research is strongly embedded in the evolutionary scientific literature. To evaluate the veracity of online manosphere claims, a corpus of science textbooks was therefore constituted.⁸⁴ As expressed by Denault and Zloteanu, "The challenge then is trying to help the public separate the wheat from the chaff."⁸⁵ Yet, it would be impossible to scrutinize all the scientific claims made in the manosphere: Denault and Zloteanu write that even debunking all the claims in the one body language video they analyze "would have been a Sisyphean task."⁸⁶

⁷⁹ For an explanation of the ultimate/proximate distinction in the evolutionary behavioral sciences, see Chap. II, B, 116.

⁸⁰ Evolutionary approaches to human behavior tend to be general fundamental-science level inquiries. Thus, there is plenty of research on political tribalism, in-group biases, or dominance hierarchies, but rarely does research apply an evolutionary lens to specific political movements like Communism or Nazism for example.

⁸¹ Ullica Segerstråle, *Defenders of the Truth: The Sociobiology Debate* (Oxford: Oxford University Press, 2000). Such was also Thomas Kuhn's approach. With a training in physics, this historian of science revolutionized epistemology with his classic book, Thomas Kuhn, *The Structure of Scientific Revolutions* (Chicago: The University of Chicago Press, 1962).

⁸² The manosphere's ideology and its different subgroups are detailed in Chap. I, B, 50.

⁸³ This is exposed in section Chap. II, A, 112; Chap. II, B, 121.

⁸⁴ See details in Chapter III, C, 160.

⁸⁵ Denault and Zloteanu, "Darwin's Illegitimate Children," 8.

⁸⁶ They add, "unpacking and comparing claims to research findings, even if very effective in showing the actual nature of what is disseminated by body language experts, is extremely time-consuming," Ibid.

Therefore, a key step in this research was to identify patterns and recurring themes in manosphere discourse. Rather than examining each claim, the goal is to produce an ideological and scientific critique of manosphere uses of science on popular themes such as sex differences.⁸⁷ Detailed attention is also given to the specifics of each manosphere group and divergences between them, as they do not uniformly cite the same research nor dwell on the same issues.⁸⁸ This research project can be divided into three broad focuses:

Research Questions

The first theme pertains to the scientific understanding or literacy of the manosphere. How knowledgeable are manospherians about life sciences and evolution? How well do they know the theories and concepts? This is a self-evident line of questioning that comes to mind when trying to study the reception and circulation of science in any group. Before identifying and criticizing potential biases or misconceptions, an assessment of scientific literacy should be conducted. Such an assessment necessarily involves comparison with the general population, especially given the still contentious nature of evolutionary theory in the United States. This should be coupled with a general appraisal of the role and image of science in those online communities. Is it trusted, admired, despised, criticized? Is it central or peripheral to those communities? etc.

The second theme relates to the uses and appropriations of science. This is the main focus of my research and the one that requires the most fine-grained analysis. It encompasses many research questions: what scientific concepts and ideas are routinely invoked in the manosphere and to what end? How does this fit in the broader narratives, values, and objectives of these groups? How do these appropriations differ from the scientific literature? Are there recurring biases or misconceptions? While manosphere communities mostly mobilize scientific knowledge around issues of sexuality and sex differences, I also examine how scientific concepts and ideas can seep into other domains, such as personal identities, life narratives, or beliefs about the past and future.

The third theme revolves around the circulation of scientific knowledge. How and when did this knowledge start to propagate? What are the sources of scientific knowledge in the manosphere? Through which channels does it circulate? On the Internet, ideas circulate and mutate between different groups at an unprecedented pace, which calls for attention to the mechanisms underlying these dynamics.

Dissertation Outline

In order to answer those research questions, the present dissertation is divided into seven chapters. The first two chapters lay out the historical and conceptual bases necessary to understand and discuss both the manosphere and evolutionary science. The third chapter details the research methods and data used, before the analysis results are expounded in the final four chapters.

Chapter I, "The Manosphere: History, Sociology, and Ideology of Contemporary Manosphere Groups," establishes the ideological genealogy of the contemporary manosphere, starting in the United States in the 1970s up to this day. The five contemporary manosphere

⁸⁷ Such analyses are to be found in Chap. IV-VI.

⁸⁸ A group-by-group analysis is provided in Chap. V: The Avatars of Manosphere Science, 228.

branches are classified and defined, and their points of convergence highlighted. Lastly, manosphere research is thoroughly reviewed.

Chapter II, "Evolutionary Sciences and Gender Politics in the United States," reviews past ideological appropriations of Darwinism in the United States starting in the 19th century, as well as the controversies surrounding evolutionary approaches to human behavior on issues of sex and gender. The contemporary state of those scientific disciplines is assessed, along with ongoing criticisms and debates.

Chapter III, "Methods: Ethics, Data Collection, and Data Analysis," opens with epistemological and methodological considerations on the present research, its object and its limitations. Then all the study design, data collection, and data analysis choices are detailed and justified.

Chapter IV, "Evolutionary Sciences in the Manosphere: How Scientifically-Literate Online Communities Appropriate Evolutionary Reasoning in Distinctive Ways," introduces the manospherians' fondness for evolutionary sciences and their high levels of scientific literacy. It then argues that manosphere discourse depicts instincts as inflexible and irresistible forces, a framing which is disproportionately applied to women, leading to a negation of their agency, and even of their humanity. Moreover, it shows that a lot of the seemingly scientific discourse found in the manosphere consists of manosphere-made evolutionary "just-so stories." As a result, the Darwinian discourse circulating in those online spaces is sufficiently distinct from the scientific state-of-the-art that it justifies being labeled as its own distinct "manosphere science."

Chapter V, "The Avatars of Manosphere Science: How Darwinian Evolution is Customized by Each Group According to its Aims and Ideology," reviews the specificities of each manosphere group, as they all have different focuses and interpretations of Darwinian evolution, mostly guided by their respective worldviews and agendas. In spite of this diversity, the core of manosphere science seems to always revolve around sex differences, with a suite of similar underlying biases, which are addressed in the following chapter.

Chapter VI, "Manosphere Science: How Science, Pseudoscience, and Manosphere Ideology Combine to Create a Sexist Darwinian Worldview," critiques manosphere discourse on sex differences, by comparing it to the relevant scientific literature. Not only does it reveal widespread misogynistic double standards and value judgments, but it also finds a wealth of unsupported claims and selective interpretation of the available evidence. Then, this chapter explores the distinctly nonscientific aspects of manosphere Darwinism, which have more to do with traditional misogyny, pseudoscientific fads, and philosophy of history than with empirical research.

Chapter VII, "Scientific Knowledge Acquisition and Circulation: Exploring the Emergence and Online Propagation of Manosphere Science," examines the mechanisms through which manosphere science emerges and circulates. In order to explore this complex and dynamic phenomenon, it details the original roots of manosphere science, the architecture of manosphere websites and platforms, as well as the knowledge-sharing and science-learning practices of manospherians. Finally, it investigates the role of evolutionary scientists themselves in this process.

Geographic Challenges in Studying the Manosphere

One of the main challenges of the present research object was its uncertain geographic contours. Most of the public figures interviewed, cited, and discussed hail from the United States, from manosphere icons like Rollo Tomassi and Warren Farrell, to evolutionary scientists like Macken Murphy, Michael Mills, and Glenn Geher.⁸⁹ However, when it comes to the manosphere user base, the picture becomes much blurrier. Evidently, the manosphere is a transnational phenomenon, as speaking English is the only requirement for entry and participation in its communities. Yet, the cultural and ideological influence of the United States in those spaces is paramount. For that reason, the political context of this dissertation is mostly American, whether in the genealogy of the manosphere, with a focus on US men's groups (Chapter I), in the political history of Darwinism, with a focus on US figures and debates (Chapter II), and in analyses of the contemporary manosphere, with a focus on online culture wars and political polarization. It is for that reason too that I recruited a counterpart of US respondents to compare manosphere survey respondents with.⁹⁰ Yet, I could not ask manospherians about their whereabouts. They tend to be quite suspicious, and this would have been likely to scare them off and compromise data collection. Although my analyses are mostly embedded in the US cultural context, it must therefore be kept in mind that this is necessarily imperfect, owing to the immaterial delineations of Internet communities.

Summary

Throughout these analyses, I show that manospherians collectively produce and maintain a body of Darwinian analyses on sex/gender and society which is quite distinct from evolutionary scientific literature. This discrepancy cannot be ascribed to sole lay misunderstandings of scientific results, as manospherians exhibit a far above average understanding of Darwinian evolution. Rather, it is better understood as an ideological appropriation of science, guided by political aims and values rather than by a search for truth. Indeed, when scientific results fit manosphere ideology, they are touted as incontrovertible proof for manosphere beliefs, while those which do not are conspicuously absent from manosphere discourse. Beyond this motivated cherry-picking, manospherians also employ their Darwinian imagination to generate their own evolutionary narratives on the past, present, and future. Lastly, when evolutionary research fails to support their worldview, they turn towards outdated, pseudoscientific, or nonscientific sources to ground their empirical claims. Underlying all this is a wealth of misogynistic value judgments, emotions, and double standards. So far, science studies have mostly focused on anti-science movements such as religious creationism, climate change denialism, or anti-vaxx, but the present research also reveal how online communities of self-avowed science enthusiasts can end up distorting and misrepresenting scientific results. This calls for increased scrutiny of the mechanisms and politics of scientific knowledge acquisition and circulation in the digital landscape of the 21st century. Before proceeding to the analyses, the manosphere and its communities are thoroughly presented in the first chapter.

⁸⁹ For details on those interviews, see Chap. III, C, 161.

⁹⁰ For details on the survey, see Chap. III, B, 146.

CHAPTER I: THE MANOSPHERE

History, Sociology, and Ideology of Contemporary Manosphere Groups

"Welcome.

I imagine one of, if not the main reason, why you are here is because of the fact that this is the only place left online where the troubles of men are taken seriously and the truth is spoken without an ounce of pc bullshit.

In spite of whatever title we choose to adorn ourselves with, in my case I consider myself a MGTOW monk, we are all men living in this increasingly hostile society and it is becoming harder to ignore the blatant double standards in the treatment of men and women and men of all backgrounds are becoming very much fed up with it" (MGTOW, 2019).

Introduction

In this open letter to other manosphere groups, a proponent of the Men Going Their Own Way (MGTOW) philosophy addresses "an olive branch" to members of other manosphere communities. In his view, all these men are "refugees," united by their rejection of a "hostile society," which, he claims, is impervious to the "troubles of men." What this remarkable document shows is both the variety of manosphere communities, as the letter targets four other different groups, and the similarities between them, as it also emphasizes the common ground shared by the whole manosphere. Understanding the origins, diversity, and nuances of manosphere ideologies is the purpose of this chapter. Before delving into the subject matter of this research—ideological appropriation of science (chapters IV-VI) and circulation of scientific knowledge (chapter VII)—, it is necessary to introduce the manosphere, its history, ideology, and its different communities. This chapter contains several original analyses and contributions to the literature. Indeed, by combining primary historical sources, contemporary online data, and the relevant social scientific literature, it provides a detailed ideological and sociological genealogy of the contemporary manosphere.

Section A outlines the genesis of the contemporary manosphere. Starting from the 1970s and the Men's Liberation Movement in the United States, it presents the men's movements of the 1970s-1990s, until this activism moved online with the advent of the Internet in the 1990s. Those forefathers created a paradigm from which most contemporary online men's groups are derived. Paradoxically, it began with a movement of men who were avowedly strong supporters of feminism. The similarities between these groups are analyzed, as well as their relationship with science, and their legacy in the contemporary manosphere. This section is based mostly on primary sources from that period, as well as the few available scholarly sources. Additionally, Warren Farrell, the most prominent activist of this period, was interviewed to shed light on that history.⁹¹ Contemporary academic sources are rare, for these movements are nowadays relatively unknown: this section is—to my knowledge—the first thorough attempt at establishing a genealogy of the manosphere.

Section B defines and presents the contemporary manosphere. A typology is established, constituted of five branches (Men's Rights Activists, Pickup-Artists, The Red Pill, Men Going Their Own Way, and incels), which are then described. After delineating the specifics of each

⁹¹ For more details on the interview, see Chap. III, C, 161.

branch, their similarities are highlighted. These form a core of shared manosphere beliefs and features. Based on this analysis, I provide my own definition of the manosphere.

Section C is an extensive literature review of manosphere research, ranging from 2004 to 2024. It details the different methods and disciplinary outlooks that have been applied to studying these online communities, as well as some of the main findings. It also focuses on the unprecedented surge in public attention, funding, and interest from various disciplines that incel research has been witnessing. Finally, I evaluate the current state of manosphere research and draw some general conclusions about the manosphere from this assessment.⁹²

⁹² To my knowledge, there exists no such extensive literature review of manosphere research, encompassing five communities and all relevant social scientific fields. A condensed version of this literature review was published in Louis Bachaud, "La manosphère anglophone : tour d'horizon et revue de la littérature," *Revue française des sciences de l'information et de la communication*, no. 28 (2024), <u>https://journals.openedition.org/rfsic/15570</u>.

A. THE PRE-INTERNET ERA: THE GENESIS OF THE MANOSPHERE

A.1. The Men's Liberation Movement (1970s)

1.a. Deconstructing and Escaping Postwar Masculinities

In the United States in the 1960s-1970s, traditional gender roles came under attack.⁹³ Middle and upper-class women organized nationally to challenge their rigid maternal and housekeeping duties, and to fully integrate the economic, intellectual and political life of the country.⁹⁴ Inspired by the revolutionary impetus of the Women's Liberation Movement—as it was then called—some men started questioning their sex roles.⁹⁵ The phrase "Men's Liberation" is thought to have originated in a New Left magazine in 1970.⁹⁶ In 1973, a Californian collective of men issued a manifesto. They argued that masculine values fostered inequalities, hierarchies, and violence, and were responsible for both individual and social ills. They rejected what they considered as traditional masculinity altogether:

"We, as men, want to take back our full humanity. We no longer want to strain and compete to live up to an impossible oppressive masculine image—strong, silent, cool, handsome, unemotional,

⁹³ They were then called "sex roles," which is the phrase I will therefore use in this historical section. "Gender role" became the most common term in the 1990s. see Google Books' Ngram Viewer. https://web.archive.org/web/20231002132955/https://books.google.com/ngrams/graph?content=sex+role%2Cgender +role&year start=1920&year end=2019&corpus=en-2019&smoothing=3, generated and archived October 2, 2023. For details on Ngram, see footnote n°201, 51.

⁹⁴ This was not the first feminist mass movement in the United Sates, as it took the best part of a century of activism for female suffrage to eventually be adopted nationwide in 1920 with the Nineteenth Amendment—at least in theory as voting restrictions remained for different groups up until the 1965 Voting Rights Act. This is often referred to as the "first wave" of feminism. After World War II, with the reduction of household labor through technology, dramatic increases in life expectancies, and the rise of the service industry, mostly college-educated middle-and-upper-class women fought for a change in cultural attitudes towards female labor and for equal acceptance in all sectors of the job market and in government. The movement spread to gender issues in most areas of society (reproductive rights, family, relationships, sex, etc.) and is often referred to as the "second wave" of feminism. It must however be noted that historians have questioned this framework of feminist "waves," e.g., Lucy Delap who argues that "[t]he historical organizing frame of "feminist waves" has not proved up to the job of making sense of the complexities of feminist history," Lucy Delap, *Feminisms: A Global History* (London: Pelican, 2020), 5. On this question, see also Nancy Hewitt, ed., *No Permanent Waves: Recasting Histories of U.S. Feminism* (New Brunswick: Rutgers University Press, 2010).

⁹⁵ As shown by the Google Books Ngram Viewer, the phrase "Women's Liberation" originated in the mid-1960s, and reached peak popularity in the mid-1970s,

https://web.archive.org/web/20231113140912/https://books.google.com/ngrams/graph?content=women%27s+liberat ion&year start=1900&year end=2019&corpus=en-2019&smoothing=3. It might even have been more widespread than "feminism" for a short period in the early 1970s,

https://web.archive.org/web/20231113141807/https://books.google.com/ngrams/graph?content=women%27s+liberat ion%2Cfeminism&year_start=1950&year_end=2019&corpus=en-2019&smoothing=3, both links generated and archived November 13, 2023. For details on Ngram, see footnote n°201, 51.

⁹⁶ Jack Sawyer, "On Male Liberation," *Liberation*, August-September-October 1970. The New Left is a broad label used to designate the student-led protest movements of the 1960s-1970s in the West. As opposed to their unionist and Marxist forebears, these movements placed less emphasis on economic and labor issues, and more on cultural issues (sex, social and family structure, racial and gender equality) as well as environmentalism. This new "radical intelligentsia" positioned itself as critical towards both the capitalist and Soviet models, "New Left," Gordon Marshall, ed., *A Dictionary of Sociology* (Oxford: Oxford University Press, 1998), 447-448.

successful, master of women, leader of men, wealthy, brilliant, athletic, and 'heavy.' We no longer want to feel the need to perform sexually, socially, or in any way to live up to an imposed male role, from a traditional American society [...]⁹⁷

Mostly drawn from the ranks of the radical left and of the anti-war student protest movements of the 1960s, Men's Liberation started gaining ground. In 1974 and 1975, no less than four liberationist book-length manifestoes were published: *Men and Masculinity, The Male Machine, Men's Liberation* and Warren Farrell's *Liberated Man.*⁹⁸ Those male writers lambasted traditional masculinity, and envisioned a new egalitarian future, where men would be able to spend time with their families, escape what was described as the soul-crushing corporate life, be open about their emotions, and stop hiding behind the veneers of machismo and homophobia.⁹⁹ Warren Farrell was the most prominent male liberationist, a tireless advocate and organizer for the movement.

The term "movement" might be misleading, for male liberationism was never as organized and influential as its feminist counterparts, as remarked by a journalist at the time: "unlike the women's movement, with its card-carrying members, its social and legislative programs, its public demonstrations and other appurtenances of an organized crusade, men's lib is fragmented and almost underground."¹⁰⁰ The main grassroot activity of Men's Liberation was consciousness-raising groups after the model set up by radical feminists.¹⁰¹ In the 1970s, all over the country, these small groups of men gathered to discuss their relationships with masculinity, with their wives/partners, and with women in general.¹⁰² These sessions aimed at deconstructing everyday sexist behavior and creating a space for men to express their emotions. Male liberationists also issued periodicals, organized and joined feminist protests, and from 1975, held a yearly conference on men and masculinity.¹⁰³ Journalistic accounts agreed on one point: those men were

⁹⁷ "The Berkeley Men's Center is a collective of men struggling to free themselves from sex-role stereotypes and to define themselves in positive, nonchauvinistic ways. It has been active since 1970 and includes men of all sexual orientations," Berkeley Men's Center, "Berkeley Men's Center Manifesto," 1973, reproduced in Joseph Pleck and Jack Sawyer, eds., *Men and Masculinity* (Englewood Cliffs: Prentice-Hall, 1974), 173-74.

⁹⁸ Joseph Pleck and Jack Sawyer, eds., *Men and Masculinity*; Marc Feigen Fasteau, *The Male Machine* (New York: Mc Graw-Hill, 1974); Jack Nichols, *Men's Liberation: A New Definition of Masculinity* (New York: Penguin Books, 1975); Warren Farrell, *The Liberated Man: Beyond Masculinity: Freeing Men and Their Relationships with Women* (New York: Random House, 1974).

⁹⁹ For a more detailed description of the Men's Liberation Movement, see Louis Bachaud, "Aux Sources Du Masculinisme, Un Mouvement d'hommes Féministes : L'étonnante Trajectoire Du Men's Liberation Movement," in *Genres et Militantismes: Pluralité Des Formes de Mobilisations Féministes et LGBTQ*+, ed. Groupe d'Études Doctorales sur le Genre (GEDoG) (Joinville-le-Pont: Double Ponctuation, 2022), 41–68.

¹⁰⁰ Lisa Hammel, "Men's Lib Almost Underground, but a Growing Movement," *The New York Times*, August 9, 1972, 42.

¹⁰¹ Starting in the late 1960s, many feminists were disappointed with the National Organization for Women's reformism, as well as by the sexism of traditional left-wing and student protest organizations. A decentralized network of radical feminist groups emerged over the country, lambasting the sexist social and sexual order and engaging in protests, theorizing, as well as consciousness-raising groups. For a landmark history of the movement, see Alice Echols, *Daring to Be Bad: Radical Feminism in America 1967-1975* (Minneapolis: University of Minnesota Press, 1989).

¹⁰² The number of these groups was then estimated at around 300, in Barbara Katz, "Saying Goodbye to Superman," *The National Observer*, December 1973.

¹⁰³ "In 1975, a group of men who were enrolled in a women's studies course at the University of Tennessee held what they announced as "The First National Conference on Men and Masculinity," in Knoxville. These "M&Ms" then

overwhelmingly white, middle-class, and college-educated.¹⁰⁴ Historian Kirsten Swinth adds that they usually had ties with New Left, antiwar, and civil rights activism, as well as with feminism, in the latter case often through their female partners.¹⁰⁵

1.b. Relations with Feminism: From Honeymoon to Divorce

Betty Friedan is one of the most influential American liberal feminists of the 20th century.¹⁰⁶ In her 1963 bestseller, *The Feminine Mystique*, she denounced the malaise caused by the strictures of the (white, middle-class) female sex role. Three years later, she was one of the co-founders and the first president of the National Organization for Women (NOW). Far from seeing men as enemies, Friedan thought they were also the victims of their own crippling "mystique":

"Men are not allowed to admit that they sometimes are afraid. They are not allowed to express their own sensitivity, their own need to be passive sometimes and not always active. Men are not allowed to cry. So they are only half-human, as women are only half-human, until we can go this next step forward."¹⁰⁷

This excerpt could have been taken right out of a Men's Liberation manifesto. In fact, Men's Liberation and liberal feminists were ideologically aligned at the time.¹⁰⁸ Thus, Warren Farrell chaired a National Task Force on the Masculine Mystique inside NOW.¹⁰⁹ Wilma Scott Heide, president of NOW between 1971 and 1974, also lavished praise on Farrell's *Liberated Man*: "The work Warren Farrell is doing does and will have universal and profound importance for our nation

continued—being held in various cities each year throughout the late 1970's. These gatherings were hugely successful. In 1978 the M&M in Los Angeles drew over 500 paid participants," see National Organization for Men Against Sexism (NOMAS), <u>https://web.archive.org/web/20230912113410/https://nomas.org/about/history/</u>, archived September 12, 2023.

¹⁰⁴ Hammel, "Men's Lib Almost Underground, but a Growing Movement"; Katz, "Saying Goodbye to Superman."

¹⁰⁵ Kirsten Swinth, *Feminism's Forgotten Fight: The Unfinished Struggle for Work and Family* (Cambridge: Harvard University Press, 2018), location 931 of 8171, Kindle.

¹⁰⁶ As opposed to radical feminism (see footnote n°101, 34), liberal feminism is the more established and organizational branch of US feminism, which fights for equal rights and opportunities for women through advocacy and lobbying. It is sometimes called "reformist" or "mainstream" feminism, as it works from inside existing economic and political structures and tries to integrate women inside those. As such, "[t]he tenets of liberal feminist theory are perhaps the most familiar and widespread forms of feminism," Lucy Bailey, "Feminism, Liberal," in Nancy Naples, ed., *The Wiley Blackwell Encyclopedia of Gender and Sexuality Studies* (Hoboken: John Wiley & Sons, 2016), https://doi.org/10.1002/9781118663219.wbegss738, 1.

¹⁰⁷ Betty Friedan, "Abortion: A Woman's Civil Right," February 16, 1969, speech delivered at the first National Conference on Abortion Laws in Chicago, Illinois, https://web.archive.org/web/20230626134934/https://awpc.cattcenter.iastate.edu/2022/02/23/abortion-a-womans-

civil-right-feb-16-1969/, archived June 26, 2023. NOW's first Statement of Purpose, adopted in 1966, also advocated for a "fully equal partnership of the sexes," https://web.archive.org/web/20230607125404/https://now.org/about/history/statement-of-

purpose/#:~:text=The%20purpose%20of%20NOW%20is,truly%20equal%20partnership%20with%20men., archived June

¹⁰⁸ This was not however the case with all feminists, as some radical feminists argued that a symmetrical approach obscured the power relationship between the sexes, see 1.c below, 37.

¹⁰⁹ National Organization for Women, "Resolution on Establishing a Task Force on The Masculine Mystique – 1971," <u>https://web.archive.org/web/20231002130014/https://feminist.org/resources/feminist-chronicles/part-iii-the-early-</u> <u>documents/resolution-on-establishing-a-task-force-on-the-masculine-mystique-1971/</u>, archived October 2, 2023.

and the world," she noted when it was published.¹¹⁰ Feminist leader Gloria Steinem was particularly sympathetic. In Marc Feigen Fasteau's *The Male Machine*, she wrote, "This book is a complement to the feminist revolution, yet it is one no woman could write. It is the revolution's other half."¹¹¹

For those male and female activists and theorists, Men's and Women's Liberation were then conceived as two sides of the same coin. Furthermore, Men's Liberation was a strategic asset for feminists, because it tried to rally men to the cause. Thus, in *The Liberated Man*, Farrell goes at length to explain (to men) why women's liberation would be a boon for everyone, a rhetoric that Steinem also favored.¹¹² If women took responsibility for their lives, Farrell argued, men would be relieved of their demanding breadwinner role. If men and women shared housework and childcare equally, they would show more respect and mutual understanding. If women were able to flourish as individuals with their own interests, careers, and preferences, this would make romantic relationships and family life richer and happier.¹¹³

In the mid-1970s, the Men's Liberation Movement was at its peak. It was aligned with the liberal feminism of Friedan, Steinem and NOW, both ideologically, with an emphasis on the necessity of escaping traditional sex roles, and strategically, by trying to recruit educated men to this egalitarian program. Yet, when interviewed by a journalist in 2019, Gloria Steinem did not even remember ever hearing the phrase "men's libbers," a testimony to how short-lived this osmosis proved to be.¹¹⁴ Indeed, by the early 1980s, male liberationists would be completely split, with one faction still supporting feminism, and the other going its own way.

1.c. "Forks in the Road": The Scission of the Men's Liberation Movement

Men's Liberation had a broad and rather vague platform, which appealed to various demographics: from white-collar workers, who resented the corporate drudge, to gay activists and radical Marxists, who wanted to rethink society entirely. Despite these differences, the movement was held together by criticisms of postwar masculinity and commitment to gender equality. Thus, it participated in the Equal Rights Amendment (ERA) campaign of the 1970s.¹¹⁵ The ERA, which would constitutionally enshrine gender equality, was a cause powerful enough to unite and mobilize all supporters of Men's Liberation, from the most moderate centrists to the most radical socialists. In 1972, it was passed by both houses of Congress, but never managed to gather enough state ratifications. In 1980, the Republican party withdrew its support, Ronald Reagan was elected, and the ERA would never come to pass even though the ratification deadline was moved to 1982.¹¹⁶

¹¹⁰ Wilma Scott Heide in Farrell, *The Liberated Man*, opening praise for the book.

¹¹¹ Gloria Steinem in Fasteau, *The Male Machine*, XV.

¹¹² See for example, Gloria Steinem, "What it Would Be Like if Women Win", *Time*, August 31, 1970.

¹¹³ Farrell, *The Liberated Man*.

¹¹⁴ Nona Willis Aronowitz, "The 'Men's Liberation' Movement Time Forgot," *Vice*, March 18, 2019, <u>https://web.archive.org/web/20240828095441/https://www.vice.com/en/article/the-mens-liberation-movement-time-forgot/</u>, archived August 28, 2024.

¹¹⁵ Notably through an organization called Men Allied Nationally (MAN) for ERA.

¹¹⁶ For a political scientist's analysis of the ERA defeat, see Jane Mansbridge, *Why We Lost the ERA* (Chicago: University of Chicago Press, 1986). Today, the ERA is still one of the core issues of NOW's platform, see National

This marked a turning point for male gender activists. As explained by one of them, "Except for the ERA, the men's movement was in sharp disagreement over the nature of its relationship with feminism."¹¹⁷

The main bone of contention was the notion of male oppression. Inspired by radical feminism, an antisexist faction of Men's Liberation called out male power, and sought to confront men about their sexist individual and sexual conduct. Another group refused this framework, which they claimed obscured male-specific issues and suffering.¹¹⁸ Chief among them was Warren Farrell, who had always insisted on a symmetrical approach. To him, men's liberation and women's liberation were only temporary labels, two sides of the same platform, a position that he still claims to hold to this day: "My fundamental beliefs have always been that we shouldn't have a men's movement to criticize women, or a women's movement criticizing men and calling them the oppressors. [...] We should have a gender liberation movement."¹¹⁹

While this approach may have been compatible with the liberal feminism of NOW, for which abstract "mystiques" and "sex roles" constrained both women and men, it was not compatible with the more radical strands of feminism. Indeed, "in the radical feminist argument, the notion of sex roles obscured the power relationship between the sexes," Barbara Ehrenreich explains, adding, "One might as well talk, as feminist Carol Ehrlich suggested, of slave 'roles' and slave-owner 'roles."¹²⁰ Through that lens, the sex role rhetoric of Male Liberationists looked more conservative than revolutionary, as if men were avoiding responsibility for their actions. Sociologist Michael Messner thus summarizes the inherent limits and contradictions of 1970s male liberationism:

"Men's liberation discourse walked a tightrope from the very beginning. First, movement leaders acknowledged that sexism had been a problem for women and that feminism was a necessary social movement to address gender inequalities. But they also stressed the high costs of the male sex role to men's health, emotional lives, and relationships."¹²¹

As Messner points out, Men's Liberation included both a recognition of structural sexism against women and an emphasis on "the hazards of being male."¹²² It thus attracted people with

OrganizationforWomen,ConstitutionalEquality,https://web.archive.org/web/20230905052408/https://now.org/issues/constitutional-equality/,archivedSeptember 5,2023.

¹¹⁷ Joe Interrante, "Dancing Along the Precipice: The Men's Movement in the 80s," *Radical America* 15, no. 5 (1982): 53–71, 58.

¹¹⁸ Ibid, 58-60.

¹¹⁹ Warren Farrell, May 2023, interview with the author. For more details, see Chap. III, C, 161.

¹²⁰ Barbara Ehrenreich, *The Hearts of Men: American Dreams and the Flight from Commitment* (New York: Anchor Books, 1983), 124. Born in Missouri, Carol Ehrlich was an anarchist and radical feminist active in the 1970s, who is mostly remembered for her essay *Socialism, Anarchism, and Feminism* (Baltimore: Research Group One, 1977).

¹²¹ Michael Messner, "The Limits of 'The Male Sex Role': An Analysis of the Men's Liberation and Men's Rights Movements' Discourse," *Gender & Society* 12, no. 3 (1998): 255–76, <u>https://doi.org/10.1177/0891243298012003002</u>, 256.

¹²² This phrase was the title of a successful book by psychologist Herb Goldberg published in 1976. Although his criticism of male sex roles was rather aligned with that of Men's Liberation, Goldberg did not address sexism, and was

different focuses and agendas. Some were more interested in rooting out male chauvinism,¹²³ while some were more focused on male wellbeing. This fundamental divide started fissuring the Men's Liberation movement in the late 1970s: "The conflict began to surface in debates over political resolutions at the national conferences in St. Louis (1977), Los Angeles (1978), and Milwaukee (1979). And it began to emerge within local men's groups and centers," an activist recalls.¹²⁴ And "by the 1980s," sociologist Michael Kimmel writes, men's movements "had reached a crossroads."¹²⁵

By 1981, the scission was complete, with the now-called profeminist men creating the National Organization for Men (NOM).¹²⁶ According to Warren Farrell, these activists thought that "men's issues should only exist to the degree that they support women's."¹²⁷ In his mind, they betrayed the cause of gender equality, along with feminists. For profeminist sociologist Michael Kimmel, the blame lies in the opposite camp: "Once women began to make it personal, to critique men's behaviors—by making rape, sexual harassment, and domestic violence part of the gender dynamics that were under scrutiny—the men's libbers departed."¹²⁸ At the start of the 1980s, there was no more Men's Liberation movement to speak of. Despite their different viewpoints on this scission, all sides actually agree on the cause: some activists thought they should be auxiliaries of feminism and primarily sought to combat male oppression of women, while others refused this and kept on advocating for men's issues and against the strictures of the male sex role. A third movement attempted to escape the conflictual arena of gender politics altogether. The next section focuses on the latter two, since profeminist men are not a part of the manosphere's genealogy.

A.2. The Men's Movement(s) (1980s-1990s)

2.a. The Birth of the Men's Rights Movement

The faction of men who started opposing feminism did not suddenly become male supremacists. Rather, they had supported feminism and the ERA in the attempt to solve some male-

dismissive of organized gender politics. As a therapist, he claimed he just wanted to write a book to help men feel better about themselves, without any guilt. This book can be seen as one of the first seeds of the budding Men's Rights movement. Herb Goldberg, *The Hazards of Being Male: Surviving the Myth of Masculine Privilege* (New York: Nash Publishing, 1976).

¹²³ The phrase "male chauvinism" was then quite popular to describe misogyny. According to the Google Books Ngram popularity peaked in 1974, in the heyday Viewer. its of Men's Liberation, https://web.archive.org/web/20230925090140/https://books.google.com/ngrams/graph?content=Male+chauvinism& year start=1950&year end=2019&corpus=en-2019&smoothing=3, generated and archived September 25, 2023. For details on Ngram, see footnote n°201, 51.

¹²⁴ Interrante, "Dancing Along the Precipice: The Men's Movement in the 80s," 57-58.

¹²⁵ Michael Kimmel, *Angry White Men: American Masculinity at the End of an Era* (New York: Nation Books, 2013), 105.

¹²⁶ It was re-named National Organization for Changing Men (NOCM) in 1983, then National Organization for Men Against Sexism (NOMAS) in 1990. It is still active today, see <u>https://web.archive.org/web/20230627131536/https://nomas.org/</u>, archived June 27, 2023.

¹²⁷ Warren Farrell, May 2023, interview with the author. For more details, see Chap. III, C, 161.

¹²⁸ Kimmel, Angry White Men, 104.

specific issues. Chief among those were the male draft and child custody after divorce.¹²⁹ Indeed, between 1964 and 1973, the Vietnam war had taken a heavy toll on young American men, as almost two millions were drafted and sent to fight abroad, by virtue of being born male.¹³⁰ For some men at the time, this made the idea of male oppression very difficult to swallow. Surely a true gender equality movement would combat this, they argued.¹³¹ And indeed, the ERA would have made the male-only draft unconstitutional.¹³² These activists who addressed men's issues became known as masculists, masculinists, or as members of the Men's Rights movement. Their first organization, founded in 1977, was called Free Men, Inc.—nowadays known as the National Coalition For Men (NCFM).¹³³

Similarly, as divorce had become more commonplace,¹³⁴ child custody was disproportionally, if not automatically, attributed to mothers.¹³⁵ In the 1970s, states started questioning this maternal preference, considering a presumption of shared custody in disputed divorces, but NOW did not support this approach.¹³⁶ For feminists, it was unthinkable to grant men equal rights to their children's custody after divorce, when they did not contribute equally to childcare before divorce. More importantly, a blind presumption of joint custody would put exbattered wives in danger, by forcing them to regularly interact with their abusive ex-husbands.¹³⁷

¹²⁹ These two issues feature prominently in one of the earliest Men's Rights book, Francis Baumli, ed., *Men Freeing Men: Exploding the Myth of the Traditional Male* (Jersey City: New Atlantis Press, 1985). The book features a chapter on custody entitled "When Daddy Can't Be Daddy Anymore" (163-202) and one on conscription entitled "The Sexist Draft," (224-241). In our interview, Warren Farrell agreed that these were the main issues at the time: "I think those were the main reasons. And men have made very little progress on either of those." For more details on the interview, see Chap. III, C, 161.

¹³⁰ The official number of conscripts for the Vietnam War is 1,857,304. In the 1970s-1980s, most of these male activists would also remember the Korean War draft (1,529,539 conscripts) as well as the WWII draft of their fathers' generation (around 10 million conscripts), Selective Service System, "Induction Statistics," <u>https://web.archive.org/web/20230925144222/https://www.sss.gov/history-and-records/induction-statistics/</u>, archived September 25, 2023.

¹³¹ See Baumli, *Men Freeing Men*, "The Sexist Draft," 224-241.

¹³² The ERA's text stating that "Equality of rights under the law shall not be denied or abridged by the United States or by any state on account of sex," it would have required either the creation of a gender-neutral draft, or the abolition of the male-only draft. For successive version of the ERA text, see <u>https://history.hanover.edu/courses/excerpts/336era.html</u>, archived September 30, 2024.

¹³³ NCFM website: <u>https://web.archive.org/web/20230628104416/https://ncfm.org/</u>, archived June 28, 2023.

¹³⁴ The US divorce rate doubled between 1965 and 1975, Robert Michael, "The Rise in Divorce Rates, 1960-1974: Age-Specific Components," *Demography* 15, no. 2 (1978): 177–82, https://doi.org/10.2307/2060521, 178.

¹³⁵ The dominant juridical principle at the time was still the "tender years doctrine," inherited from the Progressive Era, as stated in this 1920 law treatise, "Where the children are of tender years, other things being equal, the mother is preferred as their custodian," cited in Mary Ann Mason, *From Father's Property to Children's Rights: The History of Child Custody in the United States* (New York: Columbia University Press, 1994), 113.

¹³⁶ Ibid., 123;125. California was the first state to establish a joint custody preference in 1980.

¹³⁷ This is still NOW's position, as this ideological and legal battle has been going on for fifty years. See for example, Irene Weiser and Marcia Pappas, "Fathers' Responsibility Before Fathers' Rights," July 29, 2006, https://web.archive.org/web/20140512230817/http://www.nownys.org/fathers resp.html, archived May 12, 2014. See also, National Organization for Women, "Fall 2012 – Newsletter of the NOW Family Law Ad Hoc Advisory Committee – SPECIAL REPORT,"

https://web.archive.org/web/20121018120803/http://www.nowfoundation.org/issues/family/FamilyLawNewsletter-Fall2012.pdf, archived October 18, 2012.

For Farrell, who had spent years campaigning to get fathers more involved with their children, this was the last straw:

"Everything went well until the mid-seventies when NOW came out against the presumption of joint custody. I couldn't believe the people I thought were pioneers in equality were saying that women should have the first option to have children or not to have children—that children should not have equal rights to their dad."¹³⁸

Resentment towards feminism started growing. It was accused of strategically disregarding what MRAs started calling "men's rights" or "men's issues":¹³⁹ "These feminists believe that because shared parenthood is seen by many women as a threat, it is a political hot potato best dropped," Daniel Calvin, a 1980s MRA, argued.¹⁴⁰ Similarly, Men's Rights Activists (MRAs) fumed about the perceived lack of feminist support for ending the draft: "I'm tired of hearing that men cause war. Politicians perhaps, but not men. I swear, Ms. Steinem, I've never caused a war in my life," a male activist pleaded.¹⁴¹ Resentful of the lack of popular and media attention for those men's issues, the movement accused its former feminist allies of forfeiting the struggle for equality: "Men's liberation recognized that society lays oppressive roles on *both* sexes, a fact which feminism tends to ignore,"¹⁴² an early MRA leader wrote, adding, "Feminism is transformed before our eyes into female chauvinism."¹⁴³ His words for profeminist men were harsher—"Today's male feminists are largely men filled with self-loathing who expiate their guilt through the worship of a goddess who gets her kicks out of dumping on men. They ignore or belittle the role restrictions men have lived with, and rigidly follow the feminist party line on issues."¹⁴⁴

By the 1980s, Men's Rights had become autonomous, and widely opposed to feminism. In 1993, Warren Farrell published *The Myth of Male Power*, which became the canonical text of the movement.¹⁴⁵ In it, he explored structural disadvantages facing men, such as higher rates of suicide, workplace fatalities, or homelessness.¹⁴⁶ He also addressed the new hot-button issues of feminism, such as sexual harassment and rape, each time refusing what he described as one-sided narratives,

¹³⁸ Steven Svoboda, "An Interview with Warren Farrell," Menweb.org, 1997, <u>https://ia902600.us.archive.org/22/items/20230628_20230628_1237/_.pdf</u>, archived June 28, 2023.

¹³⁹ This was paralleling the emergence of "women's issues" as a political platform, which started gaining popularity in the 1970s as shown by the Google Books Ngram Viewer, <u>https://web.archive.org/web/20230929121623/https://books.google.com/ngrams/graph?content=women%27s+issues</u> <u>&year_start=1900&year_end=2019&corpus=en-2019&smoothing=3</u>, generated and archived September 29, 2023. For details on Ngram, see footnote n°201, 51.

¹⁴⁰ Daniel Calvin, "The Option of Joint Custody," in *Men Freeing Men: Exploding the Myth of the Traditional Male*, ed. Francis Baumli (Jersey City: New Atlantis Press, 1985), 185–99, 197.

¹⁴¹ Frederic Hayward, "We Who Are About to Die," in *Men Freeing Men: Exploding the Myth of the Traditional Male*, ed. Francis Baumli (Jersey City: New Atlantis Press, 1985), 238–39, 239.

¹⁴² Richard Haddad, "Concepts and Overview of the Men's Liberation Movement," in *Men Freeing Men: Exploding the Myth of the Traditional Male*, ed. Francis Baumli (Jersey City: New Atlantis Press, 1985), 281–88, 283.

¹⁴³ Richard Haddad, "Female Chauvinism," in *Men Freeing Men: Exploding the Myth of the Traditional Male*, ed. Francis Baumli (Jersey City: New Atlantis Press, 1985), 269, 269.

¹⁴⁴ Richard Haddad, "Today's Male Feminists," in *Men Freeing Men: Exploding the Myth of the Traditional Male*, ed. Francis Baumli (Jersey City: New Atlantis Press, 1985), 290, 290.

¹⁴⁵ Farrell, *The Myth of Male Power*. In our interview, Farrell stated that he now regrets the title, preferring *The Paradox of Male Power*, which is closer to his position. He also does not like the label "Men's Rights" and prefers speaking of "Men's Issues."

¹⁴⁶ For contemporary statistics on these matters, see footnote n°211, 52-53.

and calling for resocialization of both sexes.¹⁴⁷ Although he had not reneged on his gender egalitarianism, his positions definitely placed him well into the antifeminist camp. By a strange twist of history, a group of former feminist men had become stalwart antifeminists, a divide which would only accentuate over time.

2.b. The Rise and Fall of the Men's Mythopoetic Movement (1980s-1990s)

The term "mythopoetic" was first used by American psychologist Shepherd Bliss in 1986 to describe gatherings that had been occurring under the aegis of American poet Robert Bly:¹⁴⁸

"In the Mendocino woods each year since 1982, nearly 100 men have gathered to spend a week together drumming, reciting poetry, learning aikido, playing volleyball, telling stories, making masks, listening to presentations by men like Robert Bly and psychologist James Hillman, and dancing a wild samba late into the night."¹⁴⁹

These all-male retreats were the beginning of what would become a nationwide movement. Inspired by myths and folklore, poetry, as well as Jungian psychoanalysis, several New Age writers tried to redefine masculinity based on what they saw as ancient wisdom. They diagnosed a crisis in masculinity in contemporary American men. To answer this, they wrote books, organized lectures and retreats specifically destined for a male audience. With a therapeutic spirit, the movement sought to help men feel better and express their pain and emotions. In psychoanalytical fashion, relationships with the mother and the father were particularly central in these attempts at unearthing past traumas.¹⁵⁰ "Mythopoets" insisted on the importance of initiation, and on the father-son bond, which they saw as dysfunctional in American society. They notably ignored the topic of women and gender relationships in general, focusing instead on male experiences, emotions, and bonding. To be as inclusive and nonconflictual as possible, political discussions were also carefully avoided.¹⁵¹ It is difficult to generalize on the mythopoetic men's movement, for it never was an organized force, nor a cogent ideology, as explained by sociologist Michael Schwalbe:

¹⁴⁷ Farrell, *The Myth of Male Power*.

¹⁴⁸ Robert Bly (1926-2021) was a Minnesotan poet and a famous opponent of the Vietnam War, founding and heading the American Writers Against the Vietnam War organization in the 1960s. He received the National Book Award for Poetry in 1968. He later turned to organizing men's movements and theorizing about masculinity.

¹⁴⁹ Shepherd Bliss, "Beyond Machismo: The New Men's Movement," *The Yoga Journal* 71 (1986): 36-40, 38. Bliss remarks elsewhere that the movement was just called "the Robert Bly Men's Movement" before he coined the word "mythopoetic," see Shepherd Bliss, "Mythopoetic Men's Movements," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, ed. Michael Kimmel (Philadelphia: Temple University Press, 1995), 292–307, 292.

¹⁵⁰ The theory behind the mythopoetic men's movement and its roots in Jungian psychoanalysis are detailed in Michael Schwalbe, "The Theory Behind the Practice," *Unlocking the Iron Cage: The Men's Movement, Gender Politics, and American Culture* (New York and Oxford: Oxford University Press, 1996), 35-52.

¹⁵¹ For a thorough and critical press account of the movement's ideology and activities, see Phil Mc Combs, "Men's Movement Stalks the Wild Side," *The Washington Post*, February 3, 1991, <u>https://web.archive.org/web/20220629173057/https://www.washingtonpost.com/archive/lifestyle/1991/02/03/mens-movement-stalks-the-wild-side/83d3e85f-1384-484c-8e43-c4e30e1229f4/</u>, archived June 29, 2022; for the most complete academic overview of the movement, based on three years of participant observation and interviews, see

Schwalbe, Unlocking the Iron Cage.

"It's true that mythopoetic activity was not centrally coordinated, overtly oriented to political goals, or restricted to those who swore allegiance to a particular set of beliefs. There was, however, an underlying philosophy (derived in large part from Jungian psychology), a circuit-riding group of teachers, a body of inspirational literature, nationally circulated publications and many similarities of practice among the mythopoetic men's groups that had sprung up around the country."¹⁵²

Nothing illustrates the popularity of the movement better than the commercial success of Robert Bly's 1990 *Iron John: A Book About Men.*¹⁵³ Written by the most prominent mythopoet, this exploration of masculine coming-of-age myths remained on the *New York Times*' weekly non-fiction bestseller list for the whole of 1991, even topping it eleven times that year.¹⁵⁴

At the time, the country saw men flocking to mythopoetic retreats and seminars, escaping everyday life for weekends of lectures, poetry, drumming, dancing, howling, soul-searching, and male bonding. So prevalent was this trend that sociologists Kimmel and Kaufman wrote that "hundreds of thousands of men" had participated in mythopoetic events, although they do not source this estimate.¹⁵⁵ Writer Susan Faludi concurs and writes that "Bly's weekend retreats logged fifty thousand men in the last half of the '80s alone," while an institute devoted to mythopoetic seminars "enrolled more than ten thousand men in the 1980s,"¹⁵⁶ all this before the publication of *Iron John*. If the exact figures are uncertain, observers and scholars agree on the demographic of mythopoetic men: "Nearly all were white, self-identified as heterosexual, and college educated," Michael Schwalbe writes.¹⁵⁷

The mythopoetic men's movement briefly became known as "the men's movement" in the US, obscuring all others.¹⁵⁸ For example, when introducing his book on masculinity in 18th-and 19th-century America, historian Anthony Rotundo wrote, "This is a story with special resonance for us in an era with an organized men's movement."¹⁵⁹ The book's dust jacket states that he was

¹⁵² Michael Schwalbe, "Mythopoetic Men's Work as a Search for Communitas," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, ed. Michael Kimmel (Philadelphia: Temple University Press, 1995), 186–204, 187.

¹⁵³ Robert Bly, Iron John: A Book about Men (Reading: Addison-Wesley, 1990).

¹⁵⁴ It only dropped of the ranking for the last three days of the year. Bestseller lists were obtained from: <u>https://web.archive.org/web/20230622154537/http://www.hawes.com/1991/1991.htm</u>, archived June 22, 2023.

¹⁵⁵ Michael Kimmel and Michael Kaufman, "Weekend Warriors: The New Men's Movement," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, ed. Michael Kimmel (Philadelphia: Temple University Press, 1995), 15–43, 15.

¹⁵⁶ Susan Faludi, Backlash: The Undeclared War Against American Women (New York: Crown, 1991), 319.

¹⁵⁷ Michael Schwalbe, "Mythopoetic Men's Work as a Search for Communitas", 188. Susan Faludi adds: "Nor were attendants marginalized drifters. On Bly's retreat roster were lawyers, judges, doctors, accountants, and corporate executives; at one wilderness experience, the group included several vice presidents of Fortune 500 companies and two television-station owners," Faludi, *Backlash*, 319.

¹⁵⁸ "I recall that, before the mythopoetic movement captured the public imagination, the phrase 'men's movement,' if it meant anything at all to most people, probably suggested the explicitly backlash 'men's rights' movement," Harry Brod, "The Politics of the Mythopoetic Men's Movement," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, ed. Michael Kimmel (Philadelphia: Temple University Press, 1995), 89–96, 90.

¹⁵⁹ Anthony Rotundo, American Manhood: Transformations in Masculinity from the Revolution to the Modern Era (New York: Basic Books, 1993), 1.

"opposing the views of men's movement leaders and bestselling authors." In the early 1990s, no more precisions were needed to identify mythopoets, and Bly in particular.¹⁶⁰

By the mid-1990s, the movement started declining, before virtually disappearing at the turn of the millennium. There does not seem to be much research focusing on this rapid decline. In our interview, Warren Farrell commented on the demise of mythopoets. While he was friends with Robert Bly and saluted mythopoetic male bonding, he believes that the movement's doom was spelled by its lack of politics: "It doesn't have a political, social agenda in any type of deep way. It's just an activity."¹⁶¹ Thus, he argues, it might have been a curiosity for the media to report on but did not have what it took to gain national prominence, and therefore quickly disappeared. In 2000, after reviewing the men's movements of this era, masculinity scholar Kenneth Clatterbaugh wrote: "all of these men's movements are in serious decline. The 1990s has seen the demise of most of the major publications within each movement. Attendance is dramatically down at various events [...]"¹⁶² And yet, although this did not happen to the mythopoetic men's movement, the Internet revolution was already well on its way, reinvigorating men's movements and generating new ones.

2.c. The Advent of the Internet and the Birth of the Manosphere

In the 1980s, online message boards called "newsgroups" started appearing on the discussion system Usenet. At first, these were confidential, with access being limited to universities and a few tech-savvy individuals. Yet, as they became more accessible in the late 1980s, Usenet newgroups became increasingly popular.¹⁶³ Discussions of men's issues appeared online, which is perhaps not too surprising, since the population of early Internet users was predominantly male, white, and educated, similar to that of the various men's movements. Those male-dominated—and still confidential—online spaces allowed men to gather and exchange views far from female or feminist presence. Manosphere writer Ian Ironwood recalls the spirit of the time: "wouldn't it be cool if we had a place we could go and talk, and be honest about the horseshit we wade through on a daily basis and just be dudes?"¹⁶⁴ Usenet proved to be a precursor for later technological developments in social networking such as forums and social media, and as such it contained the "early seeds" of what would become the manosphere, as explained by Ironwood:

"The early seeds of the modern Manosphere can be traced to the Usenet Newgroups of the late 1980s, particularly the **alt.men** family of newgroups. That's where the first pioneering discussions online began. That's where the Manosphere began, even though it wasn't known by that name. As

¹⁶⁰ "In the early 1990s, Bly's mythopoetic men's movement had, for all intents and purposes, become *the* men's movement in the popular discourse." Michael Messner, *Politics of Masculinities: Men in Movements* (Lanham: AltaMira Press, 1997), 8.

¹⁶¹ Warren Farrell, May 2023, interview with the author. For more details, see Chap. III, C, 161.

¹⁶² Kenneth Clatterbaugh, "Literature of the U.S. Men's Movements," *Signs: Journal of Women in Culture and Society* 25, no. 3 (April 1, 2000): 883–94, <u>https://doi.org/10.1086/495485</u>, 890.

¹⁶³ Michael Hauben and Ronda Hauben, *Netizens: On the History and Impact of Usenet and the Internet* (Los Alamitos: Wiley-IEEE Computer Society Press, 1997).

¹⁶⁴ Ian Ironwood, *The Manosphere: A New Hope for Masculinity* (Red Pill Press, 2012), e-book location 2%.

it developed, it transformed with the technology, becoming in turn Yahoo! newsgroups, mailing lists, websites, and, eventually, blogs."¹⁶⁵

Other male-centered and antifeminist newsgroups at the time were alt.dads.rights, alt.feminazis, or soc.men.¹⁶⁶ Starting in the 1990s, men also began "exchanging their knowledge in newsgroups for nearly a decade, secretly working to turn the art of seduction into an exact science."¹⁶⁷ These seduction enthusiasts and coaches became known as "Pickup-Artists" or "PUAs," and their main venue was the newsgroup alt.seduction.fast, created in 1994. "Out of that forum, an international cabal of PUAs gradually came into being," journalist and PUA Neil Strauss writes.¹⁶⁸ With the World Wide Web, the appearance of blogs, forums, and later social media, Usenet fell into oblivion. Yet, online men's groups would persist, with new communities emerging from the original MRA and PUA groups, eventually forming the manosphere.

A.3. Takeaways

3.a. Similarities Between Early Men's Movements

How does this genealogy of the manosphere shed light on contemporary developments? In order to answer this question, similarities between the men's movements of the 1970s-1990s will be briefly outlined.

Demographics and Group Mobility

Firstly, all journalistic and academic accounts of those men's movements highlight the same characteristics: activists were overwhelmingly white, middle and upper-class, as well as college educated. This relatively high level of education can explain two features. First of all, books played a prominent part as these movements were based on a canon of books written by their chief organizers and ideologists.¹⁶⁹ This might be a bias coming from available historical sources, but it seems that in the 1970s-1990s men's movements, books were more prevalent than newspapers, magazines, or TV and radio. Secondly, high levels of education also explain why these groups had an online presence as soon as the late 1980s, in the days when the Internet was still restricted to a small computer-savvy population.

There might be a very simple reason for this similarity between groups: the same men often participated in different movements. Warren Farrell is a prime example, taking part in the Men's

¹⁶⁵ Ibid.

¹⁶⁶ Alice Marwick and Robyn Caplan, "Drinking Male Tears: Language, the Manosphere, and Networked Harassment," Feminist Media Studies 18, no. 4 (2018): 543-59, https://doi.org/10.1080/14680777.2018.1450568. This study is the only one in manosphere research to include Usenet content in its dataset (the archival of Usenet being rather patchy and the navigation difficult). "Feminazi" is a portmanteau of "feminist" and "nazi". It is an epithet coined to disparage feminists who are seen as too radical. According to the Google Books Ngram Viewer, it originated in the since, late 1980s (during the Usenet era). and has been gaining favor ever https://web.archive.org/web/20230913132041/https://books.google.com/ngrams/graph?content=feminazi&year_start =1930&year_end=2019&corpus=en-2019&smoothing=3, generated and archived September 13, 2023. For details on Ngram, see footnote n°201, 51.

¹⁶⁷ Neil Strauss, *The Game: Penetrating the Secret Society of Pickup Artists* (New York: Regan Books, 2005), 9. ¹⁶⁸ Ibid., 125.

¹⁶⁹ A list of key books from this period is provided in Cited Materials and Bibliography, 1.G; 1.H, 416-417.

Liberation Movement, the Men's Rights Movement, but also in the profeminist NOM,¹⁷⁰ as well as in mythopoetic gatherings. And he is far from being the only one. Activist Jed Diamond also recalls participating in male consciousness-raising groups in the 1970s, profeminist and Men's Rights conferences in the 1980s, as well as mythopoetic events.¹⁷¹

The Masculinity Crisis

All the men's groups examined were predicated on the notion of a contemporary male malaise, if not crisis. Male liberationists employed the sex role model to put a name on their predicament: men were leading emotionally impoverished lives, prevented by machismo from forming intimate and genuine connections, and were entrapped in an unsatisfying socially imposed breadwinner role. Mythopoets insisted on the lack of father-son bonds and of rites of initiation for young men. Men's Rights' rhetoric went even further: by dint of singling out anti-male biases in the media or in courts, and bemoaning lack of public attention to men's issues, they ended up reverting the trope of men as the oppressors, to men as the oppressed. They thus resorted abundantly to the notion of a crisis for men and boys in contemporary society.

Scholars have noted the ubiquity of this notion of a "masculinity crisis."¹⁷² Over history and locations, discourses around masculinity have recurrently painted it as "fragile, defensive, threatened, and at risk. Inherently unstable, masculinity is always in process, under negotiation, needing to be 'shored up,' reinforced, buttressed against its many enemies," ¹⁷³ Judith Allen writes in an article titled "Men Interminably in Crisis?"¹⁷⁴ For sociologist Francis Dupuis-Déri, this recurring trope of a masculinity crisis is a reactionary strategy: it obscures male power and domination, usually blames women for social changes, and mobilizes resources and emotions towards a reinstatement of traditional values and a sexist hierarchy of the sexes.¹⁷⁵ While demonstrating a conscious antifeminist strategy in all historical cases is not easy, it does seem that the masculinity crisis trope reemerges in times of political and social transformations, in particular

¹⁷⁰ In our interview, Warren Farrell explained that he helped found the organization, yet his stay with the profeminist men was short-lived: "I knew Robert Brannon and the people that were forming it with him. They all had a different perspective. I knew they were just manipulating me to take over, and I just felt I would go on and do my own thing," Warren Farrell, May 2023, interview with the author. For more details, see Chap. III, C, 161.

¹⁷¹ Jed Diamond, "Twenty-Five Years in the Men's Movements," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)* (Philadelphia: Temple University Press, 1995), 313–20, 314-315.

¹⁷² Sociologist Francis Dupuis-Déri shows that just a quick query for "masculinity crisis" and "men's crisis" on online PhD dissertation libraries and bookstores finds research dealing with all the Western world in the last five centuries, as well as Latin America, Africa and Asia. He then examines the cases of 17th-century England, Revolutionary France, and late 19th-century US and Europe, which all witnessed "masculinity crisis" panics, Francis Dupuis-Déri, "Le discours de la 'crise de la masculinité' comme refus de l'égalité entre les sexes: histoire d'une rhétorique antiféministe," *Recherches féministes* 25, no. 1 (2012): 89–109, <u>https://doi.org/10.7202/1011118ar</u>.

¹⁷³ Judith Allen, "Men Interminably in Crisis? Historians on Masculinity, Sexual Boundaries, and Manhood," *Radical History Review* 82 (2002): 191–207, 199, <u>https://doi.org/10.1215/01636545-2002-82-191</u>.

¹⁷⁴ She reviews three history books on masculinity and find that they are all predicated on the idea of a "masculinity crisis." She adds that "This theme of "crisis in masculinity" is widespread across all disciplines dealing with masculinity," before listing more than twenty books on the issue. She also remarks that there is no such generalized panic about a "crisis of femininity" in books around women and femininity. Ibid., 205-206.

¹⁷⁵ Dupuis-Déri, "Le discours de la 'crise de la masculinité' comme refus de l'égalité entre les sexes."

in response to changes in gender norms, which may explain why it has been quite popular since the feminist breakthroughs of the 1970s.¹⁷⁶

In the Shadow of Feminism?

Despite their claims to represent the "men's movement," it is undeniable that none of these movements could compare with the cultural, political, organizational, and legal success of feminism. Despite its many branches and varieties, feminism was (and still is) a broadly recognizable movement, claiming to represent women and speak on their behalf. Yet, mainstream press articles of the time treated men's movements as oddities, with bemused curiosity.¹⁷⁷ And indeed, none of them ever competed with the popular and political support enjoyed by feminism. They rarely managed to penetrate the mainstream media, or to influence public policy and institutions.¹⁷⁸

To go further, I would argue that all these movements lived in the shadow of feminism. Indeed, discussions of gender were already heavily framed by the more influential feminist frameworks and concepts. Men's Liberation recycled those and adapted them to men, while profeminist men decided to embrace them altogether. On the other hand, Men's Rights went down the oppositional path, and started combating feminism. Yet, all these approaches were reactive to feminism. Kenneth Clatterbaugh points out this similarity between men's movements: "Each begins with a feminist viewpoint, whether or not it is ultimately opposed or endorsed," he writes.¹⁷⁹ In fact, the relationship with feminism was the issue that split the movement in the late 1970s. Neither pro, nor anti-feminist, the mythopoetic movement tried to create something different.¹⁸⁰ Yet, its esoteric New Age synthesis did not manage to live on in the 21st century.

¹⁷⁶ In her book on contemporary online masculinity and populism, scholar Karen Lee Ashcraft quips: "In the US, anyway, the current masculinity 'crisis' has raged for roughly 50 years, the duration of my lifetime," Karen Lee Ashcraft, *Wronged and Dangerous: Viral Masculinity and the Populist Pandemic* (Bristol: Bristol University Press, 2022), 155.

¹⁷⁷ A rather sympathetic 1971 *Life* magazine article on Men's Liberation opened this way: "The fellows you are about to meet may strike you as being incredibly wrought up over problems you weren't quite aware existed," before dubbing them "a kind of embarrassing vanguard," Barry Farrell, "You've Come a Long Way, Buddy," *Life*, August 27, 1971, 52.

¹⁷⁸ One illustration of this gap is how uncommon the phrases "Men's Rights," "Men's Issues," and "Men's Liberation" were and still are compared to their female equivalents, see Google Books Ngram Viewer, https://web.archive.org/web/20230929144959/https://books.google.com/ngrams/graph?content=Women%27s+Liber ation%2C+Men%27s+Liberation%2C+Women%27s+Issues%2C+Women%27s+Issues%2C+Women%27s+Rights%2

C+Men%27s+Rights&year start=1950&year end=2019&corpus=en-2019&smoothing=3, generated and archived September 29, 2023. For details on Ngram, see footnote n°201, 51. Another is the existence of a state feminism represented by women's policy agencies that strive to "further feminist goals through public policies from inside the state apparatus," Joni Lovenduski ed., State Feminism and Political Representation (Cambridge: Cambridge University Press, 2005), 4. There is no male counterpart to state feminism, which led Warren Farrell to chair a coalition to create a White House Council on Men and Boys as a counterpart to the White House Council on Women and Girls administration. during the Obama see the coalition's executive summarv here. https://web.archive.org/web/20230929153309/https://whitehouseboysmen.org/PROPOSAL-EXECUTIVE-SUMMARY-White House Council Boys Men.aspx, archived September 29, 2023.

¹⁷⁹ Kenneth Clatterbaugh, *Contemporary Perspectives on Masculinity: Men, Women, and Politics in Modern Society*, 2nd ed. (Boulder: Westview Press, 1997), 14.

¹⁸⁰ Kenneth Clatterbaugh, an astute analyst of men's movements, therefore labeled mythopoets a "nonfeminist" movement. The mythopoetic men's movement came under heavy criticism for not being more overtly feminist,

This analysis of similarities between pre-Internet men's movements revealed several keys to understanding the contemporary manosphere. Firstly, boundaries between groups were fluid and men circulated between them, which is even truer with online activism.¹⁸¹ Secondly, books were crucial in the developing men's movements, and should thus be given special attention.¹⁸² Thirdly, the rhetoric of a male malaise, or crisis, is ubiquitous in men's movements.¹⁸³ Lastly, none of these movements make sense except in light of feminism and its evolutions, which should be kept in mind.

3.b. Science and Human Nature in Early Men's Movements

What was the role of science in those men's movements of the 1970s-1990s? Did they contain the seeds of contemporary manosphere enthusiasm for evolutionary biology and psychology?

Men's Liberation

Inherent to the ideology of Men's Liberation was a rejection of most biological explanations for differences between men and women: those were thought to be the sole product of sex roles. In *The Liberated Man*, Farrell acknowledged some innate sexual differences, but always put the emphasis on the way social conditioning exacerbates those.¹⁸⁴ For example, premenstrual tension symptoms might exist, but a study shows that "these symptoms are correlated with dissatisfaction and conflict in a woman over her proper sex role,"¹⁸⁵ he wrote. "Is there a maternal instinct?" Farrell asked. His conclusion: "Men and women may both have instincts for parenting, but the instincts must be learned through teaching. Our culture teaches women, discourages men, and then claims the instinct for parenting is unique to women."¹⁸⁶ About violence, he also wrote,

"Most biologists today agree that men do not have natural aggressive instincts, but that aggressiveness is a product of two factors-a tendency and one's environment- and that the two

showing the difficulty for a male gender-based movement to exist independently of feminism. Kenneth Clatterbaugh, "Mythopoetic Foundations and New Age Patriarchy," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)* (Philadelphia: Temple University Press, 1995), 44–63, 61.

¹⁸¹ For the contemporary manosphere, this is discussed below in Chap. I, B, 67.

¹⁸² Manosphere books feature prominently in my qualitative discourse analysis, see full corpus materials in Appendix 9, 501. The role of books in scientific knowledge acquisition is explored in Chap. VII, A, 351.

¹⁸³ This is still true of the contemporary manosphere, see Chap. I, B, 68.

¹⁸⁴ This was the reflection of a popular strand in the social scientific research of the 1960s-1970s that highlighted the differentiated social conditioning of girls and boys through "sex-role pressures." It was spurred by an influential 1959 paper, which would then be reproduced in Liberationist books, Ruth Hartley, "Sex-Role Pressures and the Socialization of the Male Child," *Psychological Reports* 5, no. 2 (1959): 457–68, https://doi.org/10.2466/pr0.1959.5.h.457. For an example of the intertwining of sex-role research and (male and female) liberationist agendas in the mid-1970s, see Idahlynn Karre, "Stereotyped Sex Roles and Self-concept: Strategies for Liberating the Sexes," *Communication Education* 25, no. 1 (1976): 43–52, https://doi.org/10.1080/03634527609384598.

¹⁸⁵ Warren Farrell, *The Liberated Man: Beyond Masculinity: Freeing Men and their Relationships with Women* (New York: Bantam Books, 1975), 13. First published in 1974 by Random House (New York). Citations refer to the Bantam edition.

¹⁸⁶ Ibid., 113.

interact to produce aggressiveness or passivity. The implication is that environment is a variable and that by its very nature, aggressiveness is open to environmental influence."¹⁸⁷

Those passages and many others reveal a great deal of confusion over the nature/nurture conundrum. The terms are far from clear: what does "learning an instinct" exactly mean? And what is this "tendency" for male violence if not an innate propensity? Male Liberationist doxa on biological sex differences can be summed up as follows: (1) they might exist, but are almost meaningless compared to the strength of social sex-role conditioning; (2) they are abusively assumed to be true, then made worse by cultural forces, much like a self-fulfilling prophecy;¹⁸⁸ and (3) it is possible to create a gender-neutral human role and society through cultural processes.¹⁸⁹

Men's Rights

As described earlier, the Men's Rights movement branched out from Men's Liberation in the late 1970s. It also shared the same aversion towards biologically-grounded explanations for behavior. Thus, in 1985, an activist wrote about the movement: "The underpinnings of its philosophy are based on the learned behavior model," adding that it rejected "the notion that sociobiology is the major determination of role behavior."¹⁹⁰ In the 1980s, Men's Rights Activists still focused exclusively on nurture, while rejecting the influence of nature. Writing in 1997, sociologist Michael Messner thus insisted that "most men's rights' advocates are social constructionists."¹⁹¹

When Farrell wrote *The Myth of Male Power* in 1993, his position had shifted. This time, biological sex differences were acknowledged. However, they could (and should) be overwritten, he argued, for both sexes to be finally liberated. This would not however be easy, he wrote, for "Changing millions of years of genetic heritage will play many tricks on both sexes."¹⁹² Today, Farrell has forfeited his original blank slate positions, and incorporates more life scientific research in his writings, for example on hormones and animal behavior. In our interview, his position now mirrored the scientific consensus, i.e., that the nature/nurture dichotomy is pointless, for those factors are inextricably related: "It's 80% nature and 80% nurture,"¹⁹³ he jested. This trajectory over the past fifty years reflects the broader success of evolutionary approaches to human behavior. In fact, Michael Mills, a professor of evolutionary psychology I interviewed, recalled reading

¹⁸⁷ Ibid., 95.

¹⁸⁸ E.g., "One self-fulfilling myth is that women, by nature, are physically the weaker sex," ibid., 156.

¹⁸⁹ Men's Liberationists were representative of the post-WW2 rejection of biology in the social sciences, as described in the next chapter, see Chap. II, A, 102.

¹⁹⁰ Tom Williamson, "A History of the Men's Movement," in *Men Freeing Men: Exploding the Myth of the Traditional Male*, ed. Francis Baumli (Jersey City: New Atlantis Press, 1985), 308–24, 322. Sociobiology is presented in Chap. II, A, 105.

¹⁹¹ Messner, *Politics of Masculinities*, 92.

¹⁹² Warren Farrell, *The Myth of Male Power: Why Men Are the Disposable Sex* (London: Fourth Estate, 1994), 253. First published in 1993 by Simon and Schuster (New York). Citations refer to the Fourth Estate edition.

¹⁹³ Warren Farrell, May 2023, interview with the author. For details on the interview, see Chap. III, C, 161.

Farrell's *Myth of Male Power* in the 1990s and advising Farrell to look into evolutionary scientific research, which he thought would enrich his vision of sex differences.¹⁹⁴

Mythopoetic Men's Movement

The foundational definition of mythopoetic thinking by Shepherd Bliss unequivocally rejected what he called "linear," i.e., logical, reasoning. "Rather than employing rational, analytical, or political thinking, this approach thinks mythopoetically,—i.e., using symbols, metaphors, and archetypal images," he wrote in 1986.¹⁹⁵ Thus, it is no wonder that mythopoetic thinkers rejected academic discourse: "Sociologists and political scientists offer facts. Poets and mythologists offer metaphors. Both facts and metaphors seek to describe reality," Bliss added nine years later.¹⁹⁶ Mythopoets simply offered a different but equally valuable account of reality, he contended: "The sciences and mythology are unique set of stories, each attempting to explain what is. Linear reasoning differs from narrative logic, both being valid."¹⁹⁷ On the surface, the manosphere's current fascination for life sciences and evolutionary psychology thus appears to be at the antipodes of the mythopoets' anti-scientific attitudes. Yet, there are some similarities between those phenomena.

Firstly, psychology was omnipresent among mythopoets. Prominent writers and retreatorganizers included psychologist Shepherd Bliss, and Jungians such as clinical psychologist Aaron Kipnis, psychoanalyst Robert Moore, and most prominently, theorist and former head of the Carl Gustav Jung Institute in Zurich, James Hillman.¹⁹⁸ Secondly, mythopoets were in a quest to find the eternal essence of masculinity, or the "Zeus energy," as Bly wrote in *Iron John*. In doing so, they drew heavily on Jungian archetypes, which were supposedly buried deep in the collective unconscious. Thus, "following Jung, they [saw] gender as an essential, timeless features of males and females."¹⁹⁹ Therefore, even if mythopoetic sources are very remote from scientific research, there is a convergence between mythopoets and manospherians: these men found a psychological paradigm which presented gender differences as universal and timeless and which allowed them to make sense of, and to transform, masculinity.

¹⁹⁴ Michael Mills, June 2023, interview with the author. For details on the interview, see Chap. III, C, 161. His relationship with manosphere ideas is analyzed in Chap. VII, D, 369.

¹⁹⁵ Shepherd Bliss, "Beyond Machismo: The New Men's Movement," 39.

¹⁹⁶ Shepherd Bliss, "Mythopoetic Men's Movements," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, ed. Michael Kimmel (Philadelphia: Temple University Press, 1995), 292–307, 305.

¹⁹⁷ Ibid., 293.

¹⁹⁸ It is surprising to find all these PhD-holding theorists and therapists in such an apparently anti-rationalist movement. Reflecting on Bliss and Kipnis's anti-intellectualism, sociologist Michael Kimmel remarked: "This is particularly odd, since both men have their doctorates". In the afterword of Michael Kimmel, ed., *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)* (Philadelphia: Temple University Press, 1995), 364.

¹⁹⁹ Michael Schwalbe, "Why Mythopoetic Men Don't Flock to NOMAS," in *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, ed. Michael Kimmel (Philadelphia: Temple University Press, 1995), 323–32, 326.

Before turning to the advent of the Internet and the rise of the contemporary online manosphere, the timeline of men's movements in the pre-Internet era is recapitulated in figure 1.1 below:

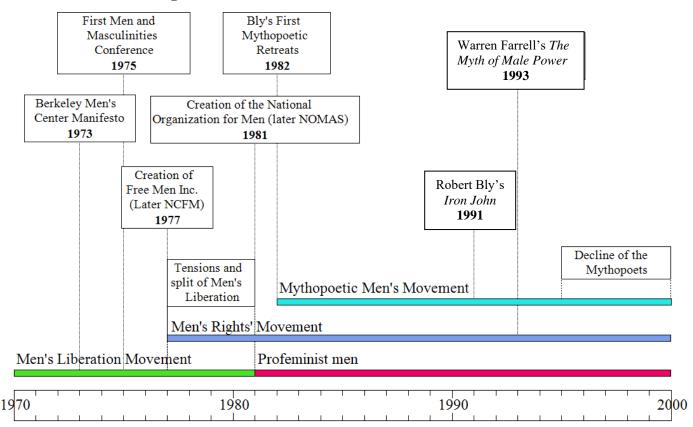


Figure 1.1: Timeline of Pre-Internet Men's Movement

B. OVERVIEW OF THE MANOSPHERE (2000s-2020s): GROUP DIFFERENCES AND SIMILARITIES

B.1. Definition and Typology

1.a. What is the Manosphere?

The term manosphere appears to have originated in the early 2010s, as shown in figure 1.2. Pseudonymous Red Pill writer Ian Ironwood is widely credited for popularizing the term in 2012 with his e-Book, *The Manosphere: A New Hope for Masculinity*.²⁰⁰

²⁰⁰ Ironwood, *The Manosphere*.

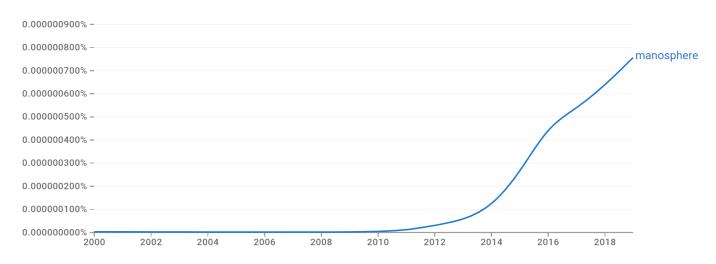


Figure 1.2: Use of the term "Manosphere" (2000-2019)

Appearance of the term "manosphere" in Google's NGram viewer, between 2000 and 2019.²⁰¹

Defining the manosphere does not seem to be difficult. In fact, academic definitions broadly concur with the definition proposed by Ian Ironwood in his 2012 foundational manifesto: "I believe the best and most *useful* definition of the Manosphere is this: a collection of internet blogs, cultural discussion groups, interpersonal interactions and digital clubhouses whose focus revolves around *issues and interests common to men and masculinity*."²⁰² All definitions, whether critical or appreciative, agree on these three points: (1) the manosphere is a constellation of loosely related groups and movements, (2) it is principally Internet-based, and (3) those groups are united by a male perspective, i.e., they speak as men, to other men, about men's experiences, and claim to do so on behalf of all men.

Yet, Ironwood adds, "When trying to pin down just *what* constitutes "the Manosphere," suddenly things get complicated."²⁰³ Indeed, while definitions are quite stable, manosphere classifications are more varied. For example, one of the earliest and most influential research articles on the manosphere contained categories like "traditional Christian conservatives" and "gamer/geek culture" in its classification.²⁰⁴ This is consistent with Ironwood's remark: "If you add in the massive number of male-oriented sports sites, car sites, and other male-dominated interest sites, then the Manosphere becomes *vast*, like the tail of a comet."²⁰⁵ Other researchers

²⁰¹ The Google Books Ngram Viewer allows to compare the frequency of terms over time in a corpus of millions of digitized books. The Y-axis shows the proportion of the chosen words relative to all the words in the corpus. See, <u>https://web.archive.org/web/20240715121306/https://books.google.com/ngrams/graph?content=manosphere&year_s</u> <u>tart=2000&year_end=2019&corpus=en-2019&smoothing=3</u>, generated and archived March 3, 2023. For more details on this tool, see Jean-Baptiste Michel, et al., "Quantitative Analysis of Culture Using Millions of Digitized Books," *Science* 331, no. 6014 (2011): 176-182, <u>https://doi.org/10.1126/science.1199644</u>.

²⁰² Ironwood, *The Manosphere*, e-book location 2%.

²⁰³ Ibid.

²⁰⁴ Debbie Ging, "Alphas, Betas, and Incels: Theorizing the Masculinities of the Manosphere," *Men and Masculinities* 22, no. 4 (2019): 638–57, <u>https://doi.org/10.1177/1097184X17706401</u>.

²⁰⁵ Ironwood, *The Manosphere*, e-book location 2%.

have also included the Alt-Right in their manosphere typology.²⁰⁶ However, such classifications are so wide that they do not allow for a precise analysis of the phenomenon itself, conflating it with overlapping but distinct ideologies and groups. If all traditional Christian conservatives or all gamers were to be included in the manosphere, this would encompass hosts of people who would never identify with it, nor agree to its ideas, including millions of women. In fact, Ironwood explains that his book will only focus on the head of the comet, i.e., "those parts of the Manosphere that clearly identify themselves as such."²⁰⁷

To avoid casting too wide a net with a vague and broad typology, I therefore adopted a simple criterion: only including groups and communities that self-identify as belonging to the manosphere. This does not comprise, for example, a manosphere-compatible thinker like Jordan Peterson.²⁰⁸ Even with this criterion, classification is not straightforward. For example, two competing manosphere Wikipedia-type platforms have classifications with respectively four and eleven subsets.²⁰⁹ Based on my long-term observation of the manosphere and my corpus analysis, I adopt a typology composed of five main communities, which has been popular in recent research.²¹⁰

1.b. Men's Rights Activists (MRAs)

Men's Rights Activists (MRAs) claim to advocate for legal reform and cultural change on behalf of men. Denying the feminist premise of male oppression, their platform revolves around a set of items called "men's issues," such as men's education or men's mental health. They also stress disproportionately male afflictions like workplace deaths and injuries, suicide, or homelessness.²¹¹

²⁰⁷ Ironwood, *The Manosphere*, e-book location 2%.

²⁰⁶ Shawn Van Valkenburgh, "Digesting the Red Pill: Masculinity and Neoliberalism in the Manosphere," *Men and Masculinities* 24, no. 1 (2018): 84–103, <u>https://doi.org/10.1177/1097184X18816118</u>, 84.

²⁰⁸ Jordan Peterson (born in Edmonton, Canada in 1962) is a clinical psychologist, who has become an internationally popular public speaker, writer, and intellectual. He focuses on contemporary social issues from a conservative perspective, and often addresses men's issues with a self-help approach.

²⁰⁹ See "Manosphere" entries on Wiki4men and incels.wiki: https://web.archive.org/web/20221206151531/https://wiki4men.com/wiki/Manosphere ;

https://web.archive.org/web/20221206151342/https://incels.wiki/w/Manosphere, both archived December 6, 2022

²¹⁰ This typology is adopted by: Alexandra Krendel, Mark McGlashan, and Veronika Koller, "The Representation of Gendered Social Actors across Five Manosphere Communities on Reddit," *Corpora* 17, no. 2 (2022): 291–321, <u>https://doi.org/10.3366/cor.2022.0257</u>; Ann-Kathrin Rothermel, Megan Kelly, and Greta Jasser, "Of Victims, Mass Murder, and 'Real Men': The Masculinities of the 'Manosphere," in *Male Supremacism in the United States: From Patriarchal Traditionalism to Misogynist Incels and the Alt-Right*, ed. Emily Carian, Alex DiBranco, and Chelsea Ebin (Oxfordshire, New York: Routledge, 2022), 117–41.; Manoel Horta Ribeiro et al., "The Evolution of the Manosphere across the Web," *Proceedings of the International AAAI Conference on Web and Social Media* 15 (2021): 196–207, <u>https://doi.org/10.1609/icwsm.v15i1.18053</u>.

²¹¹ For the worldwide greater prevalence of male suicide, see Our World in Data, "Male-to-Female Ratio of Suicide Rate," <u>https://web.archive.org/web/20230922114617/https://ourworldindata.org/grapher/Male-Female-Ratio-of-Suicide-Rates</u>, archived September 22, 2023; for workplace deaths, the US Bureau of Labor Statistics' National Census of Fatal Occupational Injuries consistently finds that men die on the job approximately ten times more than women, see latest release on that topic, Bureau of Labor Statistics, "News Release," December 16, 2022, 7, <u>https://web.archive.org/web/20230913085134/https://www.bls.gov/news.release/pdf/cfoi.pdf</u>, archived September 13, 2023; 68% of the 2022 US unsheltered homeless population was male, US Department of Housing and Urban Development, The 2022 Annual Homelessness Assessment Report (AHAR) to Congress, December 2022, 12,

This diverse movement has some issue-specific branches, such as "intactivists," who advocate against the practice of circumcision on infant boys, and Father's Rights' Activists (FRAs), who defend fathers' custody rights in divorce cases.²¹² Many prominent MRAs are lawyers and MRA organizations often provide legal advice or representation in divorce cases.

The Men's Rights movement can be seen as the forefather and intellectual matrix of the whole manosphere. Starting in the late 1970s, it rejected the feminist idea of male oppression and insisted on the existence of men's specific structural disadvantages.²¹³ MRA ideology could be summed up by three broad beliefs, from most moderate to most radical:

(1) There are male specific structural issues that need to be addressed by law and public policy. Awareness needs to be raised about those issues.

This is something all MRAs believe in, and which is not incompatible with feminism. Indeed, some issues of the MRA platform sometimes (albeit rarely) receive support from prominent liberal feminist figures.²¹⁴

(2) There is no systemic oppression of women by men. Men face their own set of hardships and disadvantages in modern Western society. These should be given the same attention and consideration as those experienced by women.

This is also widely accepted by MRAs, even of the more liberal kind, such as Warren Farrell. His 1993 book, *The Myth of Male Power*, was in fact the more elaborate attempt at defending this claim and remains a canonical MRA text to this day.²¹⁵

(3) Contemporary Western society is "gynocentric," i.e., biased against males, socially, legally, and culturally. Feminism is an anti-male interest group which promotes female power instead of equality.

This ardent antifeminism is common in the MRA community, and often accompanied by misogyny. It is best represented by Paul Elam, one of the most active MRAs of the 21st century.²¹⁶

https://web.archive.org/web/20230925172056/https://www.huduser.gov/portal/sites/default/files/pdf/2022-ahar-part-1.pdf, archived September 25, 2023.

²¹² For "intactivism," see the r/intactivist community on Reddit, <u>https://web.archive.org/web/20230929115941/https://www.reddit.com/r/Intactivists/?rdt=40219</u>, archived September 29, 2023. Father's' Rights' Activists have been the object of much research, all of which is reviewed and classified in Jonathan Alschech and Michael Saini, "'Fathers' Rights" Activism, Discourse, Groups and Impacts: Findings from a Scoping Review of the Literature," *Journal of Divorce & Remarriage* 60, no. 5 (2019): 362–88, <u>https://doi.org/10.1080/10502556.2018.1546505</u>.

²¹³ The ideological genesis of the movement is analyzed above in Chap. I, A, 38.

²¹⁴ Cathy Young, "The Feminist Leader Who Became a Men's-Rights Activist", *The Atlantic*, June 13, 2014, <u>https://web.archive.org/web/20220917181217/https://www.theatlantic.com/politics/archive/2014/06/the-now-</u>president-who-became-a-mens-rights-activist/372742/, archived September 17, 2022.

²¹⁵ Farrell, *The Myth of Male Power*.

²¹⁶ Paul Elam is the founder and ex-publisher of the most popular MRA website, A Voice For Men (AVFM). He also founded the International Conference on Men's Issues (ICMI). He also authored several books (see Bibliography, 407) In 2023, he was added to the Southern Poverty Law Center's Extremist Files, a "database which contains profiles of various prominent extremists and extremist organizations," see Southern Poverty Law Center, <u>https://web.archive.org/web/20230925155624/https://www.splcenter.org/fighting-hate/extremist-files/individual/paul-elam</u>, archived September 25, 2023.

In one form or another, these three beliefs are shared by all manosphere groups. While MRAs might be derided by the more militant factions of the manosphere as too soft or inefficient,²¹⁷ there is no doubt that their longstanding opposition to feminism and defense of what they call men's interests was instrumental in shaping the contemporary manosphere. Echoing feminist sororal values, MRAs also encourage solidarity and care between men, and aim at creating spaces where men can share their problems, suffering and experiences from a male point of view—another key dimension of the manosphere.

Politically speaking, the Men's Rights movement traditionally presented itself as unaligned—all were welcome to talk about men's issues. However, in the context of increasing political polarization in the United States,²¹⁸ it is now decidedly leaning to the right. MRAs oppose feminists around the issues of domestic violence and rape, and are highly critical of the #MeToo movement—each time expressing their concern about false accusations and the legal protection and rights of accused men.²¹⁹ As such, their position has shifted towards an increasingly fierce opposition to contemporary left-wing activism. They are thus often described by scholars as a reactionary or "backlash" movement.²²⁰ In 2018, the main MRA website A Voice for Men (AVFM), founded and operated by Paul Elam, was listed by the Southern Poverty Law Center

²¹⁷ For example, as male separatists (see footnote n°269, 62), MGTOW do not believe in the possibility of change through reformist activism and often mock MRAs for what they see as fruitless methods. As this MGTOW redditor writes in an open letter to MRAs, "We are not anywhere holding signs trying to change laws. It is not that we don't think the laws are bad, it's just that we know it would be a complete waste of time to argue." (MGTOW, 2019).

²¹⁸ While a two-party system naturally encourages dichotomous politics, the past decades have witnessed a widening gap between Democrats and Republicans. Those parties have become more ideologically cohesive, with very little remaining overlap, as Congress members have drifted away from the center over the past fifty years-especially in the Republican party, Drew Desilver, Pew Research Center, "The Polarization in Today's Congress Has Roots that Go Back Decades," March 10, 2022, https://web.archive.org/web/20230922163506/https://www.pewresearch.org/shortreads/2022/03/10/the-polarization-in-todays-congress-has-roots-that-go-back-decades/. This is echoed in the population, with growing partisan antipathy between Democratic and Republican voters, and a whopping 73% of them stating that they cannot even "agree on basic facts" with people from the opposite party, Pew Research Center, "Partisan Antipathy: More Intense, More Personal," October 10. 2019. https://web.archive.org/web/20230922163719/https://www.pewresearch.org/politics/2019/10/10/partisan-antipathymore-intense-more-personal/. This is also affects the media, with a growing partial divide around the trustworthiness of media sources, and a growing Republican mistrust of the most established sources, Mark Jurkowitz et al., Pew Research Center, "U.S. Media Polarization and the 2020 Election: A Nation Divided," January 24, 2020, https://web.archive.org/web/20230922164347/https://www.pewresearch.org/journalism/2020/01/24/u-s-media-

polarization-and-the-2020-election-a-nation-divided/. These deep divisions have led political scientists to argue that "America is exceptional in the nature of its political divide," Michael Dimock and Richard Wike, Pew Research Center, "America Exceptional the Nature of its Political Divide," Is in November 30, 2020, https://web.archive.org/web/20230922164756/https://www.pewresearch.org/short-reads/2020/11/13/america-isexceptional-in-the-nature-of-its-political-divide/. All links archived September 22, 2023.

²¹⁹ For a good instance of MRA discourse around this issue, see the National Coalition for Men's brochure, "False Reporting of Sexual Misconduct: Understanding the Myths," November 29, 2020, https://web.archive.org/web/20230922175329/http://ncfm.org/wp-content/uploads/2021/01/False-Reporting-

<u>Brochure-NCFM-compressed-5.2-mg.pdf</u>, archived September 22, 2023. For more on #MeToo, see footnote n°250, 59.

²²⁰ See for example Mélissa Blais and Francis Dupuis-Déri, eds., Le Mouvement Masculiniste Au Québec : L'antiféminisme Démasqué (Montréal: éditions du remue-ménage, 2015); Molly Dragiewicz, Equality with a Vengeance: Men's Rights Groups, Battered Women, and Antifeminist Backlash, (Boston: Northeastern University Press, 2011).

(SPLC) as a "male supremacist hate group" for its "vilification of women."²²¹ In 2022, Paul Elam stepped down and AVFM was consequently removed from the SPLC's "hate map," although Elam's new MRA group, the XY Crew, immediately replaced it.²²²

However, on politically divisive issues such as abortion, the movement remains neutral. It is certainly not perfectly aligned with the traditional conservatism of the Religious Right, which is often criticized in the manosphere as promoting values that harm men (such as the "man as provider" ideal).²²³ In fact, Reddit hosts a thirteen-thousand-strong community of self-labeled leftwing MRAs: r/LeftWingMaleAdvocates.²²⁴ The MRA platform also includes issues facing gay men, such as gay domestic violence, and tries to appeal to this constituency, though with limited success.²²⁵ The Men's Rights Activists (MRA) movement predates the Internet, with organizations such as the National Coalition for Men dating back to the late 1970s. As the oldest movement in the manosphere, it is the only one to feature traditional elements of organized activism such as hierarchical organizations, local chapters, and since 2014, an annual conference: The International Conference on Men's Issues (ICMI).²²⁶

MRAs' focus on legal reform makes them one of the more moderate and mainstream groups in the manosphere. Indeed, although their ideas are not widely accepted or popular, they try to work from inside the system through lawsuits, lobbying and advocacy. For example, the MRA-initiated *National Coalition for Men v. Selective Service System* case against the male-only Selective Service registration made it all the way to the US Supreme Court in 2021.²²⁷ In Canada, CAFE (Canadian

https://web.archive.org/web/20221123111508/https://www.splcenter.org/news/2018/02/21/year-hate-trump-buoyed-white-supremacists-2017-sparking-backlash-among-black-nationalist, archived November 23, 2022.

²²¹ Southern Poverty Law Center, "The Year in Hate: Trump Buoyed White Supremacists in 2017, Sparking Backlash Among Black Nationalist Groups,"

²²² Southern Poverty Law Center, "Male Supremacy," <u>https://web.archive.org/web/20230925161629/https://www.splcenter.org/fighting-hate/extremist-files/ideology/male-</u> <u>supremacy</u>, archived September 25, 2023.

²²³ A 2013 internal poll on the r/mensrights subreddit (n=600) found that only 20% of respondents were Christians, population American compared to 73% of the that at time. https://web.archive.org/web/20230602040341/https://www.reddit.com/r/MensRights/comments/1gp2u6, archived Religiosity data from the General Social Survey (GSS), "religious preference" variable, June 2, 2023. https://web.archive.org/web/20230925164842/https://gssdataexplorer.norc.org/trends?category=Religion%20%26%2 OSpirituality&measure=relig_rec, archived September 25, 2023.

²²⁴The subreddit's mission statement affirms that "A left-winger is someone who advocates reducing inequality
through social change,"

https://web.archive.org/web/20221122173925/https://www.reddit.com/r/LeftWingMaleAdvocates/,
archived

November 22, 2022 ²²⁵ See for example this book, with an introduction by Paul Elam, Matthew Lye, *The New Gay Liberation: Escaping*

the Fag End of Feminism (Zeta Press, 2016). ²²⁶ Past and upcoming conferences and their locations are listed on the MRA wiki. Wiki4Men, "International

Conference on Men's Issues," <u>https://web.archive.org/web/20230324164602/https://wiki4men.com/wiki/International Conference on Men%27s I</u>ssues, archived March 24, 2023.

²²⁷ Although it recognized that women are now an essential part of the military, the Supreme court declined to give a ruling on the case, with Justice Sotomayor's opinion arguing that "the Court's longstanding deference to Congress on matters of national defense and military affairs cautions against granting review while Congress actively weighs the issue," National Coalition For Men et al. v. Selective Service System et al., 593. U.S. (2021), 3. In our interview, Warren Farrell said that this case had been stalled by President Biden, "Biden, as I understand it, basically said, 'just

Association for Equality), the main MRA organization was granted charitable tax status, which two feminist scholars hold as proof of the "mainstreaming of MRA politics."²²⁸ Another illustration of that "mainstreaming" is the fact that the Men's Rights movement is the only manosphere group where activists mainly use their real names rather than pseudonyms.²²⁹ It is also the only group to have substantial female participation and influential spokeswomen (sometimes called "honey badgers" or "FeMRAs").²³⁰ Apart from the United States, the MRA movement is also well-established in Canada,²³¹ Australia,²³² India,²³³ and the United Kingdom.²³⁴ Its two most influential Internet platforms are A Voice for Men²³⁵ and the r/MensRights subreddit.²³⁶

1.c. Pickup-Artists (PUAs)

Pickup-Artists (PUAs) are a community of heterosexual men focused on the seduction of women. It is by far the less ideological and activist branch of the manosphere, as it mostly revolves around dating tips and techniques to help men meet and attract women. Yet, it played a key role in the genesis of the contemporary manosphere. Indeed, since the mid-1990s, its constellation of blogs and forums has provided spaces where men can discuss their experiences and frustrations among each other, the recurring theme being failure to reach romantic and sexual fulfillment.

To allegedly help those men succeed, "dating coaches" published and advertised methods. While the existence of such guides can be traced as far back as Ancient Rome and Ovid's *Ars*

lay off it,' and then he and the Supreme Court didn't even consider it," a claim which I do not have the means to verify. For more details on the interview, see Chap. III, C, 161.

²²⁸ Lise Gotell and Emily Dutton, "Sexual Violence in the 'Manosphere': Antifeminist Men's Rights Discourses on Rape," *International Journal for Crime, Justice and Social Democracy* 5, no. 2 (2016): 65–80, <u>https://doi.org/10.5204/ijcjsd.v5i2.310</u>, 76.

²²⁹ Other groups tend to favor pseudonyms, in particular those which are exclusively online, such as incels and MGTOW, where manospherians keep their identity private. As public activists, MRAs are also more likely to show their faces on camera.

²³⁰ My research's discourse corpus features FeMRAs Janet Bloomfield, Tara Palmatier, and Karen Straughan. See complete materials in Appendix 9, 501.

²³¹ Ruth Mann, "Men's Rights and Feminist Advocacy in Canadian Domestic Violence Policy Arenas: Contexts, Dynamics, and Outcomes of Antifeminist Backlash," *Feminist Criminology* 3, no. 1 (2008): 44–75, <u>https://doi.org/10.1177/1557085107311067</u>; Mélissa Blais and Francis Dupuis-Déri, eds., *Le Mouvement Masculiniste Au Québec : L'antiféminisme Démasqué* (Montréal: éditions du remue-ménage, 2015).

²³² Sarah Maddison, "Private Men, Public Anger: The Men's Rights Movement in Australia," *Journal of Interdisciplinary Gender Studies* 4, no. 2 (1999): 39–52, <u>https://doi.org/10.3316/ielapa.803980536786452</u>; Michael Flood, ""Fathers' Rights" and the Defense of Paternal Authority in Australia," *Violence Against Women* 16, no. 3 (2010): 328–47, <u>https://doi.org/10.1177/1077801209360918</u>.

²³³ Romit Chowdhury, "Conditions of Emergence: The Formation of Men's Rights Groups in Contemporary India," *Indian Journal of Gender Studies* 21, no. 1 (2014): 27–53, <u>https://doi.org/10.1177/0971521513511199</u>; Srimati Basu, "Looking through Misogyny: Indian Men's Rights Activists, Law, and Challenges for Feminism," *Canadian Journal of Women and the Law* 28, no. 1 (2016): 45–68, <u>https://doi.org/10.3138/cjwl.28.1.45</u>.

²³⁴ Ana Jordan, "Conceptualizing Backlash: (UK) Men's Rights Groups, Anti-Feminism, and Postfeminism," *Canadian Journal of Women and the Law* 28, no. 1 (2016): 18–44, <u>https://doi.org/10.3138/cjwl.28.1.18</u>.

²³⁵ <u>https://web.archive.org/web/20221123095555/https://avoiceformen.com/</u>, archived November 23, 2022.

²³⁶ <u>https://web.archive.org/web/20221123114758/https://www.reddit.com/r/MensRights/</u>, archived November 23, 2022.

Amatoria,²³⁷ the coach who is credited for starting the modern PUA community is Ross Jeffries, with his 1992 book, *How to Get the Women You Desire into Bed*.²³⁸ Online PUA spaces soon became a hub for men applying, refining, and discussing those methods. A host of other coaches and writers emerged, collectively defining a set of seduction principles and techniques called "game." The main point of "game" is to give confidence to shy or anxious men by having them practice approaching women. Through practice, they are promised their fear of rejection can be alleviated. To help them achieve this, the various methods emphasize different rules, techniques, and principles. These range from fashion, grooming, and body language advice to conversational tips for interacting with women.²³⁹ PUA writings are generally suffused with an optimistic tone akin to that of self-help literature: through embarking on a journey of self-transformation, one can reinvent oneself, and become a better, and thus more attractive, man.

The PUA community and its use of game came to the spotlight in 2005, with the publication of Neil Strauss's bestseller *The Game*.²⁴⁰ In this memoir, the *New York Times* journalist recalls how he infiltrated the online Pickup-Artist community, before himself becoming one of the most renowned practitioners and theoreticians of the "game." This contributed to disseminating PUA terminology and concepts all over popular culture and the Internet. Indeed, PUAs are notorious for their use of jargon and acronyms, a lot of which are now common manosphere parlance. In 2007, PUA guru and the other hero of *The Game*, Erik von Markovik alias "Mystery," hosted a reality TV show called "The Pickup Artist," with a second season that aired in 2008,²⁴¹ which can be seen as the heyday of the PUA community.²⁴²

In these early phases, the PUA community was mostly nonpolitical, and rarely mentioned feminism or social issues—confining itself to empirical and technical seduction how-to. Yet, as noted by Alt-Right scholars Hermansson et al., "the mid-to late-2000s saw the increased politicisation of the PUA community,"²⁴³ notably under the influence of bloggers Roosh V and Heartiste. They "began to increasingly interpret the initial motivation for PUA—i.e., men needing

²³⁷ Classicist Donna Zuckerberg wrote a chapter on the links between Ovid's ancient instruction manual for seduction and modern PUAs. Donna Zuckerberg, "The Ovid Method," *Not All Dead White Men: Classics and Misogyny in the Digital Age* (Cambridge, London: Harvard University Press, 2018), 89-142.

²³⁸ Ross Jeffries, *How to Get the Women You Desire into Bed: A Down and Dirty Guide To Dating And Seduction For The Man Who's Fed Up With Being Mr. Nice Guy*, (Self-published, 1992).

²³⁹ For example, a popular 2000s seduction guide includes section on "Fashion & Grooming" and "Non-Verbal Communication," as well as a whole section entitled the "Emotional Progression Model," detailing all the steps from approaching a woman to having sex with her, Nick Savoy, *Magic Bullets*, Version 1.5 (Self-published, 2007).

²⁴⁰ Neil Strauss, The Game: Penetrating the Secret Society of Pickup Artists, (New York: Regan Books, 2005).

²⁴¹ *The Pickup Artist*, 3Ball Productions, hosted by Mystery, aired on August 6, 2007, on VH1. In this reality TV show, male contestants would be taught "game" by Mystery before applying it in real-life situations.

²⁴² This popularity of the mid-2000s is illustrated by this journalist's anecdote, "I went to university two years after The Game was published, and watched its influence spread like a virus through the men in my year: I don't think I went on a night out in 2007 without some drunk rugby player trying to 'neg' me ["negging" is a PUA technique, see Appendix 30: Glossary of Manosphere Terms, 586.]" Sirin Kale, "50 Years of Pickup Artists: Why Is the Toxic Skill Still so in Demand?," *The Guardian*, November 5, 2019, https://web.archive.org/web/20221123165623/https://www.theguardian.com/lifeandstyle/2019/nov/05/pickup-artiststeaching-men-approach-women-industry-street-harassment, archived November 23, 2022.

²⁴³ Patrick Hermansson et al., *The International Alt-Right: Fascism for the 21st Century?* (London and New York: Routledge, 2020), 167.

help to seduce women—as a symptom of a deeper social ill. These bloggers would offer their readers theories as to why their difficulties in seducing women were the result of the influence of feminism and wider progressive movements on society [...]."²⁴⁴ Those influential PUA writers started regularly bemoaning the behavior of Western women, and the decline of the West. They advocated for unbridled masculinity and traditionalist values, which was absent from earlier PUA texts, all the while their tone became more misogynistic, homophobic, and antifeminist—with Heartiste eventually turning to white nationalism and Roosh V becoming an Orthodox Christian conservative pundit.²⁴⁵ This influential subset of PUAs was quite popular in the 2010s, around the time when the "manosphere" emerged as a concept, and the Red Pill community (discussed below) appeared.

The PUA community is the most commercial in the manosphere. Indeed, most coaches market their methods through high-priced seduction guides, online tutorials, or real-life practice seminars. A *Guardian* article makes the (unfortunately unsourced) claim that "What was once an underground community has grown into a seduction industry valued at \$100m."²⁴⁶ While other groups could be roughly divided between active ideologists and rank-and-file supporters, the PUA community displays more of a mercantile dynamic, which has led to its being described—notably by incels (analyzed below)—as a moneymaking scam inflicted on gullible and lonely young men.²⁴⁷ For that reason, sociologist Rachel O'Neill coined the term "community-industry" to describe this manosphere branch.²⁴⁸ PUA knowledge is primarily meant to be applied and practical, hence the worldwide network of local men's groups, or "lairs," who meet to go out and apply PUA principles to seduce women, which is called "sarging" in PUA lingo. The online platform with the most activity is the r/seduction subreddit, which boasts 741,000 users as of writing.²⁴⁹

The PUA community as such has lost its popularity and activity of the 2000s, although its concepts have spread widely, and dating coaches continue to abound, for example on YouTube.

²⁴⁷ Randy Thompson, "Pickup Artists are Frauds," Incels.blog, November 2, 2020,

²⁴⁴ Ibid., 168.

²⁴⁵ Heartiste's content has been flagged several times by the Angry White Men website, whose stated purpose is "Tracking White Supremacy,"

https://web.archive.org/web/20230929142903/https://angrywhitemen.org/category/people/james-weidmann/,

archived September 29, 2023. As for Roosh V, he explains this conversion process in this article, Roosh V, "How I Turned To God," January 27, 2020, <u>https://web.archive.org/web/20230601025202/https://www.rooshv.com/how-i-turned-to-god</u>, archived June 1, 2023.

²⁴⁶ Sirin Kale, "50 Years of Pickup Artists: Why Is the Toxic Skill Still so in Demand?," *The Guardian*, November 5, 2019, <u>https://web.archive.org/web/20221123165623/https://www.theguardian.com/lifeandstyle/2019/nov/05/pickup-artists-teaching-men-approach-women-industry-street-harassment</u>, archived November 23, 2022. As far as I could trace, this claim seems to come from a documentary on Pickup-Artists, Gumrit Samra, *Attract Any Woman Anywhere* (Derby: Lion Gent Productions, 2017).

https://web.archive.org/web/20210107142849/https://incel.blog/pickup-artists-are-frauds/, archived January 7, 2021; Incels.wiki, "PUA", https://web.archive.org/web/20221123163458/https://incels.wiki/w/PUA, archived November 23, 2022.

²⁴⁸ Rachel O'Neill, "The Work of Seduction: Intimacy and Subjectivity in the London 'Seduction Community," *Sociological Research Online* 20, no. 4 (2015): 172–85, <u>https://doi.org/10.5153/sro.3744</u>.

²⁴⁹https://web.archive.org/web/20230724145532/https://www.reddit.com/r/seduction/, archived July 24, 2023.

The #MeToo movement and feminist denunciations of street harassment and insistence on clear sexual consent have shifted cultural norms,²⁵⁰ rendering older PUA texts and methods controversial or completely outrageous.²⁵¹ Furthermore, the advent of online dating apps has radically altered the way people sexually connect in the West.²⁵² Inside the manosphere, PUAs also face the competition and opposition of the more recent incel community, which also caters to lonely and romantically unsuccessful young men. All these factors could help explain the PUA decline of the 2010s and early 2020s.

Yet, this apparent decline should not be exaggerated, because PUA terminology and "game" concepts were instrumental in spawning the Red Pill community in the 2010s. Another way to analyze it would thus be that PUAs are now simply split into separate factions: on the one hand mainstream dating coaches, and on the other hand politicized "Red Pillers," who combine game with broader reflections on masculinity, social issues, and antifeminism.²⁵³

1.d. The Red Pill

In the early 2010s, a convergence of online manosphere ideas and people gave birth to a philosophy called "The Red Pill." The name itself is a metaphor taken from the 1999 *The Matrix* movie, where "taking the red pill" means opening one's eyes to the harsh reality and leaving the comfortable but illusory world of the "blue pill."²⁵⁴ In the manosphere, "taking the red pill" means escaping feminist narratives and waking up to the alleged reality of men's lived experiences and female behavior.

On October 25, 2012, the r/TheRedPill subreddit was created, soon becoming one of the most active and popular platforms in the manosphere. It is self-described as "Discussion of sexual

²⁵⁰ On October 15, 2017, following allegations of sexual harassment and assault by Hollywood producer Harvey Weinstein, actress Alyssa Milano encouraged women to share their own experiences of sexual violence by posting #MeToo on Twitter. The response was massive: "With the hashtag used 12 million times in the first 24 hours, the 'magnitude of the problem' of sexual violence in women's (and others') lives became too apparent," Bianca Fileborn and Rachel Loney-Howes, eds., *#MeToo and the Politics of Social Change* (Cham: Palgrave Macmillan, 2019), 3. The #MeToo movement then spread worldwide and affected cultural, institutional, and legal norms around sexual harassment, assault, and consent.

²⁵¹ For a feminist critique of 2000s Pickup-Artists' approach to sexual consent, see Amanda Denes, "Biology as Consent: Problematizing the Scientific Approach to Seducing Women's Bodies," *Women's Studies International Forum* 34, no. 5 (2011): 411–19, <u>https://doi.org/10.1016/j.wsif.2011.05.002</u>.

²⁵² Meeting online has become the most popular way for heterosexual couples to meet in the United States, see Michael Rosenfeld, Reuben Thomas, and Sonia Hausen, "Disintermediating Your Friends: How Online Dating in the United States Displaces Other Ways of Meeting," *Proceedings of the National Academy of Sciences* 116, no. 36 (2019): 17753–58, https://doi.org/10.1073/pnas.1908630116.

²⁵³ Big Data analyses of online migration patterns between communities reveal this transition of many PUAs to The Red Pill: "many of the individuals of the MGTOW and the TRP communities can be traced, respectively, from the MRA and the PUA communities," Manoel Horta Ribeiro et al., "The Evolution of the Manosphere across the Web," 205.

²⁵⁴ Lana Wachowski and Lily Wachowski, *The Matrix* (Burbank, CA: Warner Bros., 1999). This dystopian sciencefiction film was a box-office hit, and has since become a US cultural landmark, added in 2012 to the Library of Congress's preserved National Film Registry, <u>https://web.archive.org/web/20230912124343/https://www.loc.gov/programs/national-film-preservation-board/film-registry/complete-national-film-registry-listing/</u>, archived September 12, 2023.

strategy in a culture increasingly lacking a positive identity for men"—showing the influence of both Men's Rights Activists (denouncing the cultural lack of positiveness around men) and Pickup-Artists (aiming at being sexually successful). In fact, many men drawn to the Red Pill community initially have the same objective and frustration as those going to PUA platforms. But rather than being told to read a dating guide and learn seduction techniques, they are met with a more comprehensive and ideological program.²⁵⁵ The underlying worldview of "Red Pill" philosophy is that life is competitive, and that to succeed in it, one must shed weaknesses and become a self-reliant "alpha male."²⁵⁶

(Hetero)sexuality in particular is described in The Red Pill as a conflictual arena where men and women vie for different things. Armed with evolutionary psychology and everyday observations and anecdotes, "Red Pillers" thus aim to demystify love and romance, reducing it to a conflict between amoral sexual strategies. To them, women are chiefly interested in men's status and resources, i.e., female "hypergamy," while men are primarily interested in women's sexuality.²⁵⁷ In The Red Pill's reading of history, patriarchal structures used to guarantee an equilibrium where marriage allowed men to access female sexuality and to reproduce in exchange for their resources. Feminism is said to have shattered that equilibrium and is seen as a tool used by women to accomplish their own "hypergamous" sexual agenda. Through sexual liberation, easier divorce, or child support payments, all the traditional means of male control on female sexuality (sexual taboo and shame, lifelong matrimony, economic dependence) have allegedly been suppressed or at least weakened. This leaves contemporary Western men in a double bind: either they continue to believe in the false "blue pill" of romantic love, or they swallow the hard truth of female hypergamy.²⁵⁸

To counter female nature and strategies, which they perceive as intrinsically more elaborate and cunning, Red Pillers devise their own strategies. Becoming a "redpilled" man thus implies rejecting the idea of finding true love with a woman, and getting to master a particular form of seduction, or "game" (PUA terminology is plentiful in the community). Red Pill game or "alpha game" is based on displaying dominance, masculinity, and aloofness, to make oneself prized and desired by women.²⁵⁹ The idea is to play into women's hypergamous tendencies to achieve sexual

²⁵⁵ When someone joins the Red Pill subreddit, he is encouraged to first read a wide range of material that define Red Pill concepts and ideology, most notably in the subreddit's "sidebar," for more on the sidebar, see footnote n°262, 61; Appendix 8, 488.

²⁵⁶ For example, the Red Pill's vision of sex and relationships is very competitive. It is predicated upon economic concepts, in which everyone in the "sexual marketplace" (SMP) has a "sexual market value" (SMV). This is analyzed in Van Valkenburgh, "Digesting the Red Pill." These terms are in Appendix 30: Glossary of Manosphere Terms, 586. The concept of "alpha male" in the manosphere is discussed further in Chap. V, E, 260.

²⁵⁷ Manosphere uses of the term "hypergamy" are discussed at length in Chap. VI, B, 308.

²⁵⁸ This is one of the leitmotivs of Red Pill guru Rollo Tomassi, who believes that "It is men who are the real romantics, not women, but it is the grand design of hypergamy that men believe it is women who are the romantic ones," and thus presents his ideas as an eye-opening antidote for romantic men, Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 225.

²⁵⁹ Alpha Game was in fact the name of a popular Red Pill blog on the topic, which has not been active since 2018, <u>https://web.archive.org/web/20230716163759/https://alphagameplan.blogspot.com/</u>, archived July 7, 2023.

success, without ever sacrificing one's independence. The Red Pill is meant to be a holistic lifestyle guide for men, a type of self-help philosophy. It focuses on nutrition and physical exercise—especially bodybuilding, to be both healthier and more attractive. It advocates for economic success through hard work and efforts, never doing anything to please others, but striving to become a fully rounded, independent, and masculine man. As such, it is inherently individualistic. Other Red Pill interests include finance, reading philosophical classics, especially Stoics, or science.²⁶⁰ The Red Pill community is quite prone to theorizing, with an extensive use of jargon and acronyms. They also curate their most popular texts and give frequent appreciation to their esteemed writers. One of the most influential is Rollo Tomassi, with his *Rational Male* blog and book series,²⁶¹ while the foundational Red Pill texts are gathered in the r/TheRedPill subreddit "sidebar"—a kind of collective manifesto aggregated over the years.²⁶²

Although still present on the Reddit platform, the subreddit has been quarantined,²⁶³ which triggered the creation of an off-site backup platform: trp.red.²⁶⁴ On this platform, discussions have taken on a more dissident and anti-establishment right-wing tone. With their content (and that of other manosphere and Alt-Right communities) being progressively ousted from mainstream platforms like Reddit or YouTube, Red Pillers have become more overtly political, embracing causes that extend beyond their traditional theme of sexual dynamics, such as Donald Trump support, transphobia, or opposition to masks and vaccines during COVID-19.²⁶⁵

1.e. Men Going Their Own Way (MGTOW)

MGTOW philosophy has a lot in common with The Red Pill. It shares the same vision of female nature as hypergamous, and is even more hostile to the social changes brought about by feminism. For MGTOW, current Western society is "gynocentric," i.e., invariably favorable

²⁶⁰ On Reddit, posts can be labeled with tags called "flair." Each subreddit has its own flairs, depending on the community's interests. The Red Pill subreddit features flairs on "Fitness," "Science," and "Finance." Red Pillers' interest in Ancient Stoicism has been studied by classicist Donna Zuckerberg, who argues that "Stoicism focuses explicitly on self-improvement, so it can be blended easily into the self-help aspect of Red Pill communities," see Zuckerberg, *Not All Dead White Men*, 59.

²⁶¹ <u>https://web.archive.org/web/20221129170325/https://therationalmale.com/</u>, archived November 29, 2022.

²⁶² Reading the material in the sidebar is seen as the first duty of anyone joining the subreddit. As a compilation of the community's founding texts, it has been archived by a Red Piller as a precaution against an eventual ban, <u>I Created a</u> <u>PDF of The Sidebar : TheRedPill (archive.vn)</u>, archived (by the user) March 30, 2020. It has been qualitatively studied by a sociologist in Van Valkenburgh, "Digesting the Red Pill."

²⁶³ Reddit site rules state, "Quarantined communities will display a warning that requires users to explicitly opt-in to viewing the content. They generate no revenue, do not appear in non-subscription-based feeds (eg Popular), and are not included in search or recommendations,"

https://web.archive.org/web/20221126195246/https://www.reddithelp.com/hc/en-us/articles/360043069012, archived November 26, 2022. Note that the r/TheRedPill subreddit had reached more than 230,000 users before the quarantine. Due to the quarantine, membership figures are now unavailable.

²⁶⁴ See <u>https://web.archive.org/web/20221129165615/https://www.trp.red/feed/hot</u>, archived November 29, 2022.

²⁶⁵ The politicization of The Red Pill subreddit during the 2016 presidential election is documented in Pierce Alexander Dignam and Deana Rohlinger, "Misogynistic Men Online: How the Red Pill Helped Elect Trump," *Signs: Journal of Women in Culture and Society* 44, no. 3 (2019): 589–612, <u>https://doi.org/10.1086/701155</u>. It has not abated since. On trp.red, one can find a whole section called "The Dark Winter" dedicated to anti-Biden/Democrat opposition, and the website is rife with anti-establishment and antisemitic conspiracy theories.

towards women, in the media, careers, sex, law, etc. This makes them close to both Red Pillers (critical about female nature) and MRAs (denouncing feminism and perceived structural biases against men). In fact, MGTOW was created by a group of MRAs in the early 2000s.²⁶⁶ Given their gloomy assessment of the state of Western society for men, MGTOW advocate for a radical solution: refusing to play the "game" of heterosexual relationships altogether. Having sex with a woman is seen by them as taking the risk of being falsely accused of rape (also a common MRA concern) or having to pay child support in case of unwanted pregnancy. As for getting married and having children, these are seen as losing propositions for contemporary men, who could lose custody of their children and have to pay alimony should the mother so decide (another MRA grievance).²⁶⁷

The main premise of MGTOW is therefore to refuse getting involved in relationships with women, while some go further and renounce having sex, or even try avoiding female company altogether—hence their name. This makes them different from Red Pillers, who devote considerable attention to seduction and sex—although both groups share a lot of their theories and terminology. They also differ from MRAs in that they do not believe in the possibility of social change and reform through activism. Many MGTOW come to the movement after bitter experiences in relationships, marriage, or contested divorces. As such, the community is also sometimes described as a "hospital," a space where wounded men can recover and share their experiences among peers. As a male separatist movement,²⁶⁸ it is one of the manosphere's most hostile towards women, who are not welcome anywhere near MGTOW spaces. Misogyny abounds in the movement, especially targeting feminists and Western women.²⁶⁹

²⁶⁶ These anonymous men recall the history of the movement's creation here, The History of MGTOW – Men Going
TheirOwnWay–TheOfficialWebsite,https://web.archive.org/web/20130219174037/http://www.mgtowhistory.com/, archived February 19, 2013.

²⁶⁷ In the early days of MGTOW, a discussion entitled "Married Men – Post Here If You Hate Your Life," gathered a lot of attention on the now defunct forum fuckedcompany.com (2006). Years later, this discussion thread was republished by a MGTOW who said it was a "classic" and had curated and archived it. It features hundreds of testimonies of unhappily married men, warning others never to marry, https://web.archive.org/web/20210121092815/https://dontmarry.wordpress.com/, archived January 21, 2021.

²⁶⁸ "Separatism is usually a liberationist movement in which people who are disempowered on the grounds of, for example, gender, ethnicity, religion or nationality seek to gain power by withdrawing from dominant groups in their respective societies." MGTOW fit this description, the authors of this definition argue, because their "aim to have no or only limited relations with women is based on their belief that men are oppressed in contemporary Western society." Their linguistic research compares MGTOW to lesbian separatists: Veronika Koller, Alexandra Krendel, and Jessica Aiston, "The Language of Gender-Based Separatism: A Comparative Analysis," *Elements in Language, Gender and Sexuality*, 2023, https://doi.org/10.1017/9781009216890, 1.

²⁶⁹ MGTOW sexism and online harassment have been studied by an Australian research team, Scott Wright, Verity Trott, and Callum Jones, "The Pussy Ain't Worth It, Bro': Assessing the Discourse and Structure of MGTOW," *Information, Communication & Society* 23, no. 6 (2020): 908–25, <u>https://doi.org/10.1080/1369118X.2020.1751867</u>; Callum Jones, Verity Trott, and Scott Wright, "Sluts and Soyboys: MGTOW and the Production of Misogynistic Online Harassment," *New Media & Society* 22, no. 10 (2020): 1903–21, <u>https://doi.org/10.1177/1461444819887141</u>. As for the specific disdain towards Western women, in particular American women, this is a common feature to most manosphere groups, as illustrated by an interest in sex tourism (particularly among incels), "mail-order brides," and articles such as this one, John Doe, "10 Reasons Why Foreign Women Are Better Than American Women," Return of Kings, December 13, 2013, <u>https://web.archive.org/web/20201112042152/https://www.returnofkings.com/22358/10-reasons-why-foreign-women-are-better-than-american-women</u>, archived November 12, 2020.

MGTOW believe that society is better run by men, and that the feminization of the workforce and government is somewhat responsible for a decline of the West.²⁷⁰ This fits in their broader belief that all the meaningful achievements in human history were accomplished by men. Outside of reproduction, which they have decided to forsake, they believe men do not need women in their lives for anything. They curate lists and quotes of famous bachelors from history who allegedly had similar beliefs and contributed greatly to philosophy, art, or science, such as Arthur Schopenhauer or Nikola Tesla.²⁷¹

Since current society and governments are seen as inherently hostile to men, there is also a strand of libertarian, anti-government rhetoric in the movement. For instance, a founding document of MGTOW is the 2001 "MGTOW manifesto," which is rife with libertarian rhetoric, proclaiming: "The goal is to instill masculinity in men, femininity in women, and work toward limited government!"²⁷² Taxes and the welfare state are thus often depicted by MGTOW as a scheme to transfer resources from hardworking men to less-deserving women. More generally, freedom could be described as the most important MGTOW value, with a general refusal for men to obey or serve people, norms and institutions, as stated in this manifesto: "**MGTOW** - Men Going Their Own Way - is a statement of self-ownership, where the modern man preserves and protects his own sovereignty above all else. [...]."²⁷³ Consequently, since MGTOW are opposed to forms of hierarchy and authority, and prize self-reliance above all, they resist being called a "movement."²⁷⁴ To them, MGTOW is a life choice, made by likeminded but ultimately independent individuals. When they do not dwell on women, feminism, and politics, discussions in the community also revolve around cooking, exercise, investments, readings, hobbies, and other ways to enjoy a fulfilling life of voluntary bachelorhood.²⁷⁵

While MGTOW was one of the fastest growing communities in the manosphere until 2021, it has recently lost a some of its key venues.²⁷⁶ In August 2021, all MGTOW communities were banned from Reddit. The popular MGTOW.com forum also ceased functioning in 2021. Today,

²⁷¹ Arthur Schopenhauer (1788-1860) was a German philosopher. He advocated for an ascetic "voluntary chastity" that would free men from their animalistic impulses, see for example Arthur Schopenhauer, *The World as Will and Representation*, vol. 1 (Cambridge: Cambridge University Press, 2010), 407. Nikola Tesla (1856-1943) was a Serbianborn US inventor, and a notorious lifelong bachelor. For an example of MGTOW appropriations of these historical figures, see MGTOW.com, "The History of M.G.T.O.W," <u>https://web.archive.org/web/20210104143908/https://www.mgtow.com/history/</u>, archived January 4, 2021.

²⁷⁰ This declinist narrative is analyzed in Chap. VI, B, 331.

²⁷² MGTOW manifesto, <u>https://web.archive.org/web/20210105094527/http://no-</u> maam.blogspot.com/2001/02/mgtow-manifesto.html, archived January 5, 2021. For more on these lists of alleged "proto-MGTOW" see Chap V D 257-258

[&]quot;proto-MGTOW," see Chap. V, D, 257-258. ²⁷³ Mgtow.com homepage, <u>https://web.archive.org/web/20200723005622/https://www.mgtow.com/</u>, archived July 23, 2020.

²⁷⁴ This is discussed further in Chap. I, B, 73.

²⁷⁵ The defunct MGTOW.com forum thus featured sections dedicated to "Sports & Leisure"; "Health and Fitness"; "Philosophy"; "Money"; and "Computer, Games and Technology,"

https://web.archive.org/web/20190405050800/https://www.mgtow.com/forums/, archived April 5, 2019.

²⁷⁶ For an estimate of the changes in popularity of different manosphere groups over time, see Ribeiro et al., "The Evolution of the Manosphere across the Web."

the community is thus scattered over the Internet, on smaller-scale forums, YouTube and alternative free-speech/Alt-Right platforms such as Bitchute,²⁷⁷ as well as various pages and communities over social media (Facebook, Instagram, Twitter). However, its popularity as well as its international influence still seem intact, as indicated by the array of non-English speaking MGTOW groups found on these platforms.²⁷⁸

1.f. Incels

Incels are defined as heterosexual men who have not had romantic or sexual experiences with women. Contrary to MGTOW, they are not single by choice, hence the term "incel," which is short for "involuntary celibate." While this description could apply to countless men, incels have become a true Internet phenomenon, a community with its own terminology and ideas, which really started booming on Reddit in the 2010s.

There were predecessors, such as the Usenet group alt.support.shyness created in 1988, Alana's Involuntary Celibacy Project in 1997 (which popularized the term "incel"),²⁷⁹ and the IncelSite and IncelSupport forums of the 2000s. At the time, those communities were composed of both men and women, and offered support and comfort to people struggling in their romantic and sex lives, as explained by the online incel encyclopedia: "Incel was not a permanent thing, and women were part of the Incel community. Because of this, fatalistic and defeatist attitudes as well as misogyny and anti-feminism weren't as pervasive as they are now."²⁸⁰ Yet, during the 2000s, incel groups started gradually shifting. Supportive attitudes made way to defeatism and bitterness, as well as trolling and other features of Internet and geek culture, while the women and LGBTfriendly orientation receded. Misogyny grew on new competing platforms, such as the forum LoveShy: "Its male users were free to vent about women, blaming them for the incels' lack of sex. The forum tilted overwhelmingly male; one of its administrators openly praised mass killers and encouraged another forum member to commit murder," journalist Zack Beauchamp writes. He adds, "During the 2000s and early 2010s, the LoveShy community cross-pollinated with members of other, similar online subcultures."281 From this cross-pollination, notably with platforms like 4/chan and Reddit, the modern incel community came to life, exploding on Reddit in the 2010s.

There, romantically unsuccessful men shared their frustration and experiences, bemoaning the easier dating lives of good-looking women ("Stacys") and men ("Chads"). They tended to

²⁷⁷ https://web.archive.org/web/20221130145206/https://www.bitchute.com/, archived November 30, 2022.

²⁷⁸ For example, a quick non-exhaustive search for Facebook groups and pages named "MGTOW" finds communities from Egypt, Tunisia, France, Québec, Italy, India, Paraguay, Algeria, Serbia, Singapore, Rwanda, Morocco, Australia, Ivory Coast and the UK, as well as a group for Europe and one for Africa. On Instagram, one finds pages named "MGTOW" from France, India, Brazil, Spain, Morocco, Iran, Argentina, Colombia, and one for Africa (Facebook and Instagram searched on September 12, 2023).

²⁷⁹ Alana, a pseudonymous lesbian feminist, coined the phrase in her website's opening manifesto. This text highlights the inclusive feminist-inspired approach of those early incel platforms, see Alana, 1997, <u>https://web.archive.org/web/19970525065344/http://www.ncf.carleton.ca/~ad097/invcel.html</u>, archived July 19, 2023.

²⁸⁰ Incels.wiki, "Alana's Involuntary Celibacy Project," <u>https://web.archive.org/web/20230719150533/https://incels.wiki/w/Alana%27s Involuntary Celibacy Project,</u> archived July 19, 2023.

²⁸¹ Zack Beauchamp, "Our incel problem," *Vox.com*, April 23, 2019, <u>https://web.archive.org/web/https://www.vox.com/the-highlight/2019/4/16/18287446/incel-definition-reddit</u>, archived July 19, 2023.

regard themselves as ugly or socially inept, and attacked double standards towards ugly men through humor and memes, as well as a flourishing jargon. Soon, the community became a popular attraction for non-incels Reddit users. However, it also started harnessing bitterness towards women and plain misogyny, which resulted in an eventual ban from Reddit.²⁸² In incel online spaces, analyses and explanations for incel loneliness and rejection by women abound. The most common one is that physically unattractive people are discriminated against, which is called "lookism."²⁸³ In fact, looks are believed to be the main factor in determining men's dating success. Since physical appearance is genetically determined, this implies "that a man's dating and life outcomes generally rely on genetically determined traits."²⁸⁴ This set of beliefs is called "the blackpill," a term coined to evoke a darker and more nihilistic version of the Red Pill. Not all incels are necessarily "blackpilled," but the blackpill has become dominant in the community, driving away more optimistic worldviews.²⁸⁵

The blackpill emerged in opposition to Pickup-Artist and Red Pill-type discourse, which aims at convincing romantically and sexually unsuccessful men than they can change things through personal effort and self-improvement. Drawing on evidence of female preferences and trends in dating, incels have a much more fatalistic view of things. Most of them attribute their celibacy to some "undesirable" and innate feature, such as their autism, short height, or nonwhite skin color, and coin specific labels depending on those (here, they would be respectively "autistcel," "shortcel," and "ethnicel").²⁸⁶ Even though some incels discuss avenues for improving their dating success (through exercise, plastic surgery, or amassing wealth), most proponents of the blackpille discussions is that "it's over." Hence the palpable despair and anger found among incels, which can sometimes culminate in desire for suicide or harming others.²⁸⁷

 ²⁸² Christine Hauser, "Reddit Bans 'Incel' Group for Inciting Violence Against Women, *The New York Times*, November 9, 2017,

https://web.archive.org/web/20230922155513/https://www.nytimes.com/2017/11/09/technology/incels-redditbanned.html, archived September 22, 2023.

²⁸³ Although more widespread in incel communities, the term can be found in mainstream dictionaries, tracing its history back to the 1970s: Merriam-Webster Online Dictionary, "Lookism," <u>https://web.archive.org/web/20221116103953/https://www.merriam-webster.com/dictionary/lookism</u>, archived November 16, 2022. This new "-ism" term was indeed coined among the fat acceptance movement, as reported on in a 1978 *Washington Post Magazine* article, cited in John Ayto, *20th Century Words* (Oxford: Oxford University Press, 1999), 485.

²⁸⁴ Incels.wiki, "Blackpill,"

https://web.archive.org/web/20221108081819/https://incels.wiki/w/Blackpill#History and extended definition, archived November 8, 2022.

²⁸⁵ Out of a sample of 272 incel respondents, 94.9% said they "believe[d] in the blackpill," and 44.1% thought that belief in the blackpill was necessary to be considered an incel. Anne Speckhard et al., "Involuntary Celibates' Experiences of and Grievance over Sexual Exclusion and the Potential Threat of Violence Among Those Active in an Online Incel Forum," *Journal of Strategic Security* 14, no. 2 (2021): 89–121, <u>https://doi.org/10.5038/1944-0472.14.2.1910</u>, 97.

²⁸⁶ The incels.wiki entry on the suffix "-cel" lists no less than eighty such labels, Incels.wiki, "-cel," <u>https://web.archive.org/web/20230914122548/https://incels.wiki/w/-cel</u>, archived September 14, 2023.

²⁸⁷ Incel suicidality is extremely high, and has been studied qualitatively by Sarah Daly and Albina Laskovtsov, "Goodbye, My Friendcels': An Analysis of Incel Suicide Posts," *Journal of Qualitative Criminal Justice & Criminology* 11, no. 1 (2021), <u>https://doi.org/10.21428/88de04a1.b7b8b295</u>, and quantitatively in William Costello et al., "The Social Networking of Incels (Involuntary Celibates)," poster presented at the 2023 Human Behavior and Evolution Society Conference, Palm Springs, CA, June 2023.

In 2014, this still confidential group infamously came under the spotlight with the Isla Vista shooting, where 22-year-old Elliot Rodger killed six people before killing himself. Before his death, he had posted YouTube videos and emailed an autobiography to his acquaintances, documenting his rejection by women, his subsequent angst, despair, and hatred, leading up to the planning of the killing spree he called his "day of retribution."²⁸⁸ Although incels debate or refute his actual involvement in the community, Rodger has become a cult-like figure for some.²⁸⁹ Since then, several other deadly attacks have been linked with incels.²⁹⁰ While such violent events only concern an infinitesimal fraction of the community, and it would be misleading to call incels a "terrorist organization,"²⁹¹ it is certainly home to a rare level of hateful and violent speech. Racist, misogynistic, or homophobic slurs abound, feminism is abhorred, and antisemitic conspiracy theories are commonplace. It must however be noted that the incel community is the manosphere group where users engage the most in "shitposting" or "trolling," i.e., deliberately provocative, outrageous, or inflammatory comments—making it difficult to dissociate real beliefs and opinions from deliberate provocation.²⁹²

Starting with r/truecels in 2016, r/incels in 2017, followed by r/braincels in 2018, incel groups have been banned from Reddit. Even the "incels without hate" group, which tried to do without the toxic elements of the community, was banned in 2021. A massive community of "Forever Alone" people remains on the platform, actively distancing itself from incels: "This is not an incel sub: any incel references, slang, or inference will be deemed hate speech and met with a ban," the homepage states.²⁹³ The most active remaining incel platform is undoubtedly the independent incels.is forum with more than 26,000 members as of writing.²⁹⁴ Remaining incel communities are thus now closed to outsiders, and closely police who can join and post, which was not the case on earlier platforms. This defiance is partly triggered by the fear of being infiltrated or

²⁹³ r/ForeverAlone subreddit rules,

²⁸⁸ Although this "day of retribution" video has been taken down by YouTube, it was transcribed in the *Los Angeles Time*, Megan Garvey, "Transcript of the Disturbing Video 'Elliot Rodger's Retribution," *Los Angeles Times*, May 24, 2014, <u>https://web.archive.org/web/20230922132035/https://www.latimes.com/local/lanow/la-me-ln-transcript-ucsb-shootings-video-20140524-story.html</u>, archived September 22, 2023.

²⁸⁹ See, Taisto Witt, "'If i Cannot Have It, i Will Do Everything i Can to Destroy It.' the Canonization of Elliot Rodger: 'Incel' Masculinities, Secular Sainthood, and Justifications of Ideological Violence," *Social Identities* 26, no. 5 (2020): 675–89, <u>https://doi.org/10.1080/13504630.2020.1787132</u>.

²⁹⁰ Such as the 2018 Toronto van attack which killed eleven people, or the 2018 Tallahassee shooting. For a review of incel attacks, see Bruce Hoffman, Jacob Ware, and Ezra Shapiro, "Assessing the Threat of Incel Violence," *Studies in Conflict & Terrorism* 43, no. 7 (2020): 565–87, <u>https://doi.org/10.1080/1057610X.2020.1751459</u>.

²⁹¹ Incel ideology has triggered mass violence acts that have been labeled by authorities as terrorist, and has drawn the attention of counter-terrorism studies (for a review of incel research, see Chap I, C, 87.) However, incels as a whole cannot be said to be a "terrorist organization" *per se* like for example Al-Qaeda, with organized networks encompassing recruitment, training, and logistics of terror attacks. Indeed, all incel perpetrators so far have been acting alone. This point has been made elsewhere: "Classifying Incels as terrorist group based on the action of a tiny minority among them might do more damage than it would help protect the society," Sophia Moskalenko et al., "Incel Ideology, Radicalization and Mental Health: A Survey Study," *The Journal of Intelligence, Conflict, and Warfare* 4, no. 3 (January 31, 2022): 1–29, <u>https://doi.org/10.21810/jicw.v4i3.3817</u>, 20.

²⁹² This point has also been made by terrorism scholars: "The online community, of which incels are a subset, has a culture layered in sarcasm and satire; this veil is challenging for a dilettante to penetrate," they add: "this often makes it difficult to tell which posts may constitute a threat, and which are just cathartic satire or bravado," Hoffman, Ware, and Shapiro, "Assessing the Threat of Incel Violence," 577.

https://web.archive.org/web/20221201122157/https://www.reddit.com/r/ForeverAlone/, archived December 1, 2022.

²⁹⁴ Incels.is, <u>https://web.archive.org/web/20240827094402/https://incels.is/</u>, archived August 27, 2024. The forum has had to change domains several times going from Mexico (incels.me) to Iceland (incels.is), by way of Columbia (incels.co).

scrutinized by outsiders, whether journalists, social scientists, security forces, or curious "normies" (the incel term for the mass of average-looking people). This insulation might partly be responsible for the radicalization of the incel community, which has witnessed a marked rise in conspiracy theories and hate speech over the 2020s.²⁹⁵

B.2. Defining the Core of Manosphere Beliefs and Attitudes: From Male Solidarity to Misogyny

2.a. The Pitfalls of Generalization and Differentiation

This section started with manosphere enthusiast Ian Ironwood. After defining the manosphere as a loose comet tail, he also warns readers against generalizations: "the moment you say something definitive about it, there are a hundred exceptions to the rule that make your attempt moot or foolhardy."²⁹⁶ Indeed, in this "online network of disparate and sometimes conflicting, sometimes overlapping assemblages,"²⁹⁷ it is easy to find counterexamples. For example, while most groups are disproportionately white, this is not the case with incels.²⁹⁸ It would be equally far-fetched to describe mainstream dating coaches or anti-circumcision activists as male supremacists. The wide scope of interests, people and groups found in the manosphere constitutes a hurdle to any generalizing attempt.

However, analyzing manosphere groups as discrete entities would stumble in another pitfall: occulting the mobility of the individuals hiding behind those group labels. Indeed, people can move from one community to the other, as explained by this MGTOW: "Every movement within the manosphere have very strong correlations. I'm myself a former PUA (before it was even a word), then married, then MGTOW. There are many MRA who have a MGTOW lifestyle. And so on" (MGTOW, 2020). These trajectories can be the product of disillusionment, as expressed by these two MGTOW:

²⁹⁵ A team of AI researchers thus investigated whether the migration of incels after their Reddit ban led to an increase in toxicity and radicalization, with mixed results. They did not find this to be the case with incels, although they found such an effect with the Donald Trump supporters' banned subreddit. Manoel Horta Ribeiro et al., "Do Platform Migrations Compromise Content Moderation? Evidence from r/The_Donald and r/Incels," *Proceedings of the ACM on Human-Computer Interaction* 5 (2021): 316:1-316:24, <u>https://doi.org/10.1145/3476057</u>. In previous research, they had however noted an overall increase in toxicity on incel forums before and after the 2017 r/incels ban. More generally, they did find that "within single communities, almost all forums are significantly more toxic than their subreddit counterparts," Ribeiro et al., "The Evolution of the Manosphere across the Web," 204.

²⁹⁶ Ironwood, *The Manosphere*, e-book location 3%.

²⁹⁷ Debbie Ging and Shane Murphy, "Tracking the Pilling Pipeline: Limitations, Challenges and a Call for New Methodological Frameworks in Incel and Manosphere Research," *AoIR Selected Papers of Internet Research*, 2021, https://doi.org/10.5210/spir.v2021i0.12174, 1.

²⁹⁸ Internal polls on incel subreddits and forums revealed a lower share of white people than in the general US population, between 52 to 57%, see Incels.wiki, "The Scientific Blackpill," ItsOver section, https://web.archive.org/web/20230724153818/https://incels.wiki/w/Scientific Blackpill#Incel forums are dispropor tionately populated by suicidal.2C disabled.2C autistic.2C and ethnic men, archived July 24, 2023. This was confirmed by academic survey research, with for example 43% of white respondents in Sophia Moskalenko et al., "Predictors of Radical Intentions among Incels: A Survey of 54 Self-Identified Incels," *Journal of Online Trust and Safety* 1, no. 3 (2022), https://doi.org/10.54501/jots.v1i3.57.

- "I found after a few months that I hated PUA more than anything else in my life." (MGTOW, 2015)
- "I started out as an mra 20 years ago. Within 10 years I went mgtow. Mra's method doesn't work for men." (MGTOW, 2020)

But they are also probably due to the very nature of the manosphere. Indeed, on the Internet, nothing prevents anyone from participating in a group, then another one a few seconds later. And there is evidence that people in fact do that. There is no such thing as a card-carrying PUA, Red Piller or MGTOW, and as a result of those loose or inexistent boundaries, overlap and migration between groups is commonplace. This was notably revealed by Ribeiro et al.'s landmark Big Data analysis of manosphere constituencies:

"Besides simply looking at the activity in each community, we also examined (on Reddit) the user overlap and migratory fluxes. We find that communities in the Manosphere shared large amounts of users through their history, and that there was substantial migration from older to newer communities. For example, there was a migratory influx of MRA users to MGTOW subreddits, with over 50% overlap in the first two years of its existence."²⁹⁹

More generally, describing manosphere groups as distinct entities would be obscuring the profound convergences between those groups. If such links did not exist, it is very unlikely that the concept of "manosphere" would have emerged and caught on. The present section thus attempts to sketch a core of manosphere beliefs and characteristics shared by every group. This will then allow for an expanded definition of the manosphere to be presented.

2.b. Core Beliefs and Shared Characteristics of Manosphere Communities

The Solidarity of Male Spaces

First, even though some might be more or less accepting towards female sympathizers, manosphere groups primarily appeal to a male audience. They offer spaces where men can discuss their experiences as men in current (Western) society. The media and academic attention devoted to manosphere hate speech (which some scholars have dubbed "rapeglish" or "e-bile")³⁰⁰ or deadly violence towards others should not obscure this simple fact: manosphere communities are also nurturing towards those they consider their own. In those spaces, men can vent, express their frustrations, or seek advice from others about many aspects of their lives such as divorce (MRAs/MGTOW), relationships (TRP), and dating (PUAs/TRP/incels). Thus, when a man comes into a manosphere forum or subreddit to talk about distressing situations and life events, he is usually met with fraternal commiseration. Here are for examples the reactions of MGTOW towards a man sharing his suicidal thoughts after a devastating breakup:

²⁹⁹ Ribeiro et al., "The Evolution of the Manosphere Across the Web," 206.

³⁰⁰ E.g., Emma Jane, "Systemic Misogyny Exposed: Translating Rapeglish from the Manosphere with a Random Rape Threat Generator," *International Journal of Cultural Studies* 21, no. 6 (2018): 661–80, <u>https://doi.org/10.1177/1367877917734042</u>.

- "You have worth!" (MGTOW, 2019).
- "You are here in the right place. EVERY guy goes through a tough breakup... IT WILL GET BETTER. Just get yourself through it and you'll look back and laugh hard you took it. Get out of the place you are living and see a GUY therapist to get over the hurt and depression. You have support here and with your family" (MGTOW, 2019).
- "Many men here understand and have felt like you now.
 Your situation is temporary my dude.
 Suicide is permanent.
 We know it sucks brother... we know this because it does suck" (MGTOW, 2019).

Similar examples are commonplace in every community. To a lot of men in adverse situations such as unemployment, loneliness, depression, judicial disputes, or romantic and sexual deprivation, the manosphere offers compassion, advice, and a sense of belonging to a community. In that regard, it is far from being an unabashedly "macho" space, for expressing and sharing one's feelings is usually encouraged, as in the liberationist consciousness-raising groups of the 1970s and the mythopoetic gatherings of the 1990s. Underlying this is the narrative that current Western society is completely impervious to male suffering and distress. This nurturing aspect of the manosphere is thus conceived as a reaction to an indifferent and/or hostile society. In that way, it is quite combative, and the line between nurturing one's own and disparaging others is easily crossed. For example, in the above example, one finds wholesome support messages along with vituperation about "vindictive bitches." In the manosphere, male solidarity is often also solidarity *against* women.

From the Male Experience to the Male Crisis

Each manosphere community has their diagnoses about contemporary male experiences. While these diagnoses differ, they all insist on male difficulties and hardships. Some insist on the areas of dating and romance (PUAs, TRP, incels), others on the cultural and legal domain (MRAs, MGTOW). In contrast to the popularity of feminist discourse in the media or in government, all these groups claim that society disregards men's experiences. Against this perceived disregard, communities diverge on the *modus operandi*: Men's Rights Activists aim at establishing a counterpart to feminist activism and cultural advocacy, Pickup-Artists and The Red Pill advocate for self-transformation, MGTOW embrace separatism, and incels plunge into defeatist nihilism. Those divergences in *modus operandi* can create antagonism among manosphere factions. For example, incels have a deep contempt for the Pickup-Artists' self-help outlook (one of the crucibles of the contemporary incel community was a website called PUAhate.com created in 2009),³⁰¹ while MGTOW sometimes deride the reformist attempts of MRAs. Yet, despite those divergences, all manosphere groups are based on the premise that men face specific structural difficulties. And they

³⁰¹ Incels.wiki documents how a "proto-blackpill" faction emerged from this forum, although "they were never any forums explicitly devoted to inceldom," Incels.wiki, "Puahate, Sluthate & Lookism (PSL)," <u>https://web.archive.org/web/20230914083534/https://incels.wiki/w/Puahate, Sluthate & Lookism %28PSL%29</u>, archived September 14, 2023.

offer a framework for some men to make sense of this experience, as well as a community to help face it.

Manosphere diagnoses of male experiences are usually negative, with MRAs insisting on an ongoing crisis for men and boys, while MGTOW and incels hold the current situation to be irretrievably adverse.³⁰² Being the oldest in the manosphere, the Men's Rights movement undoubtedly laid the theoretical foundation for all this. By insisting on male experiences and hardships, it elaborated on earlier Male Liberationist attempts to let men express their feelings and create bonds with each other. Yet, contrary to the Male Liberationist program, this bonding and advocacy was structured by growing opposition and resentment towards feminism, a feature that remains to this day, and is one of the other uniting factors of the manosphere.

A Shared Brand of Antifeminism

The manosphere is antifeminist, yet it does not mean that it is the complete opposite of feminism on all issues. It is not a uniformly male supremacist or conservative traditionalist space and it accepts for the most part the ideal of gender equality and female autonomy. Appeals for the subservience of women, or against women's rights—although present—are relatively rare. As accurately noted by anthropologist Mélanie Gourarier, the "feminism" decried by manospherians is always homogeneous and hegemonic.³⁰³ It is never positively defined and is mostly mentioned as something to be resisted. Indeed, manosphere communities nurture a set of shared grievances towards what they call feminism, expressed with varying degrees of hostility. These grievances constitute what could be called generic manosphere antifeminism, and circulate widely between communities and even beyond, notably through memes.³⁰⁴

The first grievance is that feminists do not care about men's issues and experiences. While this is also believed about the media or government, as a movement advocating for gender equality, feminism is particularly resented. From this alleged apathy towards men, manospherians conclude that feminism is a pro-female interest group, rather than an egalitarian movement. Thus, gender reversal is a favorite trope of theirs to point out anti-male double standards. Manospherians often present situations they hold to be unfair to men (such as men working more physical jobs and having higher rates of workplace fatalities) and speculate: wouldn't feminists speak out if the gender were reversed?³⁰⁵ The logical consequence of this is to wholeheartedly reject the notions of

³⁰² The notion of "masculinity crisis" is increasingly popular nowadays, see Google Books Ngram Viewer, <u>https://web.archive.org/web/20231003081444/https://books.google.com/ngrams/graph?content=masculinity+crisis&</u> <u>year start=1950&year end=2019&corpus=en-2019&smoothing=3</u>, generated and archived October 3, 2023. For details on Ngram, see footnote n°201, 51. For historical analysis and critique of this recurring trope, see Chap. I, A, 45.

³⁰³ Mélanie Gourarier, Alpha Mâle (Paris: Seuil, 2017), 10.

³⁰⁴ Manosphere memes used to illustrate the antifeminist tropes and grievances described in this section are reproduced in Appendix 2, 465.

³⁰⁵ This practice is so widespread that the r/mensrights subreddit has had to establish restrictions on "gender reversal" posts: "Posts speculating about what would happen if the gender were reversed are subject to restrictions. Gender reversal posts must include comparable examples from both genders and also must be news stories, not some random photo or video or twitter post," r/mensrights, subreddit rule number 12,

male oppression and privilege, and to deride feminist claims about them.³⁰⁶ In fact, what is called "radical feminism" and its claims are bitterly opposed by the manosphere, which pictures it as a misandrist (i.e., man-hating)³⁰⁷ and anti-egalitarian movement.³⁰⁸ A common way to do so is by sharing extremely generalizing and depreciatory statements about men made by women on social media to illustrate feminism—a case of cherry-picking. On the Internet, such statements circulate widely, and can become the object of a plethora of antifeminist memes.

This is just the commonly shared and "basic" version of manosphere antifeminism. It is expressed with varying degrees of intensity, the highest one being to portray feminism as a ploy by conspiring elites to subjugate men and bring about the "degeneracy" and "decline" of the West. Quite naturally, those communities united in their rejection of a homogeneous and hegemonic feminism also devote a lot of attention to women.³⁰⁹

Focus on Women and Varying Degrees of Misogyny

Even though the manosphere is a space by and for men, discussions do not always revolve around men or masculinity. In fact, even in a male separatist community like MGTOW, female behavior and interactions with women are among the most common topics. In communities focusing on (heterosexual) relationship and dating experiences, such as Pickup-Artists, The Red Pill, or incels, there is hardly a conversation that does not focus—at least in part—on women. Quantitative linguistic studies on manosphere platforms confirm this prevalence, with "women" being the most frequent nongrammatical word in the whole r/TheRedPill subreddit.³¹⁰ Similarly, in 2019, sociologists LaViolette and Hogan conducted a Big Data comparison of two Reddit communities dedicated to men's issues: the profeminist r/MensLib and the antifeminist r/MensRights. They found greater occurrence of the "she/her" pronouns in Men's Rights discourse,

https://web.archive.org/web/20231003125325/https://www.reddit.com/r/MensRights/?rdt=48755, archived October 3, 2023.

³⁰⁶ "At its core, privilege is a sociological concept. In terms of its popular usage, the best definition is the one provided by feminist scholar Peggy McIntosh: privilege is a 'system of unearned advantages' provided to an individual at birth based on their gender, sexuality, race, and a multitude of other characteristics. Male privilege, specifically, concerns the belief that men are afforded economic, social, and political advantages in most societies," Peggy Mc Intosh, "White Privilege and Male Privilege," Wellesley College Center for Research on Women, 1998, cited and discussed in Anna Wenzel, ed., *Male Privilege* (New York: Greenhaven Publishing, 2020), 8. Wenzel adds that "it was during the second wave of feminism in the 1970s that the concept of privilege formally entered the academic sphere and the broader social conscience," Ibid., 8.

³⁰⁷ For history and analysis of the term "misandry" and its role in the manosphere, see Alice Marwick and Robyn Caplan, "Drinking Male Tears: Language, the Manosphere, and Networked Harassment," *Feminist Media Studies* 18, no. 4 (2018): 543–59, <u>https://doi.org/10.1080/14680777.2018.1450568</u>.

 $^{^{308}}$ Therefore, "radical feminism" is used in the manosphere in a different sense than the historical one presented in footnote n°101, 34. Instead, it more or less designates all feminists who defend ideas opposed to those presented in this section.

³⁰⁹ Similarly, women are also described as an extremely homogeneous population in the manosphere, as highlighted in Chap. IV, B, 196.

³¹⁰ Joseph Mountford, "Creating Masculinities Online: Bronies and The Red Pill" (Master's Thesis, University of Sussex, 2015), <u>http://rgdoi.net/10.13140/RG.2.1.4400.5608</u>, 58.

"perhaps reflecting an us-versus-them mentality."³¹¹ After I analyzed the data that they kindly updated and shared, it appears that "woman" is also the most common nongrammatical word on r/MensRights—as opposed to "men" on r/MensLib.³¹² Other similar quantitative studies concur that focus on women is a ubiquitous feature of the manosphere.³¹³

As for the content of discussions on women, it varies greatly between groups. Yet, some tropes are widespread and unsurprisingly aligned with manosphere antifeminism. In the manosphere, women are usually portrayed as emotional, self-centered, preys to victim mentality and rhetoric, as well as oblivious to male life experiences and contributions to society. Levels of misogyny are extremely variable. Some communities try to strictly avoid it, notably the mainstream PUA venues such as r/seduction or the most progressive MRAs, while others give it free rein, particularly MGTOW and incels.

The Language of the Manosphere

Lastly, the manosphere is united by its use of particular idioms.³¹⁴ While all communities coin their own terms, concepts, and phrases, there are broad transfers between groups, contributing to a shared identity:

"The manosphere is an aggregate of diverse communities brought together by a common language that orients them in opposition to the discourse and rhetoric of feminism. While the concerns of, say, young men interested in seducing women, libertarian Bitcoin farmers, and fathers caught up in contentious custody hearings are quite different, vocabulary contributes to a sense of common identity."³¹⁵

Given the nature of the Internet, these lexical transfers go far beyond the borders of the manosphere. For example, the term "cuck," which is nowadays an Alt-Right favorite, is also widespread in the manosphere.³¹⁶ Similarly, the word "Chad," after gaining popularity among incels, has now seeped into popular media and social media culture. Manosphere communities still differ widely in their idioms, but they nonetheless all engage in lexical creation and transfers, with each group having its own variant as a result–a unique mixture of antifeminist and Alt-Right catchphrases, Internet and gamer slang, and scientific vocabulary.³¹⁷

³¹¹ Jack LaViolette and Bernie Hogan, "Using Platform Signals for Distinguishing Discourses: The Case of Men's Rights and Men's Liberation on Reddit," *Proceedings of the Thirteenth International AAAI Conference on Web and Social Media* (2019): 323–34, <u>https://doi.org/10.1609/icwsm.v13i01.3357</u>, 331.

³¹² Jack LaViolette, personal communication, May 2021.

³¹³ For incels, see Sylvia Jaki et al., "Online Hatred of Women in the Incels.Me Forum: Linguistic Analysis and Automatic Detection," *Journal of Language Aggression and Conflict* 7, no. 2 (2019): 240–68, https://doi.org/10.1075/jlac.00026.jak.

³¹⁴ For a glossary of manosphere terms, see Appendix 30, 586

³¹⁵ Marwick and Caplan, "Drinking Male Tears," 11.

³¹⁶ Maureen Kosse, "'Ted Cruz Cucks Again': The Insult Term Cuck as an Alt-Right Masculinist Signifier," *Gender and Language* 16, no. 2 (2022): 99–124, <u>https://doi.org/10.1558/genl.21079</u>.

³¹⁷ In the Internet era, neologisms can originate and spread rapidly to help social movements further their agendas, e.g., Erica Lippert, "Argumentative Strategies and Neologisms in Greenpeace Communication: Ecocide and Climaticide On Instagram," *Neologica*, no. 16 (2022): 173–202, <u>https://doi.org/10.48611/isbn.978-2-406-13219-6.p.0173</u>. A

2.c. Original Manosphere Definition

Now that features common to all manosphere groups have been outlined, I will provide my own detailed definition of the manosphere, summarizing the previous sections. This contribution to the literature expands on the basic and widely accepted definitions presented in the "What is The Manosphere?" subsection above.³¹⁸

Manosphere Definition

The manosphere is a collection of mostly online groups and communities, avowedly revolving around men's experiences and interests. It provides spaces for some men to share with other men their daily experiences of life as a man. There, they can seek advice, vent, or voice grievances in a fraternal environment, albeit one often predicated on hostility towards women. Those groups are united by the belief that men face gender-specific structural issues, whether in sex and relationships, in court, or in Western society at large. Feminism, pictured as homogeneous and hegemonic, is considered to be blind to such issues, if not responsible for them, and is therefore widely opposed and reviled. In fact, it is depicted in the manosphere as a pro-women interest group rather than an egalitarian movement. As an alternative to feminism and a way out of the "male crisis," manosphere movements diverge on the *modus operandi*. Some advocate for collective organization and reform (MRAs), while others recommend checking out of collective politics and advocate for individualistic success (PUA, TRP) or male separatism (MGTOW), or fall into despair and fatalism (incels). Somewhat paradoxically for male-centered spaces, women are a favorite topic of discussion, with varying degrees of misogyny. This conglomerate of groups and communities is further united by a shared repertoire of antifeminist tropes, memes, and by its own composite jargon.

2.d. Recapitulatory Figures

The manosphere is home to many communities which resemble each other, yet differ in many ways, which can be confusing to the uninitiated. Below is a series of figures and tables summarizing the information from the previous sections to help the reader synthetize it. Firstly, figure 1.3 provides a timeline of the different manosphere communities.

conference was held on this topic at the University of Strasbourg (France) entitled "Lutter avec des mots : néologie et militantisme" ("Fighting with Words: Neologisms and Activism"), November 16-17, 2023. It featured presentations showcasing the use of neologisms in diverse activist contexts (Far-Right, feminism, anti-Covid vaccination, urban protests, animal rights, etc.). See conference program here, https://web.archive.org/web/20240420104328/https://www.misha.fr/agenda/evenement/lutter-avec-des-mots-neologie-et-militantisme, archived April 20, 2024.

³¹⁸ Chap. I, B, 50.

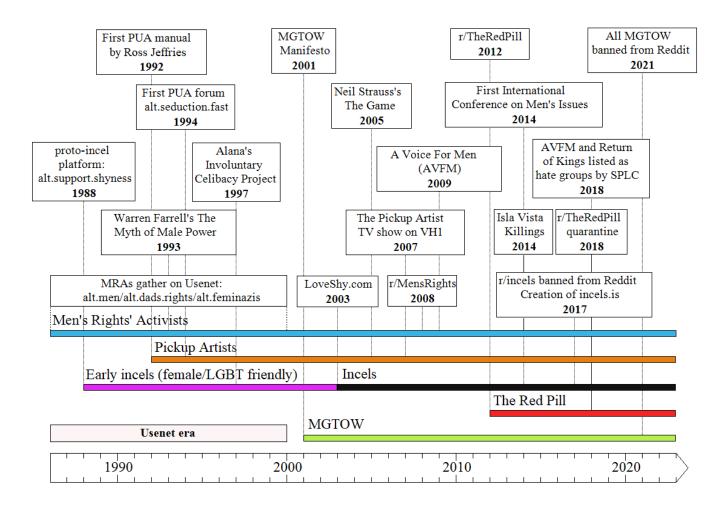


Figure 1.3: Manosphere Timeline

Secondly, I provide tables and figures which summarize the main tenets of each manosphere group's ideology. In his book on men's movements of the 1980s-1990s, Kenneth Clatterbaugh introduces four questions that provide a "logical structure"³¹⁹ to describe and critique those movements:

- "- 1. What is the social reality for men in modern society?
- 2. What maintains or explains this social reality?
- 3. What would be a better social reality?
- 4. How can we achieve this better reality?"³²⁰

³¹⁹ Kenneth Clatterbaugh, Contemporary Perspectives on Masculinity, 2.

³²⁰ Ibid.

Table 1.1 below describes the five manosphere branches through Clatterbaugh's framework.³²¹

Group	What is the social reality for men in modern society?	What maintains or explains this social reality?	What would be a better social reality?	How can we achieve this better reality?
Men's Rights Activists (MRAs)	Men face gender- specific issues which are constantly ignored or downplayed in society. For example: the falling educational achievement of boys, or the higher rates of suicide and addiction among men.	A combination of (1) traditional cultural values which sees men as disposable; and (2) modern feminism, which systematically puts blame on men, and denies the existence of men's issues.	An egalitarian society, where every structural issue would be given its due attention. One where men would feel free to express their feelings and perspectives without fear of dismissal.	Recruitment; indignation; mobilization; activism; legal support and advice for men; creating counter- narratives; advocating for policy change.
Pickup- Artists (PUAs)	Most heterosexual men have a very hard time when it comes to dating, sex, and relationships. They live in a state of sexual and romantic inhibition and frustration.	Confidence issues and lack of experience, which make men anxious and self-conscious when interacting with women. This is compounded by their idealization of women.	Pickup-Artistry (also called "game") is a self-improvement method meant to allow men to satisfy their sexual and romantic expectations. It does not have a structural social agenda <i>per se</i> .	Fashion and grooming; studying social and sexual dynamics; developing an interesting personality; gaining experience through trial-and-error; concrete seduction tips and techniques.
The Red Pill (TRP)	Most men are "blue pilled," i.e., they put women on pedestals, accept feminism, and are unable to satisfy their own desires. They are ideologically conditioned to be "beta males," providing resources for women and society.	 (1) Female nature is hypergamous, and women always strategize to extract benefits from men (money, support, validation). (2) Feminism is a vast brainwashing enterprise that demonizes men and legitimizes all female behavior. 	The Red Pill teaches men how to become "alpha": self- sufficient, masculine men, who pursue their own desires and interests, and reject socially imposed expectations. It helps men navigate current society, with no blueprint for an alternate society.	 (1) "Taking the Red Pill": i.e., rejecting feminism; studying social and sexual dynamics; reading. (2) becoming "alpha": bodybuilding; "game"; developing an independent and self-sufficient lifestyle.

Table 1.1: Ideology of Manosphere Groups

³²¹ For another example of a table summarizing manosphere worldviews, see Rothermel, Kelly, and Jasser, "Of Victims, Mass Murder, and 'Real Men," 133-135.

Men Going Their Own Way (MGTOW)	MGTOW agree with the diagnoses of both MRAs and TRP. Western society is irremediably stacked against men. In particular, they have no legal protection against false rape allegations, no reproductive rights, and no say in matters of child support and custody.	 (1) Feminism is the main culprit. It has seeped into education, governments, and become culturally hegemonic. (2) Women's hypergamous nature, shallow and exploitative of men. (3) Traditional expectations for men in careers, marriage, courtship, etc. 	MGTOW are very pessimistic regarding Western society. They do not think it possible for men to challenge feminist hegemony, nor to defend their interest collectively. They thus advocate for men to individually check-out from social expectations, and romantic relationships.	Going one's own way: i.e., avoiding sexual and romantic interactions with women; developing a self-sufficient lifestyle; personal growth, satisfying one's own desires; investing in traveling, career or hobbies rather than in dating and relationships. Taking the red pill.
Incels	Society is stratified according to looks. Good-looking men (Chads) get the social and sexual validation. Regular looking men (normies), spend their lives working in the hope of attracting and providing for one woman (betabuxxing). Ugly men are at the bottom of society, they receive no attention nor validation.	 Lookism is ubiquitous. Social media and dating apps are shallow and reinforce it. Women ignore and behave cruelly towards ugly and awkward men. Feminists and other Social Justice Warrior (SJWs) ignore or ridicule incels' plight by spreading the male oppression myth. 	There is no common social agenda. Some wish for a traditional society, with enforced monogamy and arranged marriages. Some call for sexual subjection of women. However, as a rule, incels tend to be hopeless and nihilistic, and rarely discuss concrete measures or a better society.	 Some incels try to "ascend" and escape inceldom through plastic surgery, bodybuilding, sex tourism, or sex workers.³²² Some accept their situation, and cope with it through video games, drugs, pornography, etc. A minority turns towards suicide or mass violence.

Applying Clatterbaugh's four questions to describe manosphere communities is quite revealing. Indeed, he contended that these four questions were necessary "to identify and understand a sociopolitical perspective."³²³ This framework fit the 1980s-1990s men's movements he was studying. Those had social agendas and emphasized collective actions to reach them. However, as table 1.1 shows, contemporary manosphere communities have a different bent. The emphasis is much more on individual than collective action. While these Internet groups have shared grievances, and sociopolitical readings of society, they mostly focus on self-improvement,

³²² Those methods are all called "maxxing" techniques, here respectively "surgerymaxxing," "gymmaxxing," "SEAmaxxing" (for South-East Asia), and "escortmaxxing."

³²³ Clatterbaugh, Contemporary Perspectives on Masculinity, 2.

self-actualization, and lifestyle.³²⁴ Men's Rights, being the oldest, is the only one to fit the traditional mold of a "movement."³²⁵ In fact, with typical libertarian suspiciousness towards organizations, MGTOW proudly resist being called a "movement":

"MGTOW is not a "movement". It's an individual lifestyle choice.

Feminism is a "movement". Gay pride is a "movement". They rely heavily on arranged conferences. Public events and loud, organized parades shutting down traffic. Public meetings. Designated representatives and speakers at the United Nations. Gobs of wasteful state funding. A collective army all loudly marching forward toward a common goal.... requiring mass subscriptions, and indoctrinating children in public schools. Else it fails.

MGTOW thrives without any of that. It is the polar opposite of a movement."³²⁶

In a book similar to Clatterbaugh's, sociologist Michael Messner drew a map of the "Terrains of the Politics of Masculinities," to represent the different perspectives of men's movements in the 1980s-1990s (including race activists and profeminist men).³²⁷ In figure 1.4 below, I adapt his map to current manosphere issues and groups. For that purpose, three main focuses or "terrains" were identified: (1) Male Grievances; (2) Antifeminism; and (3) Self-Improvement, all represented by circles. Groups were positioned inside those circles along a triangle representing the manosphere. Lastly, groups were colored according to their relative levels of misogyny, as measured by prevalence of online hate speech, sexist slurs and tropes, etc.³²⁸

³²⁶ Mgtow.com, "Frequently Asked Questions,"

³²⁴ In that regard, the manosphere perfectly fits the "idea that individuals have been increasingly 'disembedded' from the different types of collectivities and organizations that had structured social and political life during an earlier period of modernity" and that contemporary social movements can be "understood as expressions of a radicalized 'individualization' of contemporary society," an influential theoretical position regarding contemporary activism in a globalized digital age, Adrienne Sörbom and Magnus Wennerhag, "Individualization, Life Politics, and the Reformulation of Social Critique: An Analysis of the Global Justice Movement," *Critical Sociology* 39, no. 3 (2013): 453–78, <u>https://doi.org/10.1177/0896920511431499</u>, 454. This article, however, nuances and criticizes the "individualization" narrative as too vague and simplistic.

³²⁵ Sociological definitions of movements insist on two aspects: (1) they have an organization and (2) an agenda for social change: "Social movements are purposeful and organized."; "Social movements have specific goals, formal organizations, and a degree of continuity," Marshall, *A Dictionary of Sociology*, "social movements," 615-616. Men's Rights fit these criteria. For that reason, it is the only manosphere group which is sometimes referred to as a "movement" in this dissertation.

https://web.archive.org/web/20210104143631/https://www.mgtow.com/faq/, archived January 4, 2021.

³²⁷ Messner, *Politics of Masculinities*, 91.

³²⁸ This is a general estimate, based on years of browsing and analysis of manosphere content, as well as on the relevant scholarly literature, e.g., "Overall, we can rank communities based on the levels of toxicity and misogyny, with MGTOW, Incels and TRP at the top, MRAs in the middle, and PUAs at the bottom," Ribeiro et al., "The Evolution of the Manosphere across the Web," 205.

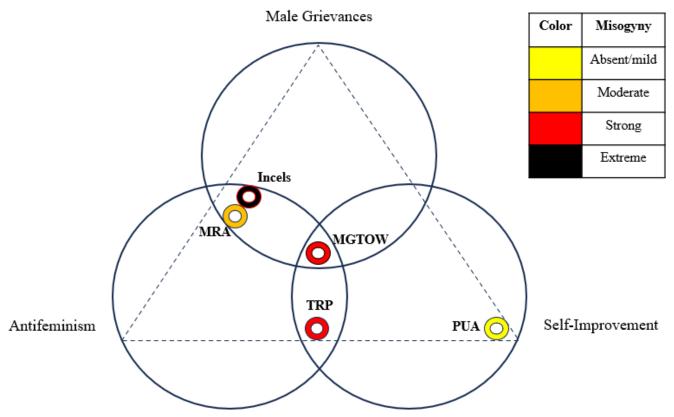


Figure 1.4: The Terrains of Manosphere Politics

These three terrains of manosphere politics each encompass three or more groups. Together, they represent key contemporary themes and narratives that draw some men to the manosphere. Indeed, an extremely successful public intellectual like Jordan Peterson is adept at merging those three themes.³²⁹ While this map is just a schematic representation, it can be fruitfully interpreted. For example, no ideology is based solely on grievances. In fact, grievances are always complemented by antifeminism, which designates an enemy to hold responsible for those grievances. However, this three-theme framework is also limited. Indeed, MRA grievances are mostly social, legal, and judicial, and thus quite different from the sexual grievances of incels. Similarly, MGTOW are contemptuous of PUA techniques which are seen as antics to please and attract women, even though both communities have a "self-improvement" orientation.

For a more detailed understanding of similarities and differences between manosphere ideologies, the three terrains are therefore further subdivided in table 1.2 below: "Male grievances"

³²⁹ Peterson's focus on self-improvement is apparent in the myriad of short self-help/motivational clips found on YouTube, as well as in his book, Jordan Peterson, *12 Rules for Life: An Antidote to Chaos* (Toronto: Penguin Random House Canada, 2018). For relationship to feminism and focus on male issues, see his YouTube conversations with Warren Farrell: Jordan B Peterson, "The Four Dos and Don'ts of Divorce," YouTube.com, August, 16, 2021; Jordan B Peterson, "Avoiding School Shootings and the Boy Crisis," YouTube.com, June 13, 2022, <u>https://web.archive.org/web/20230428043036/https://www.youtube.com/watch?v=IpPr5i1aHjE, https://web.archive.org/web/20231113152715/https://www.youtube.com/watch?v=IAqCISsZEM4&t=3340s, archived respectively April 28, 2023 and November 13, 2023.</u>

are divided between "social grievances" (child custody, male suicide, etc.) and "sexual grievances" (disadvantages for men in heterosexual dating, sex, and relationships). "Antifeminism" is reduced to "antifeminism" *per se*, meaning active opposition to feminism on feminist hot-button issues such as rape or domestic violence. Another subcategory was added to include support for anti-political correctness (PC). Indeed, most manospherians' antifeminism includes a broader dislike towards PC, and the feminist/LGBTQ+/race activists (mockingly called "Social Justice Warriors" or "SJWs") who try to enforce and expand it.³³⁰ Finally, "Self-improvement" is divided into "lifestyle" (such as focusing on physical exercise, reading, etc.) and "game" (i.e., seduction techniques).

 MRA
 PUA
 TRP
 MGTOW
 Incel

	MRA	PUA	TRP	MGTOW	Incels
Social grievances	1	×	\approx	√	\approx
Sexual grievances	×	×	×	√	√
Antifeminism	✓	×	\approx	√	\approx
Anti PC-SJWs	✓	\approx	√	√	√
Lifestyle	×	√	√	√	\approx
Game	×	√	√	×	×

 \checkmark = Major feature of the ideology \approx = Minor feature of the ideology \checkmark = Absent/Anecdotal

After the overview of manosphere history and ideology found in sections A and B, section C presents a literature review of manosphere research. While this dissertation's introduction featured a brief literature review on biology in the manosphere, this one is an exhaustive literature review of all manosphere research.

C. MANOSPHERE RESEARCH LITERATURE REVIEW

C.1. Discourse Analysis–Unobtrusive Methods

1.a. Qualitative Discourse Analysis

Qualitative discourse analysis is the most common type of manosphere research, primarily in the fields of sociology, linguistics, or feminist media studies. These studies follow the same pattern: the discourse of an online community is collected on one or several websites, then scrutinized qualitatively. Its themes and tropes are summarized, then classified, analyzed, and often

³³⁰ Political correctness is "belief that languages and practices which could offend political sensibilities (as in matters of sex or race) should be eliminated," Merriam Webster, "Politically correct," <u>https://web.archive.org/web/20240901145431/https://www.merriam-</u>

webster.com/dictionary/political%20correctness, archived September 1, 2024. For a manosphere definition of Social Justice Warrior, see Appendix 30: Glossary of Manosphere Terms, 586

criticized. Nowadays, this type of research is so widespread that conducting an exhaustive review is a daunting, if not impossible task. In fact, as noted by two manosphere researchers, one of whom is the author of the most cited and influential of those studies,³³¹ "This categorisation has been necessary and important, but its frequent replication at this point, we argue, has led to a stagnation of knowledge, and does not facilitate theory building or intervention."³³²

Discourse analysis research roughly falls into three categories, although these often overlap: (1) general analysis of manosphere ideology; (2) focus on misogyny and violence; (3) targeted subject-specific studies.

One of the easiest avenues to get an in-depth look at an online community's ideology is to look at the discourse it produces. This discourse is readily available for researchers, while accessing the people behind the computers is quite arduous. Hence the popularity of such studies in manosphere research. After deconstructing the themes and tropes of manosphere communities, scholars then provide their concepts and analyses on the matter. Analyzing the whole manosphere, Ging thus tries to make sense of online masculinities: are they traditional, dominant, hybrid?³³³ Schmitz and Kazyak, for their part, identify two categories of manospherians: "Cyber Lads in Search of Masculinity" and "Virtual Victims in Search of Equality," as well as the dominant subthemes in each category's rhetoric.³³⁴ For Coston and Kimmel, Men's Rights Activism stems from a sense of "aggrieved entilement," i.e., from the anger of men whose lives differ from what they think they are entitled to.³³⁵ Dragiewicz reveals how MRA discourse contains calls for the reassertion of patriarchy, while its calls for formal equality obfuscate persistent gender power imbalance.³³⁶ British political scientist Ana Jordan contends that Fathers' Rights discourse has

³³¹ Ging, "Alphas, Betas, and Incels."

³³² Ging and Murphy, "Tracking the Pilling Pipeline," 1. Some of these qualitative studies do not affiliate with any particular methodological framework, while others are grounded in various methodological and theoretical traditions, to name a few: qualitative thematic analysis, inductive content analysis, analytic abduction ("In a general sense, abduction forwards explanations for novel or surprising observations. In a more practical sense, abduction aims to combine the strengths of both inductive and deductive inquiry by reasoning from concrete data (similar to induction), but using this data to extend, refine, or refute existing theories or propositions (similar to deduction))." Others have created "tailor made' qualitative analys[e]s" that combine "several sources, including variations of thematic and grounded approaches," etc. Respectively Sarah Daly and Shon Reed, "'I Think Most of Society Hates Us': A Qualitative Thematic Analysis of Interviews with Incels," Sex Roles 86, no. 1 (2022): 14-33, https://doi.org/10.1007/s11199-021-01250-5; Dignam and Rohlinger, "Misogynistic Men Online"; Michael Halpin and Norann Richard, "An Invitation to Analytic Abduction," Methods in Psychology 5 (2021): 1-8, https://doi.org/10.1016/j.metip.2021.100052, 1; Hande Eslen-Ziya and Margunn Bjørnholt, "Men's Rights Activism and Anti-Feminist Resistance in Turkey and Norway," Social Politics: International Studies in Gender, State & Society 30, no. 1 (2022): 213-38, https://doi.org/10.1093/sp/jxac011, 219-220. For definitions and applications of different approaches to qualitative research methods, see Michael Quinn Patton, Qualitative Research & Evaluation Methods: Integrating Theory and Practice, 4th ed. (Thousand Oaks: SAGE Publications, 2015).

³³³ Ging, "Alphas, Betas, and Incels."

³³⁴ Rachel Schmitz and Emily Kazyak, "Masculinities in Cyberspace: An Analysis of Portrayals of Manhood in Men's Rights Activist Websites," *Social Sciences* 5, no. 2 (2016), <u>https://doi.org/10.3390/socsci5020018</u>.

³³⁵ Bethany Coston and Michael Kimmel, "White Men as the New Victims: Reverse Discrimination Cases and the Men's Rights Movement," *Nevada Law Journal* 13, no. 2 (2013): 368–85.

³³⁶ Molly Dragiewicz, "Patriarchy Reasserted: Fathers' Rights and Anti-VAWA Activism," *Feminist Criminology* 3, no. 2 (2008): 121–44, <u>https://doi.org/10.1177/1557085108316731</u>.

more to do with the postfeminist narratives than with an antifeminist "backlash," and that those two narratives should be clearly differentiated.³³⁷

Such general discursive analysis has also been conducted on Pickup-Artists, with Almog and Kaplan highlighting the importance of "gaming logic" in PUA discourse, which they describe as a "geeky solution to the dilemmas of young masculinity."³³⁸ Similarly, Red Pill ideology has been qualitatively analyzed by Van Valkenburgh, who stresses the importance of neoliberal economics and scientific discourse in this new digital take on masculinity.³³⁹ As for incels, they are the subject of increased scrutiny, and blackpill ideology has been deconstructed extensively in social science journals, criminology studies, and security and counter-terrorism reports.³⁴⁰ All these analyses highlight dominant themes and tropes in manosphere discourse, which they link to broader cultural phenomena.³⁴¹ They also criticize such discourse, by highlighting its contradictions. Violent and hateful speech is one of the main objects of these critiques.

Discourses around rape and sexual violence in the manosphere have been a recurring concern and focus of feminist scholars. For example, Lise Gotell and Emily Dutton analyze MRA discourse on rape, which they see as a strategic tool to mobilize young men, in a shift away from Fathers' Rights issues. They show how feminist critiques of "rape culture" are framed by MRAs as a ludicrous "moral panic," with female MRAs leading that counteroffensive.³⁴² Emma Jane studies online rape threats, a new digital type of discourse which she calls "Rapeglish."³⁴³ The discursive construction and dehumanization of women by incels has been analyzed by Chang, as well as by Menzie through the lens of "femmephobia."³⁴⁴ Hopton and Langer have examined

³³⁷ Jordan, "Conceptualizing Backlash."

³³⁸ Ran Almog and Danny Kaplan, "The Nerd and His Discontent: The Seduction Community and the Logic of the Game as a Geeky Solution to the Challenges of Young Masculinity," *Men and Masculinities* 20, no. 1 (2017): 27–48, <u>https://doi.org/10.1177/1097184X15613831</u>.

³³⁹ Van Valkenburgh, "Digesting the Red Pill."

³⁴⁰ E.g., Stephane Baele, Lewys Brace, and Travis Coan, "From 'Incel' to 'Saint': Analyzing the Violent Worldview behind the 2018 Toronto Attack," *Terrorism and Political Violence* 33, no. 8 (2019): 1667–91, <u>https://doi.org/10.1080/09546553.2019.1638256</u>; Shannon Zimmerman, "The Ideology of Incels: Misogyny and Victimhood as Justification for Political Violence," *Terrorism and Political Violence* 36, no. 2 (2022): 166–79, <u>https://doi.org/10.1080/09546553.2022.2129014</u>.; Radicalisation Awareness Network, "Incels: A First Scan of the Phenomenon (in the EU) and Its Relevance and Challenges for P/CVE" (European Commission, 2021). For an example of general qualitative overview of MGTOW ideology, see Jie Liang Lin, "Antifeminism Online: MGTOW (Men Going Their Own Way)," in *Digital Environments: Ethnographic Perspectives Across Global Online and Offline Spaces*, ed. Urte Undine Frömming et al. (Bielefeld: Transcript Verlag, 2017), 77–96.

³⁴¹ Meta-analyses are however sorely needed to compile those findings. Although meta-analyses are much more common in quantitative research, they exist in qualitative research: "The basic idea of qualitative meta-analysis is to provide a concise and comprehensive picture of findings across qualitative studies that investigate the same general research topic," for theoretical and methodological exploration of this method, see Ladislav Timulak, "Meta-Analysis of Qualitative Studies: A Tool for Reviewing Qualitative Research Findings in Psychotherapy," *Psychotherapy Research* 19, no. 4–5 (2009): 591–600, https://doi.org/10.1080/10503300802477989, 591.

³⁴² Gotell and Dutton, "Sexual Violence in the 'Manosphere.""

³⁴³ Jane, "Systemic Misogyny Exposed."

³⁴⁴ Winnie Chang, "The Monstrous-Feminine in the Incel Imagination: Investigating the Representation of Women as 'Femoids' on /r/Braincels," *Feminist Media Studies* 22, no. 2 (2020): 254–70, <u>https://doi.org/10.1080/14680777.2020.1804976</u>; Lauren Menzie, "Stacys, Beckys, and Chads: The Construction of Femininity and Hegemonic Masculinity within Incel Rhetoric," *Psychology & Sexuality* 13, no. 1 (2020): 69–85, <u>https://doi.org/10.1080/19419899.2020.1806915</u>.

manosphere sexist abuse on Twitter.³⁴⁵ Other analyses frame manosphere misogyny in terms of "male supremacy," or "authoritarian" and "fascist" subjugation of women.³⁴⁶ There is a common thread to these studies: they warn against studying manosphere misogyny as an isolated phenomenon, and call instead for analyzing it as part of a broader online and offline cultural context. In many ways, they view this online violence as just an extreme or distorted form of widespread attitudes and prejudice towards women.

Some qualitative manosphere discourse studies focus on specific events and their reception in the manosphere. For example, Dignam and Rohlinger examine the links between the Red Pill community and Donald Trump's election in 2016.³⁴⁷ Other discursive studies investigate the celebration and "canonization" of mass murderers like 1989 Montreal massacre perpetrator Marc Lépine, and 2014 Isla Vista killer Elliot Rodger.³⁴⁸ Some only dwell on specific types of texts coming from manosphere communities, such as Dayter and Rüdiger's analysis of PUA "field reports" (i.e., narrations of their encounters with women),³⁴⁹and Daly and Laskovtsov analysis of incel suicide posts.³⁵⁰ These valuable studies mine less studied sources of data, or shed light on manosphere-adjacent phenomena and events. If all researchers studied the manosphere as a bounded and static entity, this would entail loss of accuracy and complexity. In a similar vein, recent studies examined narratives of ex-Red Pillers or ex-incels who have quit the manosphere, providing insights on the yet understudied deradicalization process.³⁵¹

³⁴⁵ Kathryn Hopton and Susanne Langer, "Kick the XX out of Your Life': An Analysis of the Manosphere's Discursive Constructions of Gender on Twitter," *Feminism & Psychology* 32, no. 1 (2022): 3–22, <u>https://doi.org/10.1177/09593535211033461</u>.

³⁴⁶ Respectively in Kayla Preston, Michael Halpin, and Finlay Maguire, "The Black Pill: New Technology and the Male Supremacy of Involuntarily Celibate Men," *Men and Masculinities* 24, no. 5 (2021): 823–41, <u>https://doi.org/10.1177/1097184X211017954</u>; Susanne Kaiser, *Political Masculinity: How Incels, Fundamentalists and Authoritarians Mobilise for Patriarchy* (Hoboken: John Wiley & Sons, 2022); Casey Ryan Kelly and Chase Aunspach, "Incels, Compulsory Sexuality, and Fascist Masculinity," *Feminist Formations* 32, no. 3 (2020): 145–72, <u>https://doi.org/10.1353/ff.2020.0044</u>.

³⁴⁷ Dignam and Rohlinger, "Misogynistic Men Online."

³⁴⁸ For Marc Lépine, see Mélissa Blais, "Marc Lépine : héros ou martyr? Le masculinisme et la tuerie de l'École Polytechnique," in *Le Mouvement Masculiniste Au Québec : L'antiféminisme Démasqué*, ed. Mélissa Blais and Francis Dupuis-Déri (Montréal: Remue ménage, 2015), 109–28; Michael Halpin et al., "A Soldier and a Victim: Masculinity, Violence, and Incels Celebration of Marc Lépine" (SocArXiv, 2022), <u>https://doi.org/10.31235/osf.io/cseun</u>. For Elliot Rodger, see Witt, "If i Cannot Have It, i Will Do Everything i Can to Destroy It.' the Canonization of Elliot Rodger." ³⁴⁹ Daria Dayter and Sofia Rüdiger, "Reporting from the Field: The Narrative Reconstruction of Experience in Pickup Artist Online Communities," *Open Linguistics* 2, no. 1 (2016), <u>https://doi.org/10.1515/opli-2016-0016</u>.

³⁵⁰ Daly and Laskovtsov, "Goodbye, My Friendcels."

³⁵¹ Matteo Botto and Lucas Gottzen, "Swallowing and Spitting out the Red Pill: Young Men, Vulnerability, and Radicalization Pathways in the Manosphere," *Journal of Gender Studies* 33, no. 5 (2023): 596–608, <u>https://doi.org/10.1080/09589236.2023.2260318</u>; Amanda Isabel Osuna, "Leaving the Incel Community: A Content Analysis," *Sexuality & Culture* 28, no. 2 (2024): 749–70, <u>https://doi.org/10.1007/s12119-023-10143-6</u>; Alyssa et al., "Identifying Pathways to the Incel Community and Where to Intervene: A Qualitative Study with Former Incels," *Sex Roles* 90 (2024): 910–22, <u>https://doi.org/10.1007/s11199-024-01478-x</u>; Elizabeth Ann Hintz and Jonathan Troy Baker, "A Performative Face Theory Analysis of Online Facework by the Formerly Involuntarily Celibate," *International Journal of Communication* 15 (2021): 3047-3066; Léa-May Burns and Marie-Aude Boislard, "I'm Better Than This': A Qualitative Analysis of the Turning Points Leading to Exiting Inceldom," *The Journal of Sex Research*, 2024, 1–17, https://doi.org/10.1080/00224499.2024.2340110.

1.b. Quantitative Discourse Analysis

Algorithmic or "Big Data" techniques are now capable of processing datasets containing millions of digital objects: tweets, profiles, messages, etc. These techniques are promising, because they allow for an entire website or community's history to be quantitatively analyzed, without resorting to sampling. They have been applied to every manosphere community and various platforms: on Reddit for MRAs and The Red Pill; on Twitter for MGTOW; and on MGTOW, PUA, and incel forums.³⁵² Such analyses usually reveal the most frequent terms and themes in those communities or quantify the proportion of hateful and misogynistic content. A team of quantitative linguists recently ran a study on a cross-manosphere Reddit corpus including the five main manosphere branches to shed light on the representation of gendered social actors (i.e., "women," "girls," "men," and "boys") in manosphere discourse.³⁵³

Beyond linguistic analysis, some Big Data research designs focus on the people sitting behind their computers. Some strive to identify incels based on their Twitter and Facebook activity.³⁵⁴ Wright et al. examine the participation patterns on a MGTOW forum, revealing that half the posts are made by less than one percent of forum users.³⁵⁵ In a uniquely creative study, Brooks et al. managed to map the areas of the United States with the highest concentration of incelrelated tweets, thanks to geolocation of Twitter accounts.³⁵⁶ The most ambitious and noteworthy study of the kind was produced in 2020 by an international research team: "The Evolution of the

³⁵² For MRAs on Reddit, Patrick Rafail and Isaac Freitas, "Grievance Articulation and Community Reactions in the Men's Movement Online," Media 5, Rights Social + Society no. 2 (2019): 1–11. https://doi.org/10.1177/2056305119841387; LaViolette and Hogan, "Using Platform Signals for Distinguishing Discourses: The Case of Men's Rights and Men's Liberation on Reddit"; for The Red Pill on Reddit, Joseph Modeling The Red Pill," Mountford, "Topic Social Sciences 7, no. 3 (2018): 42-57, https://doi.org/10.3390/socsci7030042; Alexandra Krendel, "The Men and Women, Guys and Girls of the 'Manosphere': A Corpus-Assisted Discourse Approach," Discourse & Society 31, no. 6 (2020): 607-30, https://doi.org/10.1177/0957926520939690; for MGTOW on Twitter, Anna Maria Górska, Karolina Kulicka, and Dariusz Jemielniak, "Men Not Going Their Own Way: A Thick Big Data Analysis of #MGTOW and #Feminism Tweets," Feminist Media Studies 23, no. 8 (2022): 3774–92, https://doi.org/10.1080/14680777.2022.2137829; for MGTOW forums, Wright, Trott, and Jones, "'The Pussy Ain't Worth It, Bro'"; for PUA forums, David Wright, "The Discursive Construction of Resistance to Sex in an Online Community," Discourse, Context & Media 36 (2020): 1-25, https://doi.org/10.1016/j.dcm.2020.100402; for incel forums, Hamed Jelodar and Richard Frank, "Semantic Knowledge Discovery and Discussion Mining of Incel Online Community: Topic Modeling" (arXiv, April 21, 2021), https://doi.org/10.48550/arXiv.2104.09586.

³⁵³ This study manages "to establish the topics, descriptions, and actions associated with the social actors across the five groups," Alexandra Krendel, Mark McGlashan, and Veronika Koller, "The Representation of Gendered Social Actors across Five Manosphere Communities on Reddit," *Corpora* 17, no. 2 (2022): 291–321, https://doi.org/10.3366/cor.2022.0257, 1.

³⁵⁴ Mohammad Hajarian et al., "SNEFL: Social Network Explicit Fuzzy like Dataset and Its Application for Incel Detection," *Multimedia Tools and Applications* 78, no. 23 (2019): 33457–86, <u>https://doi.org/10.1007/s11042-019-08057-3</u>; Mohammad Hajarian and Zahra Khanbabaloo, "Toward Stopping Incel Rebellion: Detecting Incels in Social Media Using Sentiment Analysis," in *2021 7th International Conference on Web Research (ICWR)*, (2021): 169–74, <u>https://doi.org/10.1109/ICWR51868.2021.9443027</u>.

³⁵⁵ Wright, Trott, and Jones, "The Pussy Ain't Worth It, Bro."

³⁵⁶ Robert Brooks, Daniel Russo-Batterham, and Khandis Blake, "Incel Activity on Social Media Linked to Local Mating Ecology," *Psychological Science* 33, no. 2 (2022): 249–58, <u>https://doi.org/10.1177/09567976211036065</u>.

Manosphere Across the Web."³⁵⁷ It manages to map out the history of the manosphere, by looking at the number of users in each community's platforms over the past ten years. It also documents an increase in violent and misogynistic content over the 2010s, as found in another study of the kind.³⁵⁸ Furthermore, a remarkable Big Data cross-platform study analysis of incel spaces has also documented a steady increase in levels of violent extremist language between 2015 and 2022.³⁵⁹ Results from those algorithmic methods should however be taken with a grain of salt, for they rely on automated inferences: thus, an automated analysis of writing styles on an incel forum "found" that 35% of users were women. This is presumably false, which the authors readily acknowledge.³⁶⁰ This example shows the long way still to go for those emerging algorithmic techniques. They are bound to grow more popular and sophisticated in the years to come, as exemplified by the rich and ambitious manosphere studies already in pre-print.³⁶¹

Although they differ significantly, all those qualitative and quantitative studies hinge on the same type of data: online discourse and traces of the manosphere's digital activity. Current research therefore has a severe lack of primary data collected directly from manosphere communities. This presumably stems from the hostility of the manosphere towards social scientists and outside intruders.³⁶² The threat of cyber-harassment, intimidation, and violence deters researchers—in particularly women—from approaching those communities. In fact, interviews, surveys, and ethnographic immersions are so scarce that they can be reviewed thoroughly.

³⁵⁷ Ribeiro et al., "The Evolution of the Manosphere across the Web." It was first published as a pre-print in January 2020.

³⁵⁸ Tracie Farrell et al., "Exploring Misogyny across the Manosphere in Reddit," in *Proceedings of the 10th ACM Conference on Web Science* (2019): 87–96, <u>https://doi.org/10.1145/3292522.3326045</u>.

³⁵⁹ Stephane Baele, Lewys Brace, and Debbie Ging, "A Diachronic Cross-Platforms Analysis of Violent Extremist Language in the Incel Online Ecosystem," *Terrorism and Political Violence* 36, no. 3 (2023): 382–405, https://doi.org/10.1080/09546553.2022.2161373.

³⁶⁰ Jaki et al., "Online Hatred of Women in the Incels.Me Forum," 13. This was done using a generic algorithm, the Textgain API which uses a statistical estimate method: "Gender prediction estimates whether a text is written by a man or a woman. Statistically, women tend to talk more about people and relationships (family, friends), while men are more interested in objects and things (e.g., cars, games). As a result, women will use more personal pronouns (I, you, we) in a social context and men will use more determiners (a, an, the) and more quantifiers (one, many)." Maybe incels' and experiences strong focus on personal feelings thwarted the analysis. https://web.archive.org/web/20230914085922/https://devops.textgain.com/#tag/Profiling/paths/~1gender/get, archived September 14, 2023.

³⁶¹ Anh Vu et al., "ExtremeBB: Enabling Large-Scale Research into Extremism, the Manosphere and Their Correlation by Online Forum Data" (2021), <u>http://arxiv.org/abs/2111.04479</u>; Hussam Habib, Padmini Srinivasan, and Rishab Nithyanand, "Making a Radical Misogynist: How Online Social Engagement with the Manosphere Influences Traits of Radicalization" (arXiv, February 17, 2022), <u>http://arxiv.org/abs/2202.08805</u>.

³⁶² Ging and Murphy thus write that the manosphere's "anonymity and apparent reluctance to engage with academics [...] has resulted in a dearth of interview or survey-based research," Ging and Murphy, "Tracking the Pilling Pipeline,"
2. For examples of manospherians' hostility towards myself as a researcher, see Appendix 18, 531.

C.2. Field Research–Obtrusive Methods

2.a. Ethnographic Immersions

True ethnographic immersions combining observations and interviews have been realized by female researchers in France, England, and China.³⁶³ Those three immersions were conducted inside the Pickup-Artist community. This is unsurprising, as PUAs are both easy to locate and access (since they organize dating coaching sessions and seminars) and relatively welcoming towards women.³⁶⁴ Another innovative study consisted in having confederate Pickup-Artists surreptitiously record their interactions with women for later linguistic analysis.³⁶⁵ The Men's Rights/Fathers' Rights movement, with its organized meetings, is also easier to access. Sociologist Robert Kenedy thus combined participant observation and interviews to study Canadian organization Fathers for Justice.³⁶⁶ So did sociologist Michael Kimmel with Fathers' Rights groups in the United States.³⁶⁷ Bertoia and Drakich mixed interviews, observations, and discourse analysis to highlight the contradictions between the official rhetoric of the Men's Rights movement, and the private emotions and thoughts of its members. They conclude that in spite of their egalitarian rhetoric, Father's Rights' Activists do not express much care for equal responsibilities in childcare, but rather get involved in the movement as a reaction against the loss of control, power and money following a contested divorce.³⁶⁸ The more recent Internet-centric manosphere communities such as incels and MGTOW are much harder to study in naturalistic settings. The only exception so far has been Kaitlyn Regehr's work, which combined video ethnography and long-form interviews when producing a TV documentary on incels.³⁶⁹

³⁶³ Respectively Gourarier, *Alpha Mâle*; O'Neill, "The Work of Seduction," Haiping Liu, "Aspirational Taste Regime: Masculinities and Consumption in Pick-up Artist Training in China," *Journal of Consumer Culture* 23, no. 1 (2021): 1–19, <u>https://doi.org/10.1177/14695405211062068</u>. These three female scholars observed PUA training courses in urban areas, and conducted interviews with both coaches and "students" from the community. They used this data to critique PUAs' vision of masculinity, women, sex and intimacy.

³⁶⁴ There are some female PUA coaches, as well as "wingwomen", also called "pivots," i.e., "a woman, usually a friend, used in social situations to help one meet other women." Strauss, *The Game*, 445. However, feminist researchers still reported some discomfort in conducting those studies, notably owing to the objectification of women by PUAs, see Rachel O'Neill, "Injurious Intimacies," in Rachel O'Neill, *Seduction: Men, Masculinity, and Mediated Intimacy* (New York: John Wiley & Sons, 2018).

 ³⁶⁵ Oliver Hambling-Jones and Andrew Merrison, "Inequity in the Pursuit of Intimacy: An Analysis of British Pick-up Artist Interactions," *Journal of Pragmatics* 44, no. 9 (2012): 1115–27, <u>https://doi.org/10.1016/j.pragma.2012.04.008</u>.
 ³⁶⁶ Robert Kenedy, "Researching the Intersection between Collective Identity and Conceptions of Post-Separation and Divorced Fatherhood: A Case Study Fathers For Justice, Fathers For Just Us, or Fathers Are Us?," *Qualitative Sociology Review* 2, no. 2 (2006): 75–97, <u>https://doi.org/10.18778/1733-8077.2.2.06</u>.
 ³⁶⁷ Kimmel, *Angry White Men*.

³⁶⁸ Carl Bertoia and Janice Drakich, "The Fathers' Rights Movement: Contradictions in Rhetoric and Practice," *Journal of Family Issues* 14, no. 4 (December 1, 1993): 592–615, <u>https://doi.org/10.1177/019251393014004007</u>.

³⁶⁹ Kaitlyn Regehr, "In(Cel)Doctrination: How Technologically Facilitated Misogyny Moves Violence off Screens and on to Streets," *New Media & Society* 24, no. 1 (2022): 138–55, <u>https://doi.org/10.1177/1461444820959019</u>.

2.b. Interviews

Interview research has primarily been conducted with Men's Rights participants. Thus, Ana Jordan studied the discourse around fatherhood in the UK's Father's 4 Justice organization.³⁷⁰ Similarly, political scientist Jocelyn Elise Crowley interviewed 149 US Fathers' Rights' Activists in 2003 to understand how social movements coalesce around issues and grievances, but also around an identity.³⁷¹ She also explored the understudied women of the manosphere and their conflicted identities, by conducting 23 in-depths interviews with female Fathers' Rights' activists.³⁷² Members of the most recent online communities such as incels and MGTOW are harder to reach than traditional activists. However, researchers increasingly recognize the need to understand their lives and perspectives through interviews. In-depth Incel qualitative interviewed seven incels and three ex-incels for her book *The Incel Rebellion*.³⁷⁴ Finally, a Swedish master's student was able to reach local MGTOW with a combination of in-person meetings and online interviews.³⁷⁵

2.c. Survey Research

Quantitative survey research is also rare, presumably owing to the difficulty of recruiting respondents. The oldest study of the kind thus surveyed men's groups members (Men's Rights, profeminist, and mythopoets) about their opinions of each other, but was only able to gather responses from 17 MRAs.³⁷⁶ Recently, incels have been the target of large-scale survey studies, investigating their mental health, experiences, and beliefs, in an effort to understand and prevent violence and self-harm.³⁷⁷ This recent increase in large-scale incel survey research is a testimony

³⁷⁰ Ana Jordan, "'Dads Aren't Demons. Mums Aren't Madonnas.' Constructions of Fatherhood and Masculinities in the (Real) Fathers 4 Justice Campaign," *Journal of Social Welfare and Family Law* 31, no. 4 (2009): 419–33, https://doi.org/10.1080/09649060903430280.

³⁷¹ Jocelyn Elise Crowley, "On the Cusp of a Movement: Identity Work and Social Movement Identification Processes within Father's Rights' Groups," *Sociological Spectrum* 28, no. 6 (2008): 705–24, https://doi.org/10.1080/02732170802342974.

³⁷² Jocelyn Elise Crowley, "Conflicted Membership: Women in Fathers' Rights Groups," *Sociological Inquiry* 79, no.
3 (2009): 328–50, <u>https://doi.org/10.1111/j.1475-682X.2009.00293.x</u>.

³⁷³ Daly and Reed, "I Think Most of Society Hates Us."

³⁷⁴ Lisa Sugiura, *The Incel Rebellion: The Rise of the Manosphere and the Virtual War Against Women* (Bingley: Emerald Publishing, 2021).

³⁷⁵ Sebastian Gygax, "Shedding a Different Light on MGTOW: An Anthropological Exploration of the Emic Perspective of Belonging to MGTOW" (Master's Thesis, Stockholms universitet, 2021), <u>http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-199428</u>.

³⁷⁶ John Fox, "How Men's Movement Participants View Each Other," *The Journal of Men's Studies* 12, no. 2 (March 1, 2004): 103–18, <u>https://doi.org/10.3149/jms.1202.103</u>.

³⁷⁷ Anne Speckhard and Molly Ellenberg, "Self-Reported Psychiatric Disorder and Perceived Psychological Symptom Rates among Involuntary Celibates (Incels) and Their Perceptions of Mental Health Treatment," *Behavioral Sciences of Terrorism and Political Aggression*, 2022, 1–18, <u>https://doi.org/10.1080/19434472.2022.2029933</u>; Jesse Morton et al., "Asking Incels (Part 1): Assessing the Impacts of COVID-19 Quarantine and Coverage of the Canadian Terrorism Designation on Incel Isolation and Resentment," International Center for the Study of Violent Extremism, 2021; William Costello et al., "Levels of Well-Being Among Men Who Are Incel (Involuntarily Celibate)," *Evolutionary Psychological Science* 8, no. 4 (2022): 375–90, <u>https://doi.org/10.1007/s40806-022-00336-x</u>; Moskalenko et al., "Incel Ideology, Radicalization and Mental Health"; Speckhard et al., "Involuntary Celibates' Experiences of and Grievance over Sexual Exclusion and the Potential Threat of Violence Among Those Active in an Online Incel Forum"; Brandon

to the special attention received by this group over the last few years, which will be the focus of next section.

C.3. The Case of Incel Research

In the wake of incel-inspired mass killings in the United States and Europe, the group has been the target of unprecedented media, academic, and institutional scrutiny. For example, the European Commission has been holding expert sessions and issuing reports on incels since 2021.³⁷⁸ Incels were also discussed in the 2023 UK Home Office's Commission for Countering Extremism report, as well as in a recent United Nations Office for Counter-Terrorism workshop.³⁷⁹ With increased security concerns comes increased public funding: the US Department of Homeland Security thus granted 250,000 USD to a Georgia State University research team "to research the evolution and spread of the growing male supremacist movement referred to as Incel."³⁸⁰ This general surge in interest towards incels generated by mass killings is illustrated by figure 1.5 with use of the term soaring after the 2014 Isla Vista killings:

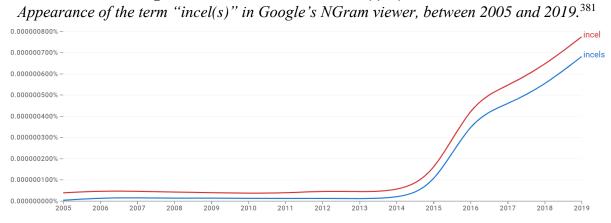


Figure 1.5: Use of the term "incel(s)" (2005-2019)

Sparks, Alexandra Zidenberg, and Mark Olver, "One Is the Loneliest Number: Involuntary Celibacy (Incel), Mental Health, and Loneliness," *Current Psychology* 43 (2024): 392–406, <u>https://doi.org/10.1007/s12144-023-04275-z</u>. ³⁷⁸ Radicalisation Awareness Network, "Incels: A First Scan of the Phenomenon (in the EU) and Its Relevance and Challenges for P/CVE."

³⁷⁹ United Kingdom Home Office, "Commission for Countering Extremism end of year report 2022 to 2023," March 28, 2023, <u>https://web.archive.org/web/20230612160516/https://www.gov.uk/government/publications/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-end-of-year-report-2023/commission-for-countering-extremism-en</u>

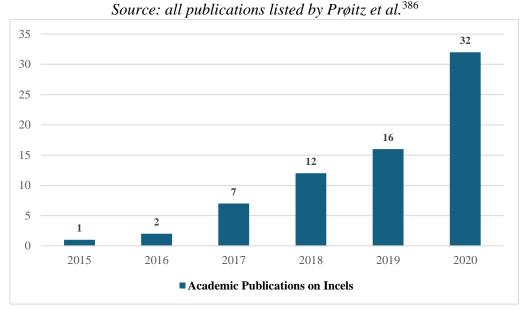
report-2022-to-2023-accessible-version, archived June 12, 2023. United Nations Office of Counter-Terrorism, "UN Office for Counter-Terrorism Workshop Investigates Role of Technology and Mental Health in Radicalization to Violent Extremism in Europe," https://web.archive.org/web/20230612155313/https://www.un.org/counterterrorism/events/BI-Hub-Technology-

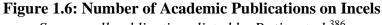
Mental-Health-Radicalization-in-Europe, archived June 12, 2023.

³⁸⁰ Georgia State University, "Grant Will Fund Research Into Growing Male Supremacist Online Culture", June 26, 2019, <u>https://web.archive.org/web/20230612153119/https://news.gsu.edu/2019/06/26/federal-grant-will-fund-research-into-growing-male-supremacist-subculture-online/</u>, archived June 12, 2023.

³⁸¹ Google Books Ngram Viewer, https://web.archive.org/web/20231004171814/https://books.google.com/ngrams/graph?content=incel%2C+incels&y ear start=2005&year end=2019&corpus=en-2019&smoothing=3, generated and archived October 4, 2023. For details on Ngram, see footnote n°201, 51.

The incel community has now taken broader cultural relevance. For example, some of its terms, such as "Chad," have entered popular parlance, while Hollywood movies are also starting to use incel-inspired characters as new archetypal villains.³⁸² As I have noticed anecdotally over years of discussing my research with different publics, incels do seem to be nowadays much better-known than the rest of the manosphere.³⁸³ In short, incels have become both a growing security concern, and a relatively well-known cultural phenomenon and archetype. This has been accompanied with an explosion of incel research.³⁸⁴ In 2022, Norwegian researchers published a literature review of English and Scandinavian-speaking publications on incels.³⁸⁵ Sorting those publications by year reveals this surge. While their literature review stops at 2020, the trend has not abated since.





³⁸² Charlotte Colombo, "Meet Hollywod's New Supervillain: the Incel," *The Digital Fix*, September 23, 2022, <u>https://web.archive.org/web/20230612162145/https://www.thedigitalfix.com/dont-worry-darling/the-batman-incel</u>, archived June 12, 2023.

³⁸³ This was confirmed by the short survey I ran on evolutionary behavioral scientists in the United States (n=44), with 75% of respondents saying they knew incels well, against 50%, 45.5%, 18.2% and 36.4% for respectively PUAs, TRP, MGTOW and MRAs. For methodological details on the survey, see Chap. III, C, 162.

³⁸⁴ A similar trend occurred after the 9/11 terror attacks, with "universities and research funders scrambling to make up for lost time, creating courses and hiring professors, a great number of which focused on 'understanding Islam' or on assessing security risks posed by the region to the United States," Lisa Wedeen, "Savoir Scientifique, Libéralisme et Empire. La Science Politique Américaine et La Région Afrique Du Nord et Moyen-Orient Aujourd'hui," in *Les Sciences Sociales En Voyage: L'Afrique Du Nord et Le Moyen-Orient Vus d'Europe, d'Amérique et de l'intérieur*, ed. Eberhard Kienle, New Online Edition (Aix-en-Provence: Institut de Recherches et d'Etudes sur les Mondes Arabes et Musulmans, 2010), 148–79, <u>https://doi.org/10.4000/books.iremam.314</u>, 149, translation mine.

³⁸⁵ Lin Prøitz et al., "Hybride Maskuliniteter Og Hatideologi På Nett," *Norsk Medietidsskrift* 29, no. 2 (2022): 1–15, <u>https://doi.org/10.18261/nmt.29.2.3</u>.

Not only is incel research more abundant than the rest of manosphere research, but it is also qualitatively different. Indeed, incels have attracted unique attention from two fields: counter-terrorism studies and psychiatry.

Following incel attacks, security scholars have started scrutinizing young men's online radicalization. Like scholars of other fields, they have produced their own discursive analyses of online incel/blackpill ideology, with a particular focus on violence.³⁸⁷ Wood et al. have analyzed processes and factors of incel radicalization by studying life histories of incel terrorists (n=15).³⁸⁸ In 2020, Hoffman et al. listed and classified all incel-related attacks. With an arguably broad definition of incel violence, they found that "the number of fatalities has climbed to nearly 50 since the first named act of incel violence occurred in 2014."³⁸⁹ Owing to subsequent attacks, this type of work is unfortunately prone to being rapidly outdated. Some scholars have also debated and criticized the relevance of current counter-terrorism theoretical frameworks for understanding the incel threat.³⁹⁰ They argue that incel violence should not be analyzed in isolation, but as part of a wider network of online violent misogyny and male supremacism. In other words, they advocate for "applying a gender lens to counter-terrorism."³⁹¹

Such studies are not exclusively analytical, and have a strong public policy focus: they aim at preventing radicalization and violence. Thus, scholars have proposed structural solutions to prevent deathly incel attacks, drawing on a wide array of public policy domains such as public and mental health, research, and education.³⁹² On a perpetrator-level, Collins and Clark propose a framework for identifying incel terrorists before they strike.³⁹³ Additionally, incels are increasingly studied by another field of applied research: psychological/psychiatric studies.

Psychologists recognize that incels face adverse life experiences. Survey research for example reveals that 86% of incels report having experienced some form of bullying (n=151),³⁹⁴

 ³⁸⁷ Sara Brzuszkiewicz, "Incel Radical Milieu and External Locus of Control," *The International Centre for Counter-Terrorism – The Hague (ICCT) Evolutions in Counter-Terrorism 2* (2020): 1–20, <u>https://doi.org/10.19165/2020.5.21</u>;
 Simon Cottee, "Incel (E)Motives: Resentment, Shame and Revenge," *Studies in Conflict & Terrorism* 44, no. 2 (2021):
 93–114, <u>https://doi.org/10.1080/1057610X.2020.1822589</u>; Radicalisation Awareness Network, "Incels: A First Scan of the Phenomenon (in the EU) and Its Relevance and Challenges for P/CVE"; Zimmerman, "The Ideology of Incels."
 ³⁸⁸ Alecia Toni Wood, P. Tanteckchi, and David Keatley, "A Crime Script Analysis of Involuntary Celibate (INCEL) Mass Murderers," *Studies in Conflict & Terrorism*, (2022): 1–13, <u>https://doi.org/10.1080/1057610X.2022.2037630</u>.
 ³⁸⁹ Hoffman, Ware, and Shapiro, "Assessing the Threat of Incel Violence," 1.

³⁹⁰ Eviane Leidig, "Why Terrorism Studies Miss the Mark When It Comes To Incels," *International Centre for Counter-Terrorism*, 2021, <u>https://web.archive.org/web/20230614151514/https://www.icct.nl/publication/why-terrorism-studies-miss-mark-when-it-comes-incels</u>, archived June 14, 2023; Julia DeCook and Megan Kelly, "Interrogating the 'Incel Menace': Assessing the Threat of Male Supremacy in Terrorism Studies," *Critical Studies on Terrorism* 15, no. 3 (2022): 706–26, <u>https://doi.org/10.1080/17539153.2021.2005099</u>.

³⁹¹ Eviane Leidig, "Why Terrorism Studies Miss the Mark When It Comes To Incels."

³⁹² Sian Tomkinson, Tauel Harper, and Katie Attwell, "Confronting Incel: Exploring Possible Policy Responses to Misogynistic Violent Extremism," *Australian Journal of Political Science* 55, no. 2 (April 2, 2020): 152–69, <u>https://doi.org/10.1080/10361146.2020.1747393</u>; Megan Kelly, Alex DiBranco, and Julia DeCook, "Misogynist Incels and Male Supremacism: Overview and Recommendations for Addressing the Threat of Male Supremacist Violence" (New America, 2021), <u>https://web.archive.org/web/20230614145759/https://www.newamerica.org/politicalreform/reports/misogynist-incels-and-male-supremacism/</u>, archived June 14, 2023.

³⁹³ Christopher Collins and James Clark, "Using the TRAP-18 to Identify an Incel Lone-Actor Terrorist," *Journal of Threat Assessment and Management* 8 (2021): 159–73, <u>https://doi.org/10.1037/tam0000167</u>.

³⁹⁴ Moskalenko et al., "Incel Ideology, Radicalization and Mental Health."

while a more recent study had 96% of incel respondents report experiencing some childhood bullying experiences (n=370).³⁹⁵ Such studies show low levels of well-being, with between 75 and 77,26% of incels reporting moderate to severe depression according to the validated Patient Health Questionnaire (PHQ-9) scale.³⁹⁶ 26% of incel respondents feature Autism Spectrum Disorders, as measured by the Autism Spectrum Quotient (AQ-10).³⁹⁷ Finally, suicidality is extremely high, with more two thirds of incels considering self-harm on a regular basis.³⁹⁸ Clinical scholars analyze the sources of incel's mental anguish, and propose interventions and treatments.³⁹⁹ In fact, a whole book has been dedicated to the topic, with a joint focus on preventing violence by incels and addressing their ill-being.⁴⁰⁰ This is such a flourishing approach that two literature reviews on incel psychology and mental health were published in 2022.⁴⁰¹

C.4. Beyond Manosphere Research

4.a. Methodology, Ethics, and Researcher Safety

Manosphere researchers face a unique set of difficulties: they study anonymous populations, which are often suspicious or even outright hostile to researchers. They thus have to be mindful about cybersecurity. Moreover, daily contact with hateful and misogynistic content can take an emotional toll, in particular for female researchers, several of whom have reflected on these experiences. Lise Gotell thus recounts how she was the target of a MRA poster campaign in her hometown of Edmonton, Canada.⁴⁰² Australian academic Emma Jane explains how she experienced "a steady stream of online abuse as well as being the target of various online 'operations' to have [her] sacked and/or [her] research funding withdrawn."⁴⁰³ While Jane reports managing to find these attacks often "amusing,"⁴⁰⁴ others have reported emotional distress when engaging daily with the manosphere. Branthonne and Waldispuehl thus mention having to pause research that was at times too emotionally taxing.⁴⁰⁵ Sarah Daly provides a detailed account of her

³⁹⁵ Costello et al., "The Social Networking of Incels (Involuntary Celibates)."

³⁹⁶ Respectively in Costello et al., "Levels of Well-Being Among Men Who Are Incel (Involuntarily Celibate)"; Costello et al. "The Social Networking of Involuntary Celibates."

³⁹⁷ Costello et al., "The Social Networking of Involuntary Celibates."

³⁹⁸ Ibid.

³⁹⁹ Josephine Broyd et al., "Incels, Violence and Mental Disorder: A Narrative Review with Recommendations for Best Practice in Risk Assessment and Clinical Intervention," *BJPsych Advances* 29, no. 4 (2023): 254–64, <u>https://doi.org/10.1192/bja.2022.15</u>.

⁴⁰⁰ Brian Van Brunt and Chris Taylor, Understanding and Treating Incels: Case Studies, Guidance, and Treatment of Violence Risk in the Involuntary Celibate Community (New York: Routledge, 2020), https://doi.org/10.4324/9780367824396.

⁴⁰¹ Stefan Stijelja and Brian Mishara, "Psychosocial Characteristics of Involuntary Celibates (Incels): A Review of Empirical Research and Assessment of the Potential Implications of Research on Adult Virginity and Late Sexual Onset," *Sexuality & Culture* 27 (2023): 715–34, <u>https://doi.org/10.1007/s12119-022-10031-5.</u>; Brandon Sparks, Alexandra Zidenberg, and Mark Olver, "Involuntary Celibacy: A Review of Incel Ideology and Experiences with Dating, Rejection, and Associated Mental Health and Emotional Sequelae," *Current Psychiatry Reports* 24 (2022): 731–40, <u>https://doi.org/10.1007/s11920-022-01382-9</u>.

⁴⁰² Gotell and Dutton, "Sexual Violence in the 'Manosphere," 67-68.

⁴⁰³ Jane, "Systemic Misogyny Exposed," 663.

⁴⁰⁴ Ibid.

⁴⁰⁵ Adeline Branthonne and Elena Waldispuehl, "La netnographie pour étudier une communauté masculiniste en ligne : contributions méthodologiques d'un e-terrain," *Recherches Qualitatives* Hors-série : quelles possibilités et quels défis pour la recherche qualitative ?, no. 24 (2019): 6–19, 15.

direct engagement with incels as an Asian-American female researcher, an experience that raised a myriad of ethical, identity, and emotional concerns.⁴⁰⁶ Lisa Sugiura, one of the leading incel researchers, also wrote several pieces about the challenges and risks of being a "female cybercrime ethnographic researcher."⁴⁰⁷ Those reflexive accounts provide a treasure trove of precautions and advice for online researchers, and enrich the methodological literature far beyond the field of manosphere research. Indeed, they reflect on problems that are bound to become more common. As Internet and social media research develops, boundaries become blurred between the researcher's private life and the digitalized "field" of research, raising cybersecurity, privacy, and emotional concerns—situations that most manosphere researchers have been through and can help others navigate.⁴⁰⁸

4.b. Online Misogyny and Alt-Right Studies

Monographic studies have their limitations, and tend to depict manosphere groups as "homogeneous identity groups operating on isolated platforms."⁴⁰⁹ Yet, Ging and Murphy argue that they should be rather conceived "as a multifaceted, ever-evolving online ecosystem."⁴¹⁰ To understand this ecosystem, it is necessary to go beyond the putative borders of the manosphere, and study the technological, ideological and political context, i.e., the rise of a transnational online far-right, and the growing political acrimony and polarization in the United States. Lately, there has been excellent work on the pipelines between the manosphere and the Alt-Right, while many books have been written on contemporary online misogyny, with focuses on the manosphere, incels, and the Alt-Right.⁴¹¹ Manosphere memes and ideology also sometimes get watered down

⁴⁰⁶ Sarah Daly, "An Asian American Woman's Reflexive Account of Direct Research With Incels," *Forum: Qualitative Social Research* 23, no. 3 (2022), <u>https://doi.org/10.17169/FQS-23.3.3932</u>.

⁴⁰⁷ Lisa Sugiura, "Engaging with Incels: Reflexivity, Identity and the Female Cybercrime Ethnographic Researcher," in *Researching Cybercrimes: Methodologies, Ethics, and Critical Approaches*, ed. Anita Lavorgna and Thomas Holt (Cham: Springer International Publishing, 2021), 473–92, <u>https://doi.org/10.1007/978-3-030-74837-1_24</u>; Anita Lavorgna and Lisa Sugiura, "Direct Contacts with Potential Interviewees When Carrying out Online Ethnography on Controversial and Polarized Topics: A Loophole in Ethics Guidelines," *International Journal of Social Research Methodology* 25, no. 2 (2020): 261–67, <u>https://doi.org/10.1080/13645579.2020.1855719</u>.

⁴⁰⁸ I have thus co-organized an online workshop for young researchers on these issues, entitled "Quand le travail touche à l'intime: les chercheu r ses face à leur objet d'étude" ("When work gets personal: researchers' relationships to their objects") on April 17, 2023. I have also published an article about the ethical challenges I faced when designing the present study of the manosphere, Louis Bachaud, "Navigating Grey Areas: Ethical Issues in Studying Online Antifeminist Communities," *Revue Française Des Sciences de l'information et de La Communication*, no. 25 (2022), <u>https://doi.org/10.4000/rfsic.13374.</u>

⁴⁰⁹ Ging and Murphy, "Tracking the Pilling Pipeline," 2.

⁴¹⁰ Ibid.

⁴¹¹ Robin Mamié, Manoel Horta Ribeiro, and Robert West, "Are Anti-Feminist Communities Gateways to the Far Right? Evidence from Reddit and YouTube," *Proceedings of the 13th ACM Conference on Web Science* (2021): 139– 47, <u>https://doi.org/10.1145/3447535.3462504</u>; Jane, "Systemic Misogyny Exposed"; Hermansson et al., *The International Alt-Right: Fascism for the 21st Century?*; Jessica O'Donnell, *Gamergate and Anti-Feminism in the Digital Age* (Cham: Springer Nature Switzerland, 2022), <u>https://doi.org/10.1007/978-3-031-14057-0</u>; Laura Bates, *Men Who Hate Women: From Incels to Pickup Artists, the Truth About Extreme Misogyny and How It Affects Us All* (London: Simon and Schuster, 2020); Emily Carian, Alex DiBranco, and Chelsea Ebin, *Male Supremacism in the United States: From Patriarchal Traditionalism to Misogynist Incels and the Alt-Right* (London and New York: Routledge, 2022); Kaiser, *Political Masculinity*.

and percolate into new social media platforms like TikTok, which contribute to their normalization, but very little work has yet explored this rising phenomenon.⁴¹²

4.c. Assessment and Takeaways

What conclusions to draw from this manosphere research literature review? Firstly, there does not appear to be much theoretical consensus or unified analytical framework, as scholars from various fields apply their respective methods and theories to study the manosphere. This is not necessarily an issue since triangulating findings and perspectives from different fields could yield a rich understanding of phenomena. However, the scarcity of geographical and sociodemographic data about manospherians has hampered this triangulation. With its strong emphasis on online discourse analysis, manosphere research is severely limited. Indeed, it is hard to infer about the lives of manospherians, be it online, or most importantly offline, from their sole manosphere-specific online activity.⁴¹³ Consequently, the current state of research provides limited and static windows onto the manosphere but does not allow yet for higher order understanding. Incel research stands out as an exception, and has become highly prolific, with quantitative results being replicated in large-scale survey studies and a strong drive towards collecting more interview data.

However, general trends can still be drawn from existing research. The first one is the growing radicality of manosphere communities, with an increase in hate speech, and communities seeming to drift towards more extreme views and conspiracy theories. This is both the case inside communities, and between them, with newer groups "out-radicalizing" earlier ones. In a context of extreme political polarization in the United States reflecting on broader Internet "culture wars," it seems that the manosphere is increasingly throwing its lot with the strong anti-establishment narrative of the radical right, in its many declinations, from anti-vaccine and anti-mask advocacy during COVID, to transphobia, antisemitism, and of course, antifeminism.⁴¹⁴ More generally, the Internet facilitates transfers of people, terms, and ideas between dematerialized groups, with new syncretisms emerging at a speed that researchers and authorities can hardly keep up with. This was exemplified by the attempted coup in Germany on December 7, 2022, from a monarchist group featuring conspiratorial narratives, Alt-Right ideology, and incel memes and terminology.⁴¹⁵ This phenomenon was in fact the theme of the 2023 annual conference of the International Center for

⁴¹² Anda Iulia Solea and Lisa Sugiura, "Mainstreaming the Blackpill: Understanding the Incel Community on TikTok," *European Journal on Criminal Policy and Research* 29, no. 3 (2023): 311–36, <u>https://doi.org/10.1007/s10610-023-09559-5</u>.

⁴¹³ For example, Sarah Daly, who has conducted interviews with incels, reports that the language they used with her was drastically different from that found on incel forums, showing the difficulty of transferring online analysis to other spheres: "I have yet to interview anyone who uses overt racial slurs or derogatory terms for women in our conversations"; "Nearly all the interviews have been pleasant and respectful", Daly, "An Asian American Woman's Reflexive Account of Direct Research With Incels," respectively paragraphs 38 and 63.

⁴¹⁴ "Culture wars" is the name often given to the increasingly vitriolic and polarized opposition of US liberals and conservatives which started in the 1980s-1990s around issues of sexuality, race, religion, education, or abortion. For an analysis of the roots of these culture wars, see Andrew Hartman, *A War for the Soul of America: A History of the Culture Wars*, 2nd ed. (Chicago: The University of Chicago Press, 2019).

⁴¹⁵ Bàrbara Molas, "Alt-solutism: Intersections between Alt-Right Memes and Monarchism on Reddit", International
CentreforCounter-Terrorism,2023,

https://web.archive.org/web/20230620160931/https://www.icct.nl/publication/alt-solutism-intersections-between-alt-right-memes-and-monarchism-reddit, archived June 20, 2023.

Counter-Terrorism, which focused on "the rapid emergence of so-called 'anti-institutional extremism', the re-emergence of right-wing extremism, and the hybridisation of extremist ideologies, facilitated by a changing and pervasive information ecosystem."⁴¹⁶ This fast pace of ideological syncretism poses a challenge to social scientists as research objects mutate, and communities can migrate, split or merge in the course of a few years.

Conclusion

In the 1970s, the Men's Liberation movement was allied to liberal feminism in the fight for gender equality. Yet, after the defeat of the ERA, the movement split in opposing factions. While no one reneged egalitarian ideals, tensions arose as grievances were branded with increasing bitterness. Men's Rights Activists started focusing solely on men's issues and opposing feminism at every turn. Decades later, their main online venue, A Voice For Men, was listed as a hate group by the Southern Poverty Law Center, a pattern which seems to repeat itself, as for example, with the incel community, which started as an inclusive support group for the lonely and romantically unsuccessful in the 1980s-1990s, before becoming a domestic terrorism concern for Western governments in the 2010s-2020s. Similarly, Pickup-Artists started by exchanging rather mundane dating tips and techniques in the 1990s, but twenty years later their main bloggers were writing about the evils of feminism and the decline of the West, eventually making way for the Red Pill community.

This increasing radicality of men's groups has been accompanied by a seemingly unrelated trend: an increasing popularity of evolutionary sciences, and in particular evolutionary psychology, in the manosphere. Are these phenomena really unrelated? How do these uses and appropriations of science fit the landscape of manosphere ideology and radicality? These are focuses of the present research. Before presenting findings and analyses in chapters four to seven, the next chapter presents the history of Darwinian evolution in the United States and its influence on broader political and ideological debates around issues of sex, gender, and feminism.

⁴¹⁶ International Center for Counter-Terrorism, "ICCT Annual Conference 2023 - Hybrid Extremism: Causes and Responses to Anti-Institutional and Far-Right Extremisms," <u>https://web.archive.org/web/20230620161637/https://www.icct.nl/event/icct-annual-conference-2023-hybrid-extremism-causes-and-responses-anti-institutional-and-far</u>, archived June 20, 2023.

CHAPTER II: EVOLUTIONARY SCIENCE AND GENDER POLITICS

United States—1859-2024

Introduction

Rollo Tomassi is a popular US writer and blogger who is widely considered to be the most influential ideologue of the Red Pill community. On Amazon.com, his "Rational Male" book series is quite successful, placing one of his books in eighth position for all sales in the "Fatherhood" category, and another in seventh position for the "Gender Studies" category, ahead of feminist classics by Simone de Beauvoir, Judith Butler, or Betty Friedan.⁴¹⁷ On Twitter, his account has more than 150,000 followers.⁴¹⁸ His Amazon author biography states: "With a focus on evolutionary psychology and objectivism, Rollo brings a pragmatic, nuts & bolts, approach to intersexual dynamics, men and women's innate natures and their effects on today's society."⁴¹⁹ To some extent, his books are marketed as a form of science popularization. Indeed, they brim with concepts from the evolutionary scientific literature such as "costly signaling," "kin selection," "mate guarding," or "evolved mating strategy." However, they contain no footnotes, no bibliography, and almost no references. A graphic designer by trade, Tomassi says he has a degree in fine arts, with a minor in psychology.⁴²⁰ In the *Rational Male: Positive Masculinity*, Tomassi explains being indebted to a particular scientist:

"2014 saw the publication of a paper by Dr. Steven W. Gangestad and Dr. Martie Haselton titled *Human Estrus: Implications for Relationship Science*. Anyone who's read the Rational Male for more than a year is probably familiar with my citing Dr. Haselton in various essays (her catalog of research has been part of my sidebar links since I began the blog),⁴²¹ but both she and Dr. Gangestad are among the foremost notable researchers in the areas of human sexuality and applied evolutionary psychology."⁴²²

About Dr Haselton, he adds,

"she has gone on to become one of my go-to sources [...]. I owe much of what I propose on Rational Male to this interplay, and while I doubt Haselton would agree with all of what I or the manosphere

⁴¹⁷ As of writing, on October 6, 2023, see Amazon.com, Amazon Best Sellers, <u>https://web.archive.org/web/20231006085934/https://www.amazon.com/gp/bestsellers/digital-</u> text/157500011/ref=pd zg hrsr digital-text;

https://web.archive.org/web/20231006090030/https://www.amazon.com/gp/bestsellers/digital-

text/157595011/ref=pd_zg_hrsr_digital-text, both archived October 6, 2023.

⁴¹⁸ Twitter.com, Rollo Tomassi @RationalMale, https://web.archive.org/web/20231104162715/https://twitter.com/RationalMale?ref src=twsrc%5Egoogle%7Ctwca mp%5Eserp%7Ctwgr%5Eauthor, archived November 4, 2023.

⁴¹⁹ Amazon.com, Rollo Tomassi, About the author, <u>https://web.archive.org/web/20231006081707/https://www.amazon.com/stores/author/B00J2165RA/about</u>, archived October 6, 2023.

⁴²⁰ Introduction to Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), I.

⁴²¹ The Rational male is also the name of Tomassi's popular Red Pill blog, <u>https://web.archive.org/web/20221129170325/https://therationalmale.com/</u>, archived November 29, 2022.

⁴²² Rollo Tomassi, *The Rational Male: Positive Masculinity* (Reno: Counterflow Media LLC, 2017), e-book version, 153. Martie Haselton and Steven Gangestad are two renowned US evolutionary psychologists, well-known for their research on the female ovulatory cycle and its associated hormonal and behavioral changes.

As this excerpt euphemistically suggests, Dr Haselton is far from keen on seeing her research associated with The Red Pill. In fact, she once wrote to me: "I must say that I am alarmed that the 'red pill' men's groups seem to like to cite my work!"⁴²⁴ Likewise, Reddit hosts a 14,000 strong community of evolutionary psychology enthusiasts, whose rules explicitly aim at distancing from The Red Pill, stating: "No 'soapboxing.' This means no agenda-driven posts, such as TheRedPill. You should not be cherrypicking evidence to support a personally held view."⁴²⁵

These introductory examples illustrate the phenomenon under study in this dissertation. For the past thirty years, the online men's groups of the manosphere have been layering their ideological discourse with concepts and theories from the evolutionary sciences, with a particular focus on evolutionary psychology. On the other hand, as shown by Dr Haselton's example, evolutionary scientists themselves do not seem very keen on this association. Is it solely because they find the manosphere ideologically distasteful? Or are they also worried by biased and erroneous interpretations of their research? To further complicate the picture, evolutionary approaches to human behavior have themselves been historically heavily criticized by social scientists and feminists. In fact, since its grand reveal in 1859 with *On the Origins of Species*, Darwinian evolution has been the object of countless debates and appropriations. As a unifying theory of life, it has famously clashed with religious creationist beliefs, but also informed and fueled controversies around social organizations, politics, as well as issues of sexuality, sex, and gender. Thus, the manosphere's contemporary appropriations of evolutionary sciences must be understood in their historical, scientific, and ideological context, which is the aim of this chapter.

Section A establishes a scientific and political history of Darwinism, with a focus on issues of sex and gender, up to the sociobiology controversy of the 1970s.⁴²⁶ As an explanatory model for the evolution of difference between the sexes, evolutionary theory has proved extremely amenable to be politically appropriated from the 1850s onward, by both feminists and their opponents. Throughout the twentieth century, as biological approaches to humans were being replaced by social sciences (sociology, psychology, anthropology), explanations for human behavior revolving around heredity and biology became more and more discredited—particularly after the horrors of Nazism. Yet, over that same period, evolutionary sciences gained a new maturity, with the New Synthesis between Darwinian evolution and genetics. From this synthesis, a wealth of new fields and disciplines emerged, linking animal and human behavior to evolutionary theory, such as ethology in the 1950s and sociobiology in the 1970s. Whenever these disciplines were applied to humans, however, they met with formidable political and epistemological

⁴²³ Ibid.

⁴²⁴ Martie Haselton, personal communication with me by email, November 18, 2022, cited with kind permission.

⁴²⁵ It is self-described as "A subreddit for individuals who appreciate evolutionary explanations for human behavior, emotion, memory, and perception," Reddit, r/evopsych, <u>https://web.archive.org/web/20231006124201/https://www.reddit.com/r/evopsych/?rdt=40305</u>, archived October 6, 2023. As of writing in October 2024, membership is around 14,000.

⁴²⁶ As is the common use of the term, "Darwinism" is used in this dissertation interchangeably with "Darwinian evolution," both referring to Darwin's theory of evolution through natural selection and to its ulterior refinements and iterations.

opposition from social scientists and feminists alike, whose criticisms are reviewed and addressed at the end of the section.

Section B is an assessment of the conflicted contemporary interplay between evolutionary approaches to human behavior, social sciences, feminism, and the public, more notably around issues of sex and gender. After a thorough theoretical and methodological presentation of the evolutionary behavioral sciences, it highlights the contribution of feminist scholars to the field. Although feminist evolutionary scientists have been striving to root out male bias from evolutionary science, the entire field itself is still mostly viewed with suspicion by feminists, an opposition which is assessed and analyzed. Lastly, research on public reception and understanding of evolutionary sciences is reviewed. Indeed, although there is no other work on contemporary manosphere reception and understanding of science, existing research on scientific literacy proved influential in helping design a manosphere-specific science literacy assessment survey.

A. A HISTORY OF DARWINISM AND GENDER POLITICS

Darwinian theory answers deep questions about life: why organisms are the way they are; why they do the things they do; and how these features arose. Such is the scope of this scientific theory that it could not avoid having tremendous ideological and political influence from the very start, something Charles Darwin himself was well aware of. This section presents Darwinian theory, and briefly reviews its historical impact on US political ideology, public policy, and controversies around sex and gender.

A.1. Early Appropriations of Darwinism: The Politics of Human Nature (1859-1914)

1.a. Darwin on the Sexes: The Theory of Sexual Selection

In 1859, British naturalist Charles Darwin released the book that would become the cornerstone of modern biology: *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*.⁴²⁷ This treatise laid out an impressive collection of evidence from minerals, plants, and animals to expose Darwin's theory: populations evolve gradually over time, until they become so distinct as to form different species. Therefore, existing species can all be assumed to share a common descent. Moreover, Darwin identified the mechanism behind this evolution, which he called natural selection, i.e., the fact that organisms more suited to their environment would survive and reproduce more than others, gradually leading to the appearance of differentiated life forms adapted to their specific environments.⁴²⁸ Cautious of the "prejudices" which people would hold against applying this theory to humans, Darwin mostly drew on examples from other species.⁴²⁹ Yet, he famously concluded the book by insisting that thanks to his evolutionary theory: "Light will be thrown on the origin of man and his history."⁴³⁰

In 1871, in *The Descent of Man and Selection in Relation to Sex*, Darwin elaborated on the other side of this theory.⁴³¹ To account for some characteristics that could not easily be explained by natural selection—such as a peacock's large and colorful tail—, he had indeed envisioned a second mechanism which he called sexual selection. Through competition between organisms

⁴²⁷ Charles Darwin, *The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (London: John Murray, 1859).

⁴²⁸ While Darwin had been nursing and developing the idea for decades, this theory of evolution by natural selection had been conceived of independently by Alfred Russel Wallace, a younger English naturalist. When Darwin, a revered and established scientist, discovered that Wallace had reached the same conclusions, it was decided to announce their joint co-discovery at a paper reading of the Linnean Society of London in 1858. Wallace's discovery prompted to Darwin to quickly write *The Origins of Species*. The two men remained friends, with Wallace becoming an ardent defender of *The Origins of Species*. The 1858 Darwin-Wallace paper did however reveal substantial and often overlooked differences between the two men's theories, Ulrich Kutschera, "A Comparative Analysis of the Darwin-Wallace Papers and the Development of the Concept of Natural Selection," *Theory in Biosciences* 122, no. 4 (December 1, 2003): 343–59, https://doi.org/10.1007/s12064-003-0063-6.

⁴²⁹ In a letter to Wallace, Darwin wrote, "You ask whether I shall discuss 'man';—I think I shall avoid whole subject, as so surrounded with prejudices," Darwin Correspondence Project, "Letter n°2192," December 22, 1857, <u>https://web.archive.org/web/https://www.darwinproject.ac.uk/letter/DCP-LETT-2192.xml</u>, archived October 10, 2023.

⁴³⁰ Darwin, *The Origin of Species*, 488.

⁴³¹ Charles Darwin, *The Descent of Man and Selection in Relation to Sex* (London: John Murray, 1871).

(mostly males) for reproduction, as well as aesthetic preferences for certain features (mostly expressed by females in their choices of reproductive partners), some specific characteristics could improve reproductive success and thus gradually evolve. They did not spread in the population because of their inherent survival value, but because they were "selected for" through intra-sexual competition and inter-sexual preferences. For Darwin, this mechanism was instrumental in the differentiation of the sexes. He thus wrote: "when the males and females of any animal have the same general habits of life, but differ in structure, colour, or ornament, such differences have been mainly caused by sexual selection."⁴³²

1.b Darwinian Feminism: Biology as Empowerment

By shattering the creationist narrative of Genesis, where God creates the Earth and its inhabitants in seven days, Darwinian evolution contradicted biblical teachings on the sexes. Indeed, Eve, the first woman, was thought to have been created from Adam's rib.⁴³³ Moreover, she was also held responsible for luring Adam into committing the Original Sin, condemning humanity to be ousted from the Garden of Eden. As US historian Kimberly Hamlin explains, "even at the dawn of the twentieth century, the lessons drawn from the Garden of Eden still circumscribed women's opportunities."⁴³⁴ Therefore, "[t]hroughout the 1870s and 1880s, women's rights advocates cheered Charles Darwin for exposing, once and for all, the fraud of the 'rib story."⁴³⁵ Although Christianity was still ubiquitous in late-19th-century America, a current of "freethinking"—i.e., agnostic or atheist—Darwinian feminism emerged, whose radical commitment for gender equality was in part inspired and fueled by evolutionary science:

"Evolutionary science was an unlikely and unwitting ally in the struggle for women's rights. Nevertheless, it allowed women to contemplate a world free from gendered biblical restrictions; to ponder sex differences in terms of animals, variety, and change; and to reimagine their bodies and their role in reproduction in an evolutionary, as opposed to biblical, context."⁴³⁶

In the late 19th and early 20th century United States, the *Descent of Man*, and sexual selection theory in particular, were "enlisted for feminist purposes."⁴³⁷ Feminist authors, chief among which Charlotte Perkins Gilman starting in the 1890s, cheered on the place given to female mate choice in Darwinian theory. ⁴³⁸ It harked back to a long-gone time when women held power and agency in the species, which they believed, along with Darwin, had been lost in contemporary humans. In

⁴³² Darwin, *The Origins of Species*, 89.

⁴³³ "And the rib, which the LORD God had taken from man, made he a woman, and brought her unto the man," Genesis.2:22 (King James Version).

⁴³⁴ Kimberly Hamlin, *From Eve to Evolution: Darwin, Science, and Women's Rights in Gilded Age America* (Chicago and London: The University of Chicago Press, 2014), 40.

⁴³⁵ Ibid., 39.

⁴³⁶ Ibid., 17.

⁴³⁷ "Indeed, perhaps the most notable aspect of the American reception of *The Descent of Man* is that so many women enlisted it for feminist purposes," Ibid., 15.

⁴³⁸ Charlotte Perkins Gilman (1860-1935) was an American writer and activist. She spent a life of writing and reflecting on the social issues of her time through various media (novels, drama, poetry, essays), with a particular focus on women's issues. To see how Gilman's theories were underpinned by 19th-century US racial politics, see Louise Michele Newman, *White Women's Rights: The Racial Origins of Feminism in the United States* (New York: Oxford University Press, 1999), 132-157.

Women and Economics, Gilman argued that women were forced to marry to survive, which went against their biological role in sexual selection.⁴³⁹ This role in evolution was considerable, and she advocated for its restoration, both for women's emancipation and autonomy, and for the betterment of the species through renewed sexual selection.⁴⁴⁰

Although Darwin himself, who was by then deceased, might not have supported those novel ideas, such was the power of his theory.⁴⁴¹ By shedding light on all aspects of life, it spurred a variety of political interpretations and appropriations, including on sex and gender. Thus, women's rights advocates, as well their opponents could ground their arguments in the science: "As a result of evolutionary theory's implications for gender and sex, responses to it were often highly gendered as readers interpreted Darwinian evolution according to whether or not it supported what they believed to be true, or hoped could be true, about men and women."⁴⁴² This gendered "cherry-picking" of evolutionary science is still happening today, as shown further in this dissertation.⁴⁴³

1.c The Darwinian Imperative: Biology as a Template for Society

The period ranging from the second half of the 19th century to the First World War in the United States can be seen as a prime example of Darwinism spreading to the social sciences, and through them, to the political ideologies of the time. As American historian Richard Hofstadter argues, although England had given Darwin to the world, the US was the Darwinian country *par excellence*.⁴⁴⁴ This was most notoriously because of the American success of Social Darwinism. Today, this term is widely recognized to be a misnomer since this ideology's chief proponent was Herbert Spencer. One of the founders of modern sociology, he was an extremely influential thinker in the English-speaking world.⁴⁴⁵ This Englishman and contemporary of Darwin in fact coined the phrase "survival of the fittest" in 1864, which Darwin later adopted as another forceful way to

⁴³⁹ Charlotte Perkins Gilman, *Women and Economics: A Study of the Economic Relation Between Men and Women as a Factor in Social Evolution* (Boston: Small, Maynard & Company, 1898), 34-39.

⁴⁴⁰ While this is not part of Darwin's theory, the dominant view of evolution in the 19th century was a teleological one, in which natural selection led to improvement and progress of species: "contrary to Darwin's hopes, evolution did not become a mature professional science. It was stuck as a kind of popular science, a sort of secular religion, and Progress was an integral part of the picture. It was because evolution was taken to promote cultural and social Progress that it was cherished by so many," Michael Ruse, "Evolution and the Idea of Social Progress," in *Biology and Ideology: From Descartes to Dawkins*, ed. Denis Alexander and Ronald Numbers (Chicago and London: University of Chicago Press, 2010), 247–75, 274. Gilman was no exception; historian Kimberly Hamlin writes that she is better understood as a reform Darwinist, i.e., someone "who believed that evolution was inherently a progressive force, leading to ever more development and opportunity for all," Hamlin, *From Eve to Evolution*, 120.

⁴⁴¹ Indeed, Darwin saw female mate choice as the most powerful driving force in sexual selection, except in humans, where he thought this was reversed, Hamlin, *From Eve to Evolution: Darwin, Science, and Women's Rights in Gilded Age America*, 10.

⁴⁴² Hamlin, *From Eve to Evolution*, 5.

⁴⁴³ See Chap. VI, A, 286 for instances of manosphere scientific gendered cherry-picking.

⁴⁴⁴ Richard Hofstadter, *Social Darwinism in American Thought: 1860-1915*, Revised Edition (Boston: Beacon Press, 1955).

⁴⁴⁵ "In the three decades after the Civil War it was impossible to be active in any field of intellectual work without mastering Spencer," Hofstadter writes, Ibid., 33. He adds that "The sales of Spencer's books in America from their earliest publication in the 1860s to December 1903 came to 368,755 volumes, a figure probably unparalleled for works in such difficult spheres as philosophy and sociology," Ibid., 34.

describe natural selection.⁴⁴⁶ Spencer's writings were suffused with a philosophy of history inspired by Darwinian principles. Social Darwinism—or Spencerism—advocated for a total *laissez-faire* approach to society and the economy. Through the natural struggle of people, groups, and societies, it contended, progress would gradually come about. From early warring periods to a prosperous and industrial age, the tide of history was seen as obeying natural laws. Influential American proponents of Spencer, such as Yale professor William Graham Sumner, thus opposed state intervention and reforms, which would disrupt their teleological view of progress.⁴⁴⁷ This individualistic struggle-for-life conservative philosophy naturally appealed to moneyed elites.⁴⁴⁸

So strong was the Darwinian influence at the time, however, that it was far from limited to conservative spheres, as seen with the example of freethinking Darwinian feminists. These feminists were in fact inspired by the writings of sociologist Lester Frank Ward, the first president of the American Sociological Association (1906-1907).⁴⁴⁹ Ward was himself an enthusiastic Darwinian, but he refuted the Spencerian analogies that superimposed biological theories to society. Nothing prevented humans, he argued, from using biological findings to implement ambitious reform, just as they used physics to engineer industrial progress. Following the findings of biology did not have to mean letting unfettered competition and social inequalities prosper.⁴⁵⁰ In the early 1900s, English-speaking social reformers and Socialists alike did not hesitate to invoke Darwinian principles.⁴⁵¹ In 1902, Russian anarchist and scholar Peter Kropotkin published an influential collection of essays entitled *Mutual Aid: A Factor of Evolution.*⁴⁵² Contesting the agonistic vision of natural selection advanced by conservatives, he showed, invoking Darwin, how cooperation was a much likelier outcome of natural selection:

"Happily enough, competition is not the rule either in the animal world or in mankind. It is limited among animals to exceptional periods, and natural selection finds better fields for its activity. Better conditions are created by the elimination of competition by means of mutual aid and mutual support."⁴⁵³

As political ideologies competed to impose their own versions of human nature and social agendas, early social scientists were influential, either defending a ruthlessly Hobbesian vision of

⁴⁴⁶ Darwin started using it in the fifth edition of *The Origins of Species*, acknowledging that "the expression often used by Mr. Herbert Spencer of the Survival of the Fittest is more accurate, and is sometimes equally convenient," Darwin, *The Origins of Species*, 5th ed (London: John Murray, 1869), 72.

⁴⁴⁷ William Graham Sumner (1840-1910) was an American clergyman and social scientist. An ardent proponent of economic *laissez-faire*, his thought combined Protestant ethics, classical economics, and Social Darwinism.

⁴⁴⁸ Hofstadter, Social Darwinism in American Thought, 201.

⁴⁴⁹ The influence of Ward's ideas on feminist thought is detailed in Hamlin, *From Eve to Evolution*, 118-150.

⁴⁵⁰ This made him a notorious "reform Darwinist," see footnote n°440, 100, for a definition.

⁴⁵¹ Darwinism was popular in feminist socialist circles: "Indeed, the very first issue of the *Socialist Woman* (June 1907) included a note instructing subscribers to "Read Darwin's 'Descent of Man,'" cited in Hamlin, *From Eve to Evolution: Darwin, Science, and Women's Rights in Gilded Age America*. For the influence of evolutionary science on (male) American socialists, see Mark Pittenger, *American Socialists and Evolutionary Thought, 1870-1920* (Madison: University of Wisconsin Press, 1993). Socialism also received the prestigious endorsement of Alfred Wallace, the co-discoverer of natural selection late in his life in the 1890s.

⁴⁵² Peter Kropotkin, *Mutual Aid* (London: W. Heineman, 1902).

⁴⁵³ Ibid., 74-75, as cited in Hofstadter, Social Darwinism in American Thought, 98.

human nature, or a benevolent Rousseauian view.⁴⁵⁴ At a time when social sciences were in their infancy and when disciplinary boundaries were not firmly established, biology permeated most fields of social inquiry, such as sociology, economics, and psychology, which in turn influenced political ideologies and public policy.⁴⁵⁵ Each time, Darwinian evolution, as the culturally and scientifically dominant paradigm of nature, was invoked and interpreted beyond its original scope, as explained by Richard Hofstadter:

"There was nothing in Darwinism that inevitably made it an apology for competition or force. Kropotkin's interpretation of Darwinism was as logical as Sumner's. Ward's rejection of biology as a source of social principles was no less natural than Spencer's assumption of a universal dynamic common to biology and society alike. [...] Darwinism had from the first this dual potentiality; intrinsically it was a neutral instrument, capable of supporting opposite ideologies."⁴⁵⁶

These historical examples throw light on the potential for appropriation inherent to evolutionary biology. As argued by sociologist Ullica Segerstråle, "evolutionary biology is a surprisingly flexible field," which "may be employed to prove almost any point one wishes," notably owing to the "great diversity of organisms in the world," which allows "to find empirical backing, too, for almost any claim, if one searches well enough." ⁴⁵⁷ This Finnish sociologist and historian of science is recognized as the authority on the greatest modern scientific and ideological controversy surrounding evolutionary sciences: the sociobiology controversy, which is the object of next section.

A.2. From The Triumph of Culturalism to the Sociobiology Controversy (1914-1975)

2.a. Culturalism in the Social Sciences: A Postwar Liberal Consensus

When Darwin wrote *The Origins of Species*, the mechanism for heredity was unknown. With the re-discovery and continuation of Gregor Mendel's research, the early 20th century saw the advent of modern genetics, a groundbreaking discovery which led to a hereditarian frenzy in political ideology.⁴⁵⁸ This was the time of eugenic policies, backed by eminent scientists such as Darwin's cousin, Francis Galton, the father of eugenics: "Having discovered the power of Mendelian genetics, many geneticists found it only natural in the early years of the century to support 'positive' or 'negative' eugenics, that is, encouraging the 'fit' to breed and preventing the

⁴⁵⁴ Philosophers Thomas Hobbes (1588-1679) and Jean-Jacques Rousseau (1712-1778) are often cited to exemplify respectively negative and positive views of human nature. For a detailed and more nuanced philosophical examination of their views on human nature, see Evrigenis Ioannis, "Hobbes and Rousseau on Human Nature and the State of Nature," in *Human: A History*, ed. Karolina Hübner (New York: Oxford University Press, 2022), 221–50, <u>https://doi.org/10.1093/oso/9780190876371.003.0011</u>.

⁴⁵⁵ Eugenics is by far the most infamous of the public policies inspired by evolutionary biology, see Chap. II, A, 102-103.

⁴⁵⁶ Hofstadter, Social Darwinism in American Thought, 201.

⁴⁵⁷ Ullica Segerstråle, "Implicit and Explicit Customized Science: The Case of Evolutionary Biology," in *The Customization of Science: The Impact of Religious and Political Worldviews on Contemporary Science*, ed. Steve Fuller, Mikael Stenmark, and Ulf Zackariasson (New York and Basingstoke: Palgrave Macmillan, 2014), 91–103, https://doi.org/10.1057/9781137379610_6, 103.

⁴⁵⁸ Gregor Mendel (1822-1884) was a German-Czech monk whose botanical experiments established many of the rules of heredity, such as the dominant/recessive heritability of certain traits. Although his work went mostly unremarked during his lifetime, it was rediscovered in 1900, which led to the establishment of modern genetics.

'unfit' from breeding."⁴⁵⁹ Eugenic policies, supported by scientists and progressive reformist elites, aimed at bettering the human stock by eliminating "defects" from the population.⁴⁶⁰ Since those defects were thought to be hereditary, it implied preventing certain classes of people from reproducing.⁴⁶¹ Social Darwinists of the late 19th century used natural selection as a metaphor to justify unbridled competition and *laissez-faire*. Conversely, in the reformist 1900-1910s (part of what is known as "the Progressive Era" in US history), eugenicists advocated for state interventionism to engineer this selection for what they considered the greater good.⁴⁶² This meant sex-segregation of the criminals and "feebleminded" so they could not reproduce, marriage restrictions, and even forced sterilization.⁴⁶³ By 1915 in the United States, thirteen states allowed the forced sterilization of criminals and the "mentally deficient." By 1930, it was thirty states.⁴⁶⁴ From the United States, eugenic policies rapidly spread to the English-speaking world and other Protestant European countries.⁴⁶⁵

At the same time, however, social science started to free itself from the hold of biology. Following anthropologist Franz Boas (1858-1942), a new generation of progressive researchers challenged the biological framework of Social Darwinists and eugenicists. In anthropology, in the wake of Boas, cultural factors were put to the forefront. Himself a field researcher, this influential scholar argued against the generalizations of evolutionists. There was no ground to attribute behavioral differences between races, groups, and communities to biological and genetic factors,

⁴⁵⁹ Carl Degler, *In Search of Human Nature: The Decline and Revival of Darwinism in American Social Thought* (New York: Oxford University Press, 1991), 145. As an example, all members of the first editorial board of the scientific journal *Genetics* founded in 1916 supported eugenics, Jon Beckwith, "A Historical View of Social Responsibility in Genetics," *BioScience* 43, no. 5 (1993): 327–33, <u>https://doi.org/10.2307/1312065</u>, 327.

⁴⁶⁰ For a contemporary geneticist's assessment of the eugenics era, see Adam Rutherford, *Control: The Dark History and Troubling Present of Eugenics* (New York: W. W. Norton & Company, 2022).

⁴⁶¹ These people disproportionally came from the most disenfranchised strata of society, such as immigrants from Southern and Eastern Europe. For example, Harry Laughlin, a prominent US eugenicist, provided extensive data to Congress in support of the restrictive Immigration Act of 1924. It was later found that he had falsified the data when conclusions did not suit his prejudices, James Dewey Watson and Andrew James Berry, *DNA: The Secret of Life* (New York: Alfred Knopf, 2003), 29-30.

⁴⁶² The early decades of the twentieth century are remembered as the "Progressive Era" in US historiography. This was a time of increased state interventionism after decades of *laissez-faire*. Emblematic reforms enacted through constitutional amendments include introduction of a federal income tax (16th amendment, 1913), prohibition of alcohol (18th amendment, 1919) and women's suffrage (19th amendment, 1920). As with all such periodization, there are definitional and conceptual debates around the relevance and meaning of this label, e.g., David Kennedy, "Overview: The Progressive Era," *The Historian* 37, no. 3 (1975), <u>https://doi.org/10.1111/j.1540-6563.1975.tb00037.x</u>.

⁴⁶³ The breadth of eugenic policies is detailed in Edward Larson, "Biology and the Emergence of the Anglo-American Eugenics Movement," in *Biology and Ideology: From Descartes to Dawkins*, ed. Denis Alexander and Ronald Numbers (Chicago and London: University of Chicago Press, 2010), 165–91. There is evidence that these measures disproportionately affected the foreign-born, Mexicans, and African-Americans, see Alexandra Minna Stern, "STERILIZED in the Name of Public Health," *American Journal of Public Health* 95, no. 7 (2005): 1128–38, <u>https://doi.org/10.2105/AJPH.2004.041608</u>. Massive sterilization of Indigenous women was still commonplace well into the 1970s, Jane Lawrence, "The Indian Health Service and the Sterilization of Native American Women," *American Indian Quarterly* 24, no. 3 (2000): 400–419.

⁴⁶⁴ Degler, *In Search of Human Nature*, 45. By the 1960s when the practice was discontinued, 63,000 forced sterilizations had been conducted.

⁴⁶⁵ Such as Canada, the United Kingdom, Australia, Germany and Scandinavian countries. The stalwart moral opposition of the Catholic church prevented eugenics from taking hold in traditionally Catholic parts of Europe and in South America. See Larson, "Biology and the Emergence of the Anglo-American Eugenics Movement."

he argued.⁴⁶⁶ In psychology as well, thanks to John Watson, a paradigm shift was under way.⁴⁶⁷ The new school of behaviorist psychology rejected the importance of heredity and instincts. Indeed, it focused solely on learned behavior patterns. As Watson famously claimed in an argument against eugenics in 1924, anyone could be made to become anyone with the proper conditioning, regardless of heredity:

"Give me a dozen healthy infants, well-formed, and my own specified world to bring them up in and I'll guarantee to take anyone at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant-chief and, yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors.' I am going beyond my facts and I admit it, but so have the advocates of the contrary and they have been doing it for many thousands of years."⁴⁶⁸

In terms of sex and gender, no scholar at the time was as influential as Margaret Mead, a former student of Boas's.⁴⁶⁹ In 1935, she published *Sex and Temperament in Three Primitive Societies*, an ethnography which showed how culturally malleable behavior was.⁴⁷⁰ By comparing three different societies in New Guinea, she demonstrated that traits considered to be male or female in one could be interchanged in another. Social conditioning, she argued, was responsible for those characteristics abusively assumed to be innately male or female. The model of "learned behavior" and "sex roles" had replaced the biological one inherited from Darwin and his heirs.⁴⁷¹ Although these ideas first met with formidable opposition, they soon became the canon of the social sciences, and, as shown by historian Carl Degler, "during the 1930s and 1940s concepts and terms like 'heredity,' 'biological influences,' and 'instinct' dropped below the horizon in social science."⁴⁷² World War II further discredited biological approaches to behavior as well as eugenics, as they were now durably tainted by association with the Nazis' racist pseudoscience.⁴⁷³ In 1950, the UNESCO thus issued a declaration by scientists on "The Scientific Basis For Human Unity," dismissing the idea of a biological basis for group differences in abilities, potential, and character:

"So far as temperament is concerned, there is no definite evidence that there exist inborn differences between human groups. There is evidence that whatever group differences of the kind there might

⁴⁶⁶ Boas's tremendous influence on the social sciences is described at length in Degler, *In Search of Human Nature*, 59-211.

⁴⁶⁷ John Watson (1878-1958) was an American psychologist who first theorized and popularized the behaviorist approach to psychology. Behaviorism advocated for experimental study of objectively observable behavior and reactions only, as opposed to speculations on consciousness or inner mental states.

⁴⁶⁸ John Watson, *Behaviorism* (Chicago: University of Chicago Press, 1962), 104. Revised edition originally published 1924.

⁴⁶⁹ Mead's intellectual contribution to the emergence of "gender" as a concept is detailed in Chapter 3, "On the Path to Gender: Margaret mead, Socialization, and Sex Role Ideology" in Shira Tarrant, *When Sex Became Gender* (Abingdon and New York: Routledge, 2006), 73-106.

⁴⁷⁰ Margaret Mead, *Sex and Temperament in Three Primitive Societies* (New York: William Morrow and Company, 1935).

⁴⁷¹ Later in her life, influenced by new discoveries on animal behavior, Mead altered her environmentalist position, see Degler, *In Search of Human Nature*, 137.

⁴⁷² Ibid., 203.

⁴⁷³ For the complex influence of Darwinism on Nazi science and eugenics, see Paul Weindling, "Genetics, Eugenics, and the Holocaust," in *Biology and Ideology: From Descartes to Dawkins*, ed. Denis Alexander and Ronald Numbers (Chicago and London: University of Chicago Press, 2010), 192–214.

be are greatly over-ridden by the individual differences, and by the differences springing from environmental factors."⁴⁷⁴

Heredity was a discredited and dangerous idea and, in the postwar era, the new environmentalist/culturalist paradigm seemed to announce an age of possibilities, progress, and equality for humankind.

2.b. The Modern Synthesis and the Birth of Sociobiology

"Ironically," evolutionary scientists Kevin Lala and Gillian Brown write about the 1930s-1940s, "psychology, anthropology, and the other human sciences rejected evolution at precisely the time that evolutionary theory was really coming together."⁴⁷⁵ Indeed, with progress in genetics, the key missing piece of biological theory and evolution was finally found. Darwin did not know the mechanism of heredity, but 20th-century geneticists did. Founding the field of population genetics, they elaborated statistical models to study variation and heredity over entire populations. Variation had always been one of the conditions for Darwinian natural selection: for a "survival of the fittest" to occur, "fitness" needs to differ between individuals. Genetics revealed the mechanisms behind this variation: genetic mutations-a myriad of seemingly random genetic changes happening each generation, as well as the genetic recombination occurring during sexual reproduction. Genetic recombination and mutations cause phenotypic variation between individuals, which in turn leads to natural selection of those genetic variants or "alleles" which are most successful in allowing organisms to reproduce.⁴⁷⁶ This explains the emergence of new species from earlier ones, and as a consequence of this gradual, aggregated, and directionless process, life adapts to different environments. By mid-century, "[e]volutionary biology could now be regarded as a mature science."⁴⁷⁷ Darwin's theory was vindicated, and now accompanied with a mechanistic explanation, as the molecular bases of DNA were starting to be better understood, as well as with solid mathematical models and concurring data and evidence from plants, animals, and microorganisms. This reunion of Darwinian evolution and genetics was called the "Modern Synthesis," a term popularized by British scientist Julian Huxley in his 1942 Evolution: The Modern *Synthesis*.⁴⁷⁸ It remains the dominant paradigm of evolutionary biology to this day.

Around the same time, a new science of animal behavior appeared. "By the early 1950s, ethology had emerged as a new discipline, with Lorenz as its father figure and *The Study of Instinct* (1951) by Tinbergen its classic text," Kevin Lala and Gillian Brown note.⁴⁷⁹ Mostly coming from Europe, ethology started producing groundbreaking research, putting instincts back to the forefront.

⁴⁷⁴ Collective, "III: The Race Question," UNESCO and its programme (Paris: Unesco, 1950), 7.

⁴⁷⁵ Kevin Lala and Gillian Brown, *Sense and Nonsense: Evolutionary Perspectives on Human Behaviour* (Oxford, New York: Oxford University Press, 2011), 38.

⁴⁷⁶ In addition to Darwinian natural and sexual selection, other processes were identified as influential in evolution, such as the random fluctuation in the frequency of alleles, called "genetic drift," or migrations and natural disasters that could radically influence the genetic makeup of entire populations.

⁴⁷⁷ Lala and Brown, *Sense and Nonsense*, 38.

⁴⁷⁸ Julian Huxley, *Evolution: The Modern Synthesis* (London: Allen & Unwin, 1942).

⁴⁷⁹ Lala and Brown, *Sense and Nonsense*, 39. Lorenz and Tinbergen, along with Karl von Frisch, a renowned German ethologist and specialist of bees, received the 1973 Nobel Prize in Physiology/Medicine for their research on individual and social behavior.

Whereas behaviorist psychologists famously worked with rats and pigeons in the laboratory, ethologists observed animals in their natural environment.⁴⁸⁰ Grounded in evolutionary theory, they viewed instincts as suites of inherited mechanisms adapted to the environment, with a focus on the environmental cues that elicited those mechanisms. As Darwin contended in his writings, they assumed that behavior was something that could evolve through natural selection, no less than organs like hands or eyes.⁴⁸¹

In the 1960s-1970s, in the wake of the Modern Synthesis and ethology's success, the school of sociobiology started to emerge within evolutionary biology. These biologists revolutionized the study of animal behavior with theoretical breakthroughs. Compared to ethology, the emphasis shifted from the stimuli that elicited specific behavior towards the study of more complex social behavior through the lens of natural selection. This approach, combined with new theories and tools from game theory, allowed to explain behavior that had previously puzzled researchers, such as altruism, cooperation, or the life of social insects. The explanatory power of the sociobiological truly held revolutionary potential. In 1975, Edward Osbourne Wilson, a specialist of ants, popularized and unified the yet scattered field with his massive Sociobiology, a book which summarized the breakthroughs of his animal research colleagues.⁴⁸² In the last chapter, however, Wilson extended sociobiology to humans. The new synthesis of sociobiology, he contended, could shed light on social phenomena such as religion or ethics.⁴⁸³ A biologist by training, undaunted by the potential repercussions of his work, Wilson thus spurred "the biggest scientific controversy of the decade."⁴⁸⁴ Indeed, as he recognized in his autobiography, his position was at odds with the hegemonic culturalism of the social sciences: "Mine was an exceptionally strong hereditarian position for the 1970s. It helped to revive the long-standing nature—nurture debate at a time when nurture had seemingly won. The social sciences were being built upon that victory."⁴⁸⁵

2.c. The Sociobiology Controversy

The release of *Sociobiology* immediately triggered condemnations and rejections within academia. In 1975, a Sociobiology Study Group was created by politically active Marxist scientists, including prominent evolutionary biologists Stephen Jay Gould and Stephen Lewontin, who lambasted sociobiology, its methods, and its supposed agenda. In a 1975 open letter, they accused sociobiology of abusively providing genetic explanations for social phenomena, thus promoting the status quo in matters of race, sex, and class.⁴⁸⁶ Sociobiology was thus accused of biological determinism and of being implicitly conservative and reactionary. In their letter, they linked this

⁴⁸⁰ Ibid., 41.

⁴⁸¹ This was the topic of Darwin's third major contribution to evolutionary theory, where he examines the universals and animal origins of emotional behavior such as anger, fear, and sadness, Charles Darwin, *The Expression of the Emotions in Man and Animals* (London: John Murray, 1872).

⁴⁸² Edward Osborne Wilson, *Sociobiology* (Cambridge: Harvard University Press, 1975).

⁴⁸³ Ibid., 559-564.

⁴⁸⁴ Lala and Brown, *Sense and Nonsense*, 50.

⁴⁸⁵ Edward Osborne Wilson, *Naturalist* (Washington DC: Island Press, 1994), 333-334.

⁴⁸⁶ Elizabeth Allen et al., "Against 'Sociobiology," *The New York Review of Books*, November 13, 1975, <u>https://web.archive.org/web/20231016124346/https://www.nybooks.com/articles/1975/11/13/against-sociobiology/</u>, archived October 16, 2023.

application of evolutionary theory to the earlier ones which had led to eugenics and "to the establishment of gas chambers in Nazi Germany," depicting sociobiology as the "latest attempt to reinvigorate" the "tired theories" of the early 1900s.⁴⁸⁷ These attacks were of a rare violence for an academic debate between colleagues, especially given that Lewontin, Gould and Wilson all worked at Harvard. Wilson retaliated and characterized his opponents as political extremists intent on slandering and misrepresenting his views.⁴⁸⁸ In 1976, at the height of the controversy, British zoologist Richard Dawkins published *The Selfish Gene*,⁴⁸⁹ an eloquent presentation and defense of the sociobiological approach, and "arguably the most popular scientific book of the twentieth century."⁴⁹⁰ The conflict was fierce, as protestors invaded Wilson's classroom, prevented him from speaking in public, calling him a patriarch or nazi, and even threw a pitcher of water on his head at an AAAS meeting in 1978.⁴⁹¹

Sociologist Ullica Segerstråle has spent decades analyzing this scientific controversy, through careful reading of each party's texts, as well as interviews of the main protagonists.⁴⁹² To her, it did not stem from the opposition between academics from the left and right, but instead of generational/ideological differences between scientists. While most of the sociobiologists, including Wilson, were left-wing liberals just like their critics, they came from an older generation, which believed in the possibility of objective research, whose results would then be scrutinized and democratically discussed by society. On the other hand, the younger, more radical scientists, who came of scientific age in the 1960s, believed that science was always ideological and wanted to expose that ideological foundation.⁴⁹³ She also argues that the main protagonists, Wilson and Lewontin, strategically furthered the controversy by using the other's caricatured position to advance their own worldviews and long-term scientific agendas.⁴⁹⁴

⁴⁸⁷ Ibid.

⁴⁸⁸ Edward Osborne Wilson, "For Sociobiology," *The New York Review of Books*, December 11, 1975. <u>https://web.archive.org/web/20231016124830/https://www.nybooks.com/articles/1975/12/11/for-sociobiology/</u>, archived October 16, 2023.

⁴⁸⁹ Richard Dawkins, *The Selfish Gene* (Oxford: Oxford University Press, 1976).

⁴⁹⁰ Lala and Brown, Sense and Nonsense, 50.

 ⁴⁹¹ Lala and Brown, *Sense and Nonsense*, 62. Steven Pinker, *The Blank Slate* (London: Penguin Books, 2002), 110 111. The American Association for the Advancement of Science (AAAS), created in 1848, is the world's largest scientific society whose goal is to promote and defend science, and is well-known for publishing the journal *Science*.
 ⁴⁹² The sum of her investigations is presented in Ullica Segerstråle, *Defenders of the Truth: The Sociobiology Debate* (Oxford: Oxford University Press, 2000).

⁴⁹³ Segerstråle, "Implicit and Explicit Customized Science," 94.

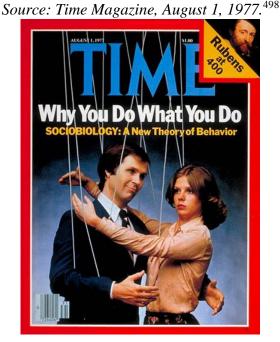
⁴⁹⁴ Ullica Segerstråle, "Colleagues in Conflict: An 'in Vivo' Analysis of the Sociobiology Controversy," *Biology and Philosophy* 1, no. 1 (1986): 53–87, <u>https://doi.org/10.1007/BF00127089</u>, 79. Segerstråle's research also reveals that the sociobiology controversy was not only about worldviews and politics. Indeed, it revealed deep-seated divisions between different methodological traditions in biology. Some of the critics, from the experimental tradition, emphasized observation and study of specific phenomena, advocating for a science that showed the complexity of life. On the other hand, sociobiologists had a more abstract approach, based on theory and statistics, with more place for thought experiments and a defense of general explanatory models. See Ullica Segerstråle, "Reductionism, 'Bad Science,' and Politics: A Critique of Anti-Reductionist Reasoning," *Politics and the Life Sciences* 11, no. 2 (1992): 199–214, <u>https://doi.org/10.1017/S0730938400015215</u>.

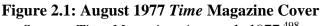
As a result of this controversy, "sociobiology had become a dirty word to many social scientists and most of them were highly suspicious of Wilson."⁴⁹⁵ The envisioned synthesis of biology and social sciences did not happen, and the term sociobiology itself fell out of favor.⁴⁹⁶ However, as noted by Brown and Lala, despite this heated controversy, sociobiology was far from a failure since it spawned new fields and disciplines: "for human sociobiology, there were to be new dawns," they write.⁴⁹⁷ Evolutionary approaches to human behavior can be said to be thriving today, so much so that their popular online appropriations are the object of the present research. Yet, because those disciplines have been consistently criticized since the 1970s, the next section reviews and assesses the most common criticisms.

A.3. Criticisms of Evolutionary Approaches to Human Behavior

3.a. Genetic Determinism

Given the primacy of cultural explanations for behavior in the social sciences (e.g., relating to education, socio-economic status), the most common charge against evolutionary approaches to human behavior is that of biological or genetic determinism. Sociobiologists or evolutionary psychologists have been routinely accused of presenting humans as automatons blindly controlled by their genes, as shown by this 1977 *Time* magazine cover released in the midst of the controversy.





⁴⁹⁵ Lala and Brown, *Sense and Nonsense*, 64.

⁴⁹⁶ For example, the field's leading journal *Ethology and Sociobiology* was renamed in 1997 as *Evolution and Human Behavior*.

⁴⁹⁷ Lala and Brown, *Sense and Nonsense*, 73.

⁴⁹⁸ *Time*, August 1, 1977, cover, retrieved on Time.com, <u>https://web.archive.org/web/20231022122150/https://content.time.com/time/covers/0,16641,19770801,00.html</u>, archived October 22, 2023.

Since the 1970s, there have been countless instances of such charges, mostly coming from feminists and social scientists.⁴⁹⁹ However, no evolutionary scientist denies the major influence of the environment (or "nurture") on human and animal behavior. The dominant view in the life sciences, in fact, is that the nature/nurture dichotomy is grossly simplistic and inappropriate. Indeed, we know that human behavior is the result of a multi-layered complex interplay of factors, some of which we think of as "natural" or "biological," such as genes and hormones, and some of which we think of as "environmental," such as resources or education.⁵⁰⁰ In reality, none of these factors exists in isolation from others. Even genes are responsive to external stimuli and their coding for proteins can thus be turned on or off (which is called "gene expression").⁵⁰¹ Similarly, the endocrine system constantly adjusts hormone levels to environmental stimuli such as levels of light or stressful situations.⁵⁰² Even at the evolutionary level, over the course of human history, modern Darwinian theory holds that traits developed through natural and sexual selection of alleles. Yet, in a social species such as ours, this differentiated reproductive outcome of mutations was necessarily heavily impacted by "cultural" factors. For example, how could humans evolve acute psychological mechanisms to identify other people's emotions if not through eons of communal life? As for sexual selection, it is the aggregated consequence of the reproductive choices effected by ancestral men and women (and their pre-human ancestors before them), which were assuredly rife with "cultural" influences (e.g., parental influence). From the ultimate evolutionary level to the development of organisms, all the way to the mechanistic level of behavior, nature and nurture constantly interact. Contemporary Darwinian feminist and philosopher Griet Vandermassen thus takes the example of language:

"In order to speak a language, social learning is needed, so it is clearly a cultural trait. One cannot learn a language, however, without specialized underlying brain structures. These structures (modules) ultimately evolved through natural selection, but are at the same time the proximate product of complex interactions between genes and environment during a person's life. Hence, although language is cultural, it is just as much biological."⁵⁰³

⁴⁹⁹ The most vocal opponents of sociobiology can be found in this collection, Hilary Rose and Steven Rose, eds., *Alas, Poor Darwin: Arguments Against Evolutionary Psychology* (New York: Harmony Books, 2000). Feminist criticisms are addressed in Chap. II, A, 112; Chap. II, B, 121.

⁵⁰⁰ Although these labels of "biological" and "environmental" are useful, they echo a mistaken dichotomous view of life, which is better understood as a constant interaction between different factors at multiple levels, as explained in this paragraph. In fact, as reminded by philosopher Griet Vandermassen, "every aspect of any living thing is, *by definition*, biological," including "the study of social behavior." Yet, she recognizes that "biological" is a useful term to evoke the different subfields of biology such as neurology, genetics, and endocrinology, and therefore uses it throughout her writings. I agree with her argument, and use this imperfect but useful term throughout the dissertation. Griet Vandermassen, *Who's Afraid of Charles Darwin? Debating Feminism and Evolutionary Theory* (Lanham: Rowman & Littlefield Publishers, 2005), 69-97; 117.

⁵⁰¹ Mark Jobling et al., eds., *Human Evolutionary Genetics*, 2nd ed. (New York and London: Garland Science, 2014), 619.

⁵⁰² See respectively Yasmine-Marie Cissé, Jeremy Borniger, and Randy Nelson, "Hormones, Circadian Rhythms, and Mental Health," in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford (New York: Oxford University Press, 2019), 367–80; Justin Mogilski et al., "Stress Hormones, Physiology, and Behavior," in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford (New York: Oxford University Press, 2019), 351–66.

⁵⁰³ Vandermassen, Who's Afraid of Charles Darwin?, 97-98.

Since all sociobiologists and evolutionary psychologists subscribe to that interactionist framework, as they have themselves repeatedly and vigorously asserted, the charge of genetic determinism appears to be unfounded. Vandermassen has dubbed this conventional accusation "The Myth of Genetic Determinism," reminding critics that, "No one contends that genes alone direct development and behavior."⁵⁰⁴ Leading evolutionary psychologist David Buss concurs: "notions of genetic determinism—behaviors caused by genes without input or influence from the environment—are simply false. They are in no way implied by the evolutionary theory or by evolutionary psychology," he writes.⁵⁰⁵

However, as described above, social sciences were established by freeing themselves from the hold of biology and carving out their own disciplinary fields. As such, accounts of human behavior that focus on factors such as evolution, genes, or hormones, are immediately received with suspicion. And the main accusation that usually seems to follow, as in the 1975 letter of the Sociobiology Study Group, is that explaining human behavior with biology is an endorsement of existing inequalities and prejudice.

3.b. Fueling Prejudice and Sexism: The Status Quo Argument

"The reason for the survival of these recurrent determinist theories is that they consistently tend to provide a genetic justification of the *status quo* and of existing privileges for certain groups according to class, race or sex,"⁵⁰⁶ Wilson's sociobiology critics wrote in their 1975 manifesto. Since then, these charges have been continually addressed to evolutionary scientists studying humans. Given their focus on evolved sex differences, sociobiology and its successors are for example often said to "justify and promote the oppression of women."⁵⁰⁷

These charges are based on the underlying premise that explaining is justifying. Yet, whether one is a social scientist and looks for environmental causes for behavior, or an evolutionary scientist trying to understand the evolutionary basis of this behavior, both these approaches aim at revealing determinisms—one social, the other genetic. The role of science is to explain phenomena, and one of the most powerful ways of doing so is by investigating causation, that is, determinism.⁵⁰⁸ This does not entail moral or political justification of any behavior or social system. However, as

⁵⁰⁴ Ibid., 98.

⁵⁰⁵ David Buss, *Evolutionary Psychology: The New Science of the Mind* (New York: Routledge, 2019), e-textbook version, 50.

⁵⁰⁶ Allen et al., "Against Sociobiology."

⁵⁰⁷ Zuleyma Tang-Martinez, "The Curious Courtship of Sociobiology and Feminism: A Case of Irreconcilable Differences," in *Feminism and Evolutionary Biology: Boundaries, Intersections and Frontiers*, ed. Patricia Adair Gowaty (Boston: Springer US, 1997), 116–50, https://doi.org/10.1007/978-1-4615-5985-6_6, 117.

⁵⁰⁸ At the core, determinism is the notion events are the products of earlier causes. However, since proving causation is a hard standard to reach, Dawkins wonders: "What does it ever mean to say that something determines something?" His answer: "What biologists in practice usually do, is to establish *statistically* that events of class R reliably follow events of class C." According to this working definition, most behaviors can be said to be "determined" by a combination of factors, some hormonal, some genetic, some social, etc. Richard Dawkins, *The Extended Phenotype: The Long Reach of the Gene* (Oxford, New York: Oxford University Press, 1999), 11. It is in that statistical sense that the term "determinism" is used throughout this dissertation.

remarked by Richard Dawkins, there is widespread belief that if a trait or behavior is determined by genes, it is therefore inevitable:

"People seem to have little difficulty in accepting the modifiability of 'environmental' effects on human development. If a child has had a bad teaching on mathematics, it is accepted that the resulting deficiency can be remedied by extra good teaching the following year. But any suggestion that the child's mathematical deficiency might have a genetic origin is likely to be greeted with something approaching despair: if it is in the genes 'it is written,' it is 'determined' and nothing can be done about it: you might as well give up attempting to teach the child mathematics. This is pernicious rubbish on an almost astronomical scale."⁵⁰⁹

This explains why sociobiologists and evolutionary psychologists are commonly accused of defending the status quo. Yet, as Dawkins puts it, "Genetic causes and environmental causes are in principle no different from each other,"⁵¹⁰ some may be hard to reverse, some not. There is no inherent reason why the influence of a genetic predisposition for drug abuse, for example, would be more inevitable or harder to reverse than the influence of social predictors of drug abuse, such as unemployment or high stress.⁵¹¹ Stating that a trait or behavior has a genetic basis does not make it inevitable. It does not either imply that what is "natural" is what is best, or what should be. This is called the "naturalistic fallacy," a mistaken inference that proponents of sociobiology have repeatedly combated from the beginning. "I am saying how things have evolved. I am not saying how we humans morally ought to behave," Dawkins wrote in *The Selfish Gene*.⁵¹² After having omitted this crucial element in Sociobiology, Wilson cautioned the same year: "There is a dangerous trap in sociobiology, one which can be avoided only by constant vigilance. The trap is the naturalistic fallacy of ethics, which uncritically concludes that what is, should be," adding "When any genetic bias is demonstrated, it cannot be used to justify a continuing practice in present and future societies."⁵¹³ To this day, almost every popular science book by evolutionary behavioral scientists mentions and cautions against this fallacy. This is in no small part due to their critics' allegations that insistence on looking for "natural" causes is politically motivated and inherently reactionary.514

⁵⁰⁹ Richard Dawkins, *The Extended Phenotype*, 13. This type of belief has been experimentally studied, as reviewed in II, B, 129.

⁵¹⁰ Ibid., 13.

⁵¹¹ Recent genetic studies conducted on over a million genomes do indeed identify genes correlated with substance use, e.g., Alexander Hatoum et al., "Multivariate Genome-Wide Association Meta-Analysis of over 1 Million Subjects Identifies Loci Underlying Multiple Substance Use Disorders," *Nature Mental Health* 1, no. 3 (2023): 210–23, <u>https://doi.org/10.1038/s44220-023-00034-y</u>. Yet, these findings, far from promoting a fatalistic view of inevitable genetic determinism, have been saluted by medical authorities as "knowledge that can be used to expand preventative services and empower individuals to make informed decisions about drug use," National Institute on Drug Abuse, "New NIH study reveals shared genetic markers underlying substance use disorders," March 22, 2023, <u>https://web.archive.org/web/20231023112327/https://nida.nih.gov/news-events/news-releases/2023/03/new-nih-study-reveals-shared-genetic-markers-underlying-substance-use-disorders</u>, archived October 23, 2023.

⁵¹³ Edward Osborne Wilson, "Human Decency Is Animal," *The New York Times*, October 12, 1975, <u>https://web.archive.org/web/20231023113249/https://www.nytimes.com/1975/10/12/archives/human-decency-is-</u> animal-hawks-and-baboons-are-not-usually-heroic.html, archived October 23, 2023.

⁵¹⁴ Griet Vandermassen argues that feminist critics of evolutionary behavioral sciences are the ones committing that naturalistic fallacy by mistakenly accusing research on "what is" of being research on "what ought to be," and research

Ultimately, Ullica Segerstråle remarks, the question whether scientists are prejudiced or reactionary "should be considered an *empirical* question."⁵¹⁵ It means examining their worldviews, beliefs, and political stances, rather than presuming hidden political agendas in their research. In that regard, allegations of conservatism against sociobiologists and their successors quickly founder when confronted with evidence.⁵¹⁶ Evolutionary scientists seem to be no less politically progressive than others.⁵¹⁷

3.c. Feminism and (Socio)Biology

Beyond accusations of conservatism from the social sciences and the left, feminists have undoubtedly been the most vocal critic of evolutionary approaches to human behavior.⁵¹⁸ As related above, since Darwin, evolutionary theory has been the main explanatory framework for anatomical and behavioral sex differences, as it allows to account for the development of secondary sexual characteristics through sexual selection (such as beards in men, or antlers in deer). On an even more fundamental level, evolutionary biology also speculates on the evolution of sexual reproduction and tries to explain why sexes exist in the first place. When applied to sex differences in human behavior, however, sociobiology and its successors clashed with an established body of feminist scholarship, whose assumptions were firmly anchored in the post WWII culturalist paradigm.⁵¹⁹

Indeed, feminist gender scholarship built itself upon the rejection of biologically-based accounts of female inferiority. Feminist historians of science have revealed the sexism underlying the birth and development of modern biology. For example, Londa Schiebinger's *Nature's Body*

on "what is natural" of necessarily having implication on "what is good," Vandermassen, *Who's Afraid of Charles Darwin?*, 101.

⁵¹⁵ Segerstråle, "Reductionism, 'Bad Science,' and Politics," 201. She also makes this point in Segerstråle, "Colleagues in Conflict," 80.

⁵¹⁶ In fact, anthropologist Pierre Louis Van Der Berghe argued: "Actually, a review of the politics of leading sociobiologists would lend more credence to the contention that sociobiology is a Communist conspiracy: J. B. S. Haldane, who is generally credited for having first hit on the notion of kin selection—a theoretical cornerstone of sociobiology—was a leading member of the British Communist Party; so was John Maynard Smith. E. O. Wilson and most other leading sociobiologists are left-of-center liberals or social democrats. 'Racist' Trivers is even married to a Jamaican and is heavily involved in radical black politics," Pierre Van Den Berghe, "Sociobiology: Several Views," *BioScience* 31, no. 5 (1981): 406, <u>https://doi.org/10.2307/1308416</u>.

⁵¹⁷ There have been two survey studies about this, one comparing evolutionary anthropology students to nonevolutionary anthropology students and a similar one with psychology. Both found that evolutionary students were no more conservative than others, and much less so than the general US population, contradicting "the view that evolutionary anthropologists hold conservative or reactionary political views," Henry Lyle III and Eric Smith, "How Conservative Are Evolutionary Anthropologists?: A Survey of Political Attitudes," *Human Nature* 23, no. 3 (2012): 306–22, <u>https://doi.org/10.1007/s12110-012-9150-z</u>, 1; Joshua Tybur, Geoffrey Miller, and Steven Gangestad, "Testing the Controversy," *Human Nature* 18, no. 4 (2007): 313–28, <u>https://doi.org/10.1007/s12110-007-9024-y</u>.

⁵¹⁸ See Rachel O'Neill, "Feminist Encounters with Evolutionary Psychology," Australian Feminist Studies 30, no. 86 (2015): 345–50, <u>https://doi.org/10.1080/08164649.2016.1157909</u>; Ruth Bleier, Science and Gender: A Critique of Biology and Its Theories on Women (New York and London: Teachers College Press, 1997); Anne Fausto-Sterling, Myths Of Gender: Biological Theories About Women And Men, Revised Edition (New York: Basic Books, 1985); Vandermassen, Who's Afraid of Charles Darwin?; Tang-Martinez, "The Curious Courtship of Sociobiology and Feminism."

⁵¹⁹ For an examination of post-WWII feminist thought, see Shira Tarrant, *When Sex Became Gender* (Abingdon and New York: Routledge, 2006).

reveals how 18th-century biology reflected the gender biases of its time.⁵²⁰ She shows that, at the time, plant sexuality was framed in heterosexual terms (whereas plants are hermaphrodites), and the male parts were arbitrarily placed higher than the female plant parts in classifications. To Schiebinger, those examples and many others reflect the fact that science was made by men and for men, at a time when women and marginalized groups were excluded from the nascent professional scientific establishment. Similarly, Darwin's ideas on the sexes have repeatedly been scrutinized and shown to reflect Victorian gender norms,⁵²¹ with some statements that could not be qualified as anything but sexist: "The chief distinction in the intellectual powers of the two sexes," he indeed wrote, "is shewn by man's attaining to a higher eminence, in whatever he takes up, than can woman—whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands."⁵²²

Soon after *The Descent of Man*, in 1873, Harvard professor Edward Clarke released *Sex in Education, or, a Fair Chance for the Girls*.⁵²³ According to historian Kimberly Hamlin, "Clarke's book was nothing short of a national phenomenon. *Sex in Education* went through seventeen editions in thirteen years," making it "one of the most frequently debated and influential works of the 1870s."⁵²⁴ In the book, he argued against women's access to higher education for physiological reasons, arguing it would subject them to too much mental and physical strain. Darwinian evolution featured prominently in his arguments.⁵²⁵ Feminists Barbara Ehrenreich and Deirdre English have shown that all over the 19th and 20th century, mostly male science and medicine professionals prescribed what women were supposed to do "for their own good."⁵²⁶ In short, life sciences have, historically, mistakenly characterized women, as well as justified and enforced male dominance and privileges.

Given this sexist legacy, it is perhaps unsurprising to find feminists among the most stalwart critics of sociobiology. As recognized by Darwinian feminist Griet Vandermassen, "the feminist suspicion of biological arguments about the sexes owes a lot to the tradition of androcentrism in science."⁵²⁷ Yet, she contends, this androcentrism is being corrected, notably with the massive influx of women in the life sciences. Feminists should applaud and accompany this movement, she argues, rather than automatically dismissing any biological explanation for human traits and differences, a stance she calls "biophobia."⁵²⁸ Indeed, it is not hard to find feminists asserting that "biology cannot be used to ground claims about 'women' or 'men' transculturally."⁵²⁹ This

⁵²⁰ Londa Schiebinger, *Nature's Body: Gender in the Making of Modern Science*, 2nd ed. (New Brunswick: Rutgers University Press, 2004).

⁵²¹ E.g., Stephanie Shields and Sunil Bhatia, "Darwin on Race, Gender, and Culture," *American Psychologist* 64, no. 2 (2009): 111–19, <u>https://doi.org/10.1037/a0013502</u>; Pietro Corsi, "Seduction and the Peacock: Charles Darwin and Sexual Selection," *Clio. Women, Gender, History* 55, no. 1 (2022): 173–89, <u>https://doi.org/10.4000/clio.21739</u>.

⁵²² Darwin, *The Descent of Man and Selection in Relation to Sex*, 327.

⁵²³ Edward Clarke, Sex in Education, or, a Fair Chance for the Girls (Boston: James Osgood and Company, 1873).

⁵²⁴ Hamlin, *From Eve to Evolution*, 73.

⁵²⁵ Ibid., 73-77.

⁵²⁶ Barbara Ehrenreich and Deirdre English, *For Her Own Good: 150 Years of the Experts' Advice to Women* (New York: Anchor Books, 1989).

⁵²⁷ Vandermassen, Who's Afraid of Charles Darwin?, 86.

⁵²⁸ Ibid., see chapter 4: "Biophobia Within Feminism," 85-117.

⁵²⁹ E.g., Nicholson, Linda, "Interpreting Gender," *Signs: Journal of Women in Culture and Society* 20, no. 1 (1994): 79–105.

opposition echoes broader epistemological debates within feminism. For instance, there are several feminist positions regarding the sexist legacy of science, recapitulated in Sandra Harding's *The Science Question in Feminism*.⁵³⁰

The first view is feminist empiricism. In this perspective, sexist science was just "bad science," which could be improved through gender-neutral theories and methodology. Feminist empiricists aim at making better science by eradicating male bias without questioning the fundamentals of the scientific method. Then come feminist standpoint epistemologies, which contend that, recognizing its historical role of domination and exclusion, science should be made from women's standpoint, with an explicitly emancipatory purpose. Yet, Harding mentions the double bind in which this type of epistemology finds itself. First, it is unable to garner widespread acceptance in the scientific community, which values universality, generalization, and reproducibility-regardless of the identity of the experimenter. Then, following its own logic, what female standpoint should be used exactly? Should there not be one for each individual woman? This questions the possibility of ever having objective scientific knowledge, which leads to Harding's third type of feminist epistemology. In feminist postmodernist approaches, scientific knowledge only reflects the historical context in which it emerges, and the very possibility of having objective and universal knowledge is denied, making the whole scientific enterprise just a type of discourse among others. This type of approach has understandably had a difficult time spreading beyond the domain of humanities where it originated.

Empirical research confirms the general hostility of feminists towards evolutionary explanations for human behavior and psychology. Investigating this issue in 2014, Laura Cowan surveyed female psychologists (n=88) about their commitment to feminism and their attitudes towards evolutionary explanations for human behavior:

"Results from the study revealed that psychologists who identified with the highest phase of feminist identity endorsed more negative perceptions about evolutionary psychology, preferred nurture explanations over nature explanations for patterns in human behavior, and possessed a higher mistrust in science than their colleagues identifying in the lowest and middle ranges of feminist identity."⁵³¹

Her statistical analysis of the survey results identifies three key components in feminists' opposition towards evolutionary psychology, which have been detailed in this chapter: (1) concerns that such explanations would justify the status quo; (2) mistrust in the field of biology; and (3) support for the social construction approach to gender. The next section reviews the current state of evolutionary behavioral sciences. It notably showcases the advances made in the field by feminist empiricists and the efforts of evolutionary scientists to bridge the gap with their feminist critics.

⁵³⁰ Sandra Harding, *The Science Question in Feminism* (Ithaca: Cornell University Press, 1986).

⁵³¹ Laura Cowan, "Feminist Perceptions of Evolutionary Psychology: An Empirical Study" (PhD dissertation, Texas Woman's University, 2014). Respondents' commitment to feminism was measured with the Feminist Identity Development Scale (FIDS), first introduced in Adena Bargad and Janet Shibley Hyde, "Women's Studies: A Study of Feminist Identity Development in Women," *Psychology of Women Quarterly* 15, no. 2 (1991): 181–201, <u>https://doi.org/10.1111/j.1471-6402.1991.tb00791.x</u>. Respondents were female members of the American Psychological Association (APA).

B. EVOLUTIONARY BEHAVIORAL SCIENCES TODAY: CONCEPTS, CRITICISMS, AND RECEPTION

B.1. Evolutionary Behavioral Sciences: Principles and Methods

Since the era of ethology and sociobiology, evolutionary approaches to human behavior have proliferated: there are evolutionary (or biological) anthropology, behavioral ecology, evolutionary psychology, behavioral endocrinology, gene-culture coevolution, etc. Although, these have substantial methodological and epistemological divergences, ⁵³² disciplinary nuances are not the most relevant to my research object—i.e., popular online interpretations and appropriations of these disciplines. Indeed, they all operate within the mainstream Darwinian paradigm of the life sciences and share basic concepts and assumptions. This section focuses on concepts and methods from these disciplines which are popular in the manosphere.

1.a Theory

Evolution by natural selection explains the gradual transformation of organisms, leading to the emergence of new species from earlier ones. Genetic variability of organisms happens through genetic recombination, as well as genetic mutations. Thus, organisms with varying traits, coded by different genes, are confronted with their environment and its selective pressures, e.g., that of surviving (which usually entails finding food, shelter, avoiding predators, etc.) and that of reproducing. Logically, genes that are most successful in allowing organisms to reproduce are overrepresented in future generations, and populations thus gradually evolve over time.

This simple principle accounts for the existence of given anatomical features. For example, humans' relatively small dentition is thought to have evolved from our hominid ancestors' as humans started making tools to cut and grind food and changed their dietary habits.⁵³³ Similarly, natural selection can account for features that are less visible to the naked eye. For example, senses like sight or hearing show clear signs of having evolved to fit the specific environments of ancestral humans.⁵³⁴ They are therefore referred to as "adaptations," mechanisms so apparently designed to help an organism respond to a selective pressure that it is held unlikely to have arisen by chance alone. The "function" of an adaptation refers to the problem it evolved to solve.⁵³⁵

Behavior is influenced by cognition, emotions, perception, etc. Each of these psychological features has underlying physiological structures (neural circuits, sensory organs, the endocrine system) which evolved just like other organs. Some behavioral features of humans can therefore be assumed to have evolved through, and be explained by, natural selection. For example, the widespread avoidance of incest (parent-offspring/brother-sister), could be explained by the costs of inbreeding. Indeed, since inbreeding causes deleterious genetic diseases, alleles that encouraged

⁵³² Lala and Brown, Sense and Nonsense: Evolutionary Perspectives on Human Behaviour.

⁵³³ Hindol Das, Vaibhav Motghare, and Mrinalini Singh, "Human Evolution of the Teeth & Jaws: A Mouthful of History," *International Journal of Oral Health and Medical Research* 5, no. 4 (2018): 32–36.

⁵³⁴ Steven Pinker, *How the Mind Works* (New York: Norton, 1997).

⁵³⁵ Buss, *Evolutionary Psychology*, e-textbook version, 88.

incest avoidance could have spread to the entire species. This does not imply, however, that humans and their ancestors consciously avoided incest to maximize their reproductive success in passing on genes through their offspring—which is called "fitness." Maximization of fitness by avoidance of deleterious genetic diseases is the "ultimate" cause for the evolution of this behavior, i.e., its function in a Darwinian sense. Humans, however, do not need to be aware of this cause to implement such behavior, which is caused more directly by "proximate" mechanisms, such as the inhibition of sexual arousal regarding siblings.⁵³⁶ To take another example, food tastes in humans are a proximate mechanism, which has been shaped by ultimate selective pressures regarding nutrition (avoiding toxic substances, consuming the most nutritious foods, etc.) When one eats food, however, one does not necessarily consciously think about genes or reproduction but seeks pleasurable sensations. In other words, one acts on the proximate mechanism developed by natural selection to fulfill its ultimate function.⁵³⁷

Given humans' remarkable history of worldwide expansion and adaptation to varied ecosystems, evolved mechanisms are presumably highly flexible and responsive to environmental cues. This is also suggested by the variability of humans on most behaviors, traits, and preferences and by the diversity of human cultures and customs. In fact, although evolutionary behavioral sciences ground their research in Darwinian evolution, and thus ultimately "in the genes," they embrace the interactionist model described above, in which organisms and their environments constantly influence each other. Four levels of analysis were famously outlined by ethologist Niko Tinbergen in 1963 and constitute different yet compatible approaches to study a given behavior from an evolutionary perspective.⁵³⁸ At the most proximate level, the question is to understand the mechanism (1), the physiology underpinning adaptations and the environmental stimuli influencing that physiology. At the developmental level (2), the question is to understand how and when those adaptations appear in ontogeny (the history of an organism), this development being heavily influenced by a variety of environmental factors, such as experience and learning. At the behavioral level (3), the goal is to assess the fitness outcomes of behavior to understand its function, once again in relation to ecological factors, social arrangements, etc. At the ultimate evolutionary level (4) is the issue of how and when the behavior was modified over evolutionary time, notably through comparison between species.

1.b Methods

While paleoanthropologists can rely on fossils to reconstitute the evolutionary history of anatomical traits, behavioral scientists have had a harder time because behavior does not fossilize.

⁵³⁶ For empirical evidence of adaptive incest-avoidance mechanisms in humans, see Buss, *Evolutionary Psychology*, e-textbook version, 247-48; 758. There is evidence of such mechanisms among many species, for example crickets, see Nicholas Davies, John Krebs, and Stuart West, eds., *An Introduction to Behavioural Ecology*, 4th ed. (Oxford: Wiley-Blackwell, 2012), 216.

⁵³⁷ As explained by evolutionary psychologist David Buss, "This almost invariably occurs outside consciousness. Humans do not smell a pizza baking and think, 'Aha! I am facing an adaptive problem of food selection!' Instead, the smell unconsciously triggers food-selection mechanisms, and no awareness of the adaptive problem is necessary," Buss, *Evolutionary Psychology*, e-textbook version, 106.

⁵³⁸ Niko Tinbergen, "On the Aims and Methods of Ethology," *Zeitschrift Für Tierpsychologie* 20, no. 4 (1963): 410–33, <u>https://doi.org/10.1111/j.1439-0310.1963.tb01161.x</u>.

How then can one prove that a specific human behavior is an adaptation? The short answer is that it is impossible. Evolutionary behavioral sciences cannot establish causation and prove their claims beyond doubt.⁵³⁹ However, the theory of natural selection itself has been empirically validated countless times and is the uncontested explanatory model for the evolution of life on Earth.⁵⁴⁰ Therefore, one could hardly dismiss it as an explanatory force for human behavior. To investigate the influence of evolution on behavior, scientists thus resort to hypotheses. Those hypotheses can be elaborated theoretically, by thinking about selective pressures faced by human ancestors. For example, given the way mammals reproduce, before paternity tests, men could never be assured that they were really their offspring's fathers. Since human males offer a rare level of parental care compared to other mammals, it might have negative fitness consequences for them to invest time and resources in offspring carrying another man's genes.⁵⁴¹ From these premises, it can be hypothesized that mechanisms allowing men to evaluate their paternity certainty might have evolved—an example of theory-driven top-down hypothesizing. Conversely, evolutionary hypotheses can be elaborated from the bottom-up, starting from empirical observations. For instance, it is well-known that pregnancy in women can be accompanied by sickness, with nausea and aversion to specific foods. Given the importance of reproduction in natural selection, and the vulnerability of the fetus, it can be hypothesized that this "sickness" is in fact an adaptation to prevent mothers from ingesting nefarious toxins during critical periods of gestation.⁵⁴² In both cases, this hypothesizing is based on adaptationist reasoning, i.e., the search for adaptations in human emotions, cognition, or behavior.

As believable as they might be, these hypotheses are so far no better than mere stories. In fact, a common criticism addressed to evolutionary behavioral scientists is that they are based on "just-so-stories."⁵⁴³ However, it is possible to empirically assess hypotheses. To achieve that, predictions must be derived from them. For example, it logically follows from the pregnancy sickness hypothesis that foods containing more harmful toxins would trigger more nauseous reactions in pregnant women.⁵⁴⁴ This prediction itself can be tested empirically in the laboratory. If predictions from a hypothesis are not borne out empirically, the hypothesis can be discarded. If predictions are verified, these verifications must be replicated in other contexts, with other

⁵³⁹ "Since we can never directly observe natural selection in operation, we can never unequivocally demonstrate that any given characteristic really is an adaptation," Griet Vandermassen argues. However, she adds that "strict adherence to verifiability as an evaluative criterion would eliminate, among others, archaeology, cosmology, evolutionary biology, forensic medicine, paleontology, tectonic geology, quantum physics, and all of the behavioral sciences as legitimate scientific enterprise," Vandermassen, *Who's Afraid of Charles Darwin?*, 140; 142.

⁵⁴⁰ For an exposé of the evidence behind Darwinian evolution by one of its most eloquent proponents and anticreationist advocates, see Richard Dawkins, *The Blind Watchmaker* (New York: Norton, 1986).

⁵⁴¹ David Buss, *Evolutionary Psychology: The New Science of the Mind* (New York: Routledge, 2019), e-textbook version, 299-303.

⁵⁴² Paul Sherman and Samuel Flaxman, "Nausea and Vomiting of Pregnancy in an Evolutionary Perspective," *American Journal of Obstetrics and Gynecology*, 186, no. 5, Supplement 2 (2002): S190–97, https://doi.org/10.1067/mob.2002.122593.

⁵⁴³ The first use of this phrase to criticize evolutionary science comes from Stephen Jay Gould, "Sociobiology: The Art of Storytelling," *New Scientist* 16 (1978): 530–33, 530. This concept is discussed at length further in Chap. IV, C, 210.

⁵⁴⁴ Daniel Fessler, "Reproductive Immunosuppression and Diet: An Evolutionary Perspective on Pregnancy Sickness and Meat Consumption," *Current Anthropology* 43, no. 1 (2002): 19–61, <u>https://doi.org/10.1086/324128</u>.

demographics (or species), while alternative explanations are considered and rigorously tested.⁵⁴⁵ Several predictions can be derived from the same hypothesis, and they should all be tested. For example, following the pregnancy sickness hypothesis, nausea should be higher during the pregnancy stage where the fetus has a high vulnerability to toxins. Eventually, the cumulative weight of evidence will tend to lend credence to some hypotheses. This is for example the case of the pregnancy sickness hypothesis, whose main predictions have been broadly verified.⁵⁴⁶

However, there is still work for evolutionary scientists to conduct on this adaptation. After all, not all women experience nauseas in the same way (if they experience any). How to explain this individual variability? It could be random or it could follow patterns. Research could therefore investigate the factors correlated with weaker or stronger nausea: is it the mother's reproductive history? Age? Physiology? The sex of the fetus? Ecological factors such as level of resources, food availability or presence of pathogens? Involvement of relatives or of the father? If some correlates are indeed found, this would allow to refine the hypothesis with a greater acknowledgment of the environmental flexibility of that adaptation, which would in turn lead to new predictions, which could then be empirically tested, etc. Through that hypothesis-based process, new light is shed on human behaviors that traditional social sciences or medicine might not have considered, given their proximate-level focus on mechanisms and phenomena. Not only does evolutionary theory give credible explanations for the origin of specific behaviors, but it also allows to investigate the nutsand-bolts, flexibility, and variability of these behaviors through a web of hypotheses, predictions, and empirical tests.

To assemble convincing concurring evidence, the same hypothesis should ideally be supported by various sources of data such as comparison with other species, cross-cultural studies, surveys, genetic studies, laboratory experiments, historical, archeological, and paleontological records, or computer simulations. For that reason, evolutionary human sciences are inherently cross-disciplinary and gather practitioners from various disciplines, such as endocrinology, psychology, cognitive science, genetics, animal behavior, demography, and anthropology.⁵⁴⁷

⁵⁴⁵ For example of cross-cultural (counter)evidence from Fiji and Kenya, see respectively Luseadra McKerracher, Mark Collard, and Joseph Henrich, "Food Aversions and Cravings during Pregnancy on Yasawa Island, Fiji," *Human Nature* 27, no. 3 (2016): 296–315, <u>https://doi.org/10.1007/s12110-016-9262-y</u>; Ivy Pike, "The Nutritional Consequences of Pregnancy Sickness," *Human Nature* 11, no. 3 (2000): 207–32, <u>https://doi.org/10.1007/s12110-000-1011-5</u>.

⁵⁴⁶ Evidence is reviewed in Buss, *Evolutionary Psychology*, e-textbook version, 157-159.

⁵⁴⁷ As an example of the interdisciplinarity of the field, see the homepage to *Evolutionary Human Sciences* journal: "The journal aims to attract papers in the fields of evolutionary anthropology, cultural evolution, human biology, evolutionary medicine, anthropological genetics, phylogenetics, paleoanthropology and evolutionary approaches to psychology, cognition, language, economics, archaeology, primatology, politics and anything else that can be considered to be part of the evolutionary human sciences," <u>https://web.archive.org/web/20240823101101/https://www.cambridge.org/core/journals/evolutionary-humansciences</u>, archived August 23, 2024.

1.c. A Thriving Research Program

Evolutionary approaches to human behavior have been gaining ground in many fields.⁵⁴⁸ They are today employed by psychologists and anthropologists who study a wide range of human features, including-but not limited to-language, emotions, cognition, morality, cooperation, sexuality, romantic love, friendship, religion, spite, aggression, jealousy, storytelling, or visual arts. The field of evolutionary medicine is quite recent, with a foundational article published in 1991,⁵⁴⁹ and two journals created respectively in 2008 and 2013: The Evolution & Medicine Review and Evolution, Medicine, and Public Health. The field looks at the evolutionary history and potential adaptive benefits of what were traditionally considered as diseases, to better understand them-as in the example of pregnancy sickness.⁵⁵⁰ In economics, with the advent of behavioral approaches putting cognitive biases to the forefront, an evolutionary lens becomes easily applicable.⁵⁵¹ In political science as well, evolutionary approaches are increasingly employed to understand partisanship, polarization, conspiracy theories, etc.⁵⁵² Another recent addition to this list is evolutionary demography, which employs evolutionary theory to make sense of population-level demographic patterns (mortality, fertility, etc.).⁵⁵³ There are nowadays many specialized scientific journal: Evolution and Human Behavior (1979), Human Nature (1990), Evolutionary Anthropology (1992), Evolutionary Psychology (2003), Culture and Evolution (2003), Evolutionary Behavioral Sciences (2007), Letters on Evolutionary Behavioral Science (2010), Human Ethology (2011), Adaptive Human Behavior and Physiology (2013), Evolutionary Psychological Science (2015), Nature Human Behaviour (2017), Evolutionary Human Sciences (2019).⁵⁵⁴ Moreover, research from the evolutionary behavioral sciences is also routinely published in mainstream sexology, psychology, or life sciences journals.⁵⁵⁵ Lastly, the dynamism and productivity of the field is illustrated by its increasing output of university textbooks.⁵⁵⁶

⁵⁴⁸ A survey of evolutionary researchers (n=579) found that they overall reported "gradual progress in the prominence of evolutionary perspectives in the past decade and had expectations such progress would continue," Daniel Kruger et al., "The 2020 Survey of Evolutionary Scholars on the State of Human Evolutionary Science," *EvoS Journal: The Journal of the Evolutionary Studies Consortium* 9, no. 1 (2022): 37–63, 37.

⁵⁴⁹ George Williams and Randolph Nesse, "The Dawn of Darwinian Medicine," *The Quarterly Review of Biology* 66, no. 1 (1991): 1–22, <u>https://doi.org/10.1086/417048</u>.

⁵⁵⁰ Randolph Nesse, "Core Principles for Evolutionary Medicine," in *Oxford Handbook of Evolutionary Medicine*, ed. Martin Brüne and Wulf Schiefenhövel (Oxford University Press, 2019), https://doi.org/10.1093/oxfordhb/9780198789666.013.1, 4–43.

⁵⁵¹ Martie Haselton, Daniel Nettle, and Damian Murray, "The Evolution of Cognitive Bias," in *The Handbook of Evolutionary Psychology, Volume 2*, ed. David Buss (Hoboken: John Wiley & Sons, 2016), 968–87.

⁵⁵² Michael Bang Petersen, "Evolutionary Political Psychology," in *The Handbook of Evolutionary Psychology*, *Volume 2*, ed. David Buss (Hoboken: John Wiley & Sons, 2016), 1084–1102.

⁵⁵³ Oskar Burger, Ronald Lee, and Rebecca Sear, eds., *Human Evolutionary Demography* (Cambridge: OpenBook Publishers, 2024).

⁵⁵⁴ All in activity as of writing, November 2, 2023. Some have changed titles, for example *Evolution and Human Behavior* used to be called *Ethology and Sociobiology* until 1996. This list uses the most recent titles, and the dates of first publication, including under prior titles.

⁵⁵⁵ E.g., Archives of Sexual Behavior, Psychological Bulletin, Personality and Individual Differences, Behavioral and Brain Sciences, Nature, or Proceedings of the Royal Society of London, B.

⁵⁵⁶ While the major introductory textbooks are going through regular revisions and new editions, a wealth of specialized textbooks have recently been published, showing the breadth of the field as well as its growing research output, e.g., David Buss, ed., *The Oxford Handbook of Human Mating* (New York: Oxford University Press USA, 2023); James Liddle and Todd Shackelford eds., *The Oxford Handbook of Evolutionary Psychology and Religion* (New York:

Although there are still widespread disagreements over methods, focuses, and theory,⁵⁵⁷ the evolutionary approach has proved to be a fruitful and illuminating research program in a wide variety of fields. In fact, from an epistemological perspective, any research on living beings cannot be anything but evolutionary. As argued by Nettle and Scott-Phillips for example, all psychology is evolutionary: "[we] assume almost all scientists are committed to naturalism and accept that humans are organic creatures phylogenetically connected to other animals. Given these commitments, what it would mean for a psychology to be non-evolutionary is obscure."⁵⁵⁸ They thus propose retiring the strict "evolutionary" vs "non-evolutionary" boundary found in psychology. The evolutionary perspective could then be foregrounded or not, depending on its relevance to specific research objects, they write:

"However, though all psychology is evolutionary, psychologists do not always need to foreground evolution in their research, just as is true for biologists. At the same time, more space for evolution does not mean any less space for environment, context, culture, meaning or agency."⁵⁵⁹

Humans evolved like other animals, and many social scientists have been fruitfully factoring in evolutionary theory in their research. However, the field of evolutionary biology is following its own theoretical course, and human evolutionary behavioral scientists are sometimes lagging behind its latest developments.⁵⁶⁰ Similarly, research in genetics and neuroscience is advancing at a fast pace and could provide the missing mechanistic explanations for human behavior and the evolution thereof. These advances might end up redefining human behavioral sciences altogether, yet Darwinian evolution will predictably remain the overarching unifying framework of biology. Evolutionary approaches to human behavior are still in their infancy. Evolutionary psychologists, for example, are currently debating whether their science can be considered as a mature science, using concepts from philosophers of science Thomas Kuhn and Imre Lakatos.⁵⁶¹ These theoretical debates and developments are the hallmark of a dynamic approach, which is as far from settling into a unified and stable form as it is from disappearing.

Oxford University Press, 2020); Viviana Weekes-Shackelford and Todd Shackelford, eds., *The Oxford Handbook of Evolutionary Psychology and Parenting* (New York: Oxford University Press, 2021); Lisa Welling and Todd Shackelford, eds., *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology* (New York: Oxford University Press, 2019); Riadh Abed and Paul St John-Smith, eds., *Evolutionary Psychiatry: Current Perspectives on Evolution and Mental Health* (Cambridge: Cambridge University Press, 2022); Yair Lior and Justin Lane, eds., *The Routledge Handbook of Evolutionary Approaches to Religion* (New York: Routledge, 2022).

⁵⁵⁷ For review, see Lala and Brown, Sense and Nonsense: Evolutionary Perspectives on Human Behaviour.

⁵⁵⁸ Daniel Nettle and Thom Scott-Phillips, "Is a Non-Evolutionary Psychology Possible?," in *Evolutionary Thinking Across Disciplines: Problems and Perspectives in Generalized Darwinism*, ed. Agathe du Crest et al. (Cham: Springer International Publishing, 2023), 21–42, <u>https://doi.org/10.1007/978-3-031-33358-3_2</u>, 22.

⁵⁶⁰ This was the criticism addressed to evolutionary psychology by two evolutionary biologists, Elisabeth Lloyd and Marcus Feldman, "Commentary: Evolutionary Psychology: A View From Evolutionary Biology," *Psychological Inquiry* 13, no. 2 (2002): 150–56, https://doi.org/10.1207/S15327965PLI1302_04.

⁵⁶¹ Jonathan Egeland, "Evolutionary Psychology and Normal Science: In Search of a Unifying Research Program," *Integrative Psychological and Behavioral Science* 57, no. 2 (2023): 390–411, <u>https://doi.org/10.1007/s12124-022-09736-x</u>; Michael Woodley of Menie et al., "Soft Core Evolutionary Psychology? Potential Evidence Against a Unified

B.2. Evolutionary Behavioral Sciences and Feminism 2.a. Sara Hrdy and the Attack on Male Bias in Sociobiology

One of the key premises of early sociobiology was inherited from Darwin's times, and further justified by theoretical advances in evolutionary biology. In mammals, females invest in offspring much more than males, with gestation and lactation being energy-consuming, moreover, their stock of eggs is limited compared to the abundant production of sperm by males. As a result of this asymmetry, females were assumed to be choosier in selecting mates, and generally coy and cautious towards sex, whereas male mammals were assumed to be more indiscriminate and active in their sexual behavior.⁵⁶² This observation fit common assumptions about the sexes, as well as known behavioral observations.

However, not all observations concurred with this supposed ubiquitous sex difference. In the 1970s and 1980s, primatologist and sociobiologist Sarah Hrdy remarked in her observations of primate sexuality that females could be extremely active sexually.⁵⁶³ Females in species such as bonobos, chimpanzees, and baboons mated with many more partners than necessary for just reproduction, actively solicited sex, and even took risks in order to do so. Humans were thought unique in their enjoyment of nonreproductive copulation, but Hrdy showed that they were just on a continuum with other primates, where females also had a capacity to orgasm. Her observations revealed a male bias in sociobiology, wherein crucial features of female behavior had been hitherto overlooked because they did not fit neatly into the existing theory.⁵⁶⁴

From a Darwinian point of view, these phenomena needed explanations. How did female orgasm evolve even though it is not a prerequisite for reproduction, and why would the females of some species (including ours) develop an inclination for much more sex than could possibly be reproductively useful? In *The Woman That Never Evolved* (1981), Hrdy proposed her own evolutionary hypotheses to make sense of those observations. For example, she argued that over evolutionary history, females would have increased their offspring's survival chances by mating with multiple males, thus creating paternity confusion among potential sires. This way, those males would have refrained from killing offspring that could potentially be theirs, she contented, after recurrent observations of infanticide by male primates.⁵⁶⁵

Research Program from a Survey of 581 Evolutionarily Informed Scholars." *Evolutionary Psychological Science* 9 (2023): 397–406, <u>https://doi.org/10.1007/s40806-023-00370-3</u>.

⁵⁶² This is known as Bateman's principle, which was later refined by sociobiologist Robert Trivers in his landmark paper on parental investment, Robert Trivers, "Parental Investment and Sexual Selection," in *Sexual Selection and the Descent of Man*, by Bernard Campbell (Chicago: Aldine, 1972), 136–79. This paper is one of the most cited in evolutionary science, with no less than 17,905 citations as of writing on December 18, 2023 (Google Scholar).

⁵⁶³ Sarah Hrdy, born in 1946, is a U.S primatologist, anthropologist, and sociobiologist, widely celebrated as a pioneer in research on the evolutionary basis of female behavior in primates. Her research has won many awards, and she was elected to the National Academy of Science, the American Academy of Arts and Sciences, the American Philosophical Society, and the American Association for the Advancement of Sciences.

 ⁵⁶⁴ For exploration of this male bias, see her 1999 preface, "On Raising Darwin's Consciousness," Sarah Hrdy, *The Woman That Never Evolved* (Cambridge, London: Harvard University Press, 1981, 1999 reprint), xiii-xxvii.
 ⁵⁶⁵ Ibid., 153-156.

Hrdy's work is a landmark example of feminist empiricism in the sciences. She recognized that the issue was not with Darwinian theory itself, but with the male-biased way it had been simplistically applied. Indeed, she did not challenge the fact that male mammals overall demonstrate greater sexual assertiveness and promiscuity than females—a well-known fact predicted by evolutionary theory. She just recognized that there was another side to the evolutionary story. Male reproduction might be inherently more competitive, due to the smaller costs of reproduction for males, but it did not mean that there was no competition among females. Females too were competing in the grand struggle of natural and sexual selection. They were not passive pawns, but had evolved their own sexual strategies, which could on occasion be as promiscuous and assertive as males', depending on species and ecological factors.

Hrdy's conclusions spawned new research into female sexuality and mating strategies. Since then, a wealth of concurrent hypotheses have been formulated, refined, and tested to better understand the origins of female sexuality, including in humans.⁵⁶⁶ Over and above her acclaimed contribution to the science, Hrdy also concluded her book with a call to feminists. Denying the evolutionary history of humans and its impact on behavioral sex differences, she argued, was not only delusional, but also counter-productive. If women were to achieve equality and control over their own destiny, they needed to understand the biological roots of patriarchy. This did not mean endorsing or justifying the situation, but on the contrary arming women with the best available knowledge to preserve and advance their hard-fought victories.⁵⁶⁷ Hrdy's book was widely saluted, and a long line of avowed Darwinian feminists have since been fruitfully contributing to evolutionary science.⁵⁶⁸ This correction of historical male bias has been labeled the "female turn" in evolutionary science by evolutionary biologist and gender researcher Malin Ah-King.⁵⁶⁹

2.b. Feminist Empiricism in the Evolutionary Behavioral Sciences Today

In the United States, women now form the majority of researchers in the fields of psychology and anthropology, the two disciplines which encompass most practitioners of evolutionary human behavioral sciences. In 2018, women represented more than 74% of psychology students enrolled in doctoral programs.⁵⁷⁰ Likewise, women have been awarded an increasing share of anthropology PhD degrees, far outnumbering men in the last thirty years.⁵⁷¹ In

⁵⁶⁶ For a review, see Heidi Greiling and David Buss, "Women's Sexual Strategies: The Hidden Dimension of Extra-Pair Mating," *Personality and Individual Differences* 28 (2000): 929–63, <u>https://doi.org/10.1016/S0191-8869(99)00151-8</u>.

⁵⁶⁷ Hrdy, *The Woman That Never Evolved*, 190-191.

⁵⁶⁸ Barbara Smuts is another influential feminist primatologist, who wrote a classic paper laying out evolutionary hypotheses to explain how male domination become so prevalent in our species, Barbara Smuts, "The Evolutionary Origins of Patriarchy," *Human Nature* 6, no. 1 (1995): 1–32, <u>https://doi.org/10.1007/BF02734133</u>.

⁵⁶⁹ Malin Ah-King, *The Female Turn: How Evolutionary Science Shifted Perceptions About Females* (London: Palgrave Macmillan, 2023).

⁵⁷⁰ Garth Fowler et al., "Women Outnumber Men in Psychology Graduate Programs," American Psychological Association, 2018, <u>https://web.archive.org/web/20230603062318/https://www.apa.org/monitor/2018/12/datapoint</u>, archived June 3, 2023.

⁵⁷¹ Robert Speakman et al., "Market Share and Recent Hiring Trends in Anthropology Faculty Positions," *PLOS ONE* 13, no. 9 (2018), <u>https://doi.org/10.1371/journal.pone.0202528</u>, Figure 1 "US-based PhD anthropology degrees

that context, it is unsurprising to find female researchers producing major contributions to the field. As shown by the example of Sarah Hrdy, their attention to potential male biases can prove particularly salutary. David Buss, a leading evolutionary psychologist, acknowledges theoretical contributions from female colleagues and argues that "[t]hese conceptual innovations and empirical discoveries were made possible, I believe, by exceptionally bright female scientists having insights into female sexual psychology that had been missed by male scientists."⁵⁷²

Since they investigate gene-based differences between men and women, these disciplines are indeed particularly liable to reflect gender stereotypes and biases, as was the case with Darwin in his time. Yet, it does not mean that the theoretical approach itself is sexist and could not be made more accurate. This has been the case with Darwin, whose theory of sexual selection was hailed by Sarah Hrdy as "one of the crown jewels of evolutionary biology," even though she demonstrated that its biased application to females "desperately needed to be revised."⁵⁷³ And there are today many researchers in the field applying the feminist empiricist program to ensure that potential male bias be revealed and corrected, as for example Dr Rebecca Burch, who has been challenging partial accounts of women's fitness in evolutionary psychology textbooks.⁵⁷⁴ She has coined the term "naturalistic phallusy" to define and combat abusively normative statements about men and women found in the evolutionary literature.⁵⁷⁵ In fact, she is part of the Feminist Evolutionary Psychology Society, whose stated purpose is to "investigate the active role of women in human evolution, reexamine previous findings, highlight understudied topics, and call attention to diverse populations."⁵⁷⁶ This puts a dent in the view of evolutionary behavioral sciences as an inherently sexist field.

Prominent evolutionary scientists have repeatedly attempted to bridge the gap with feminist social scientists and feminist theory. In 1996, a collection entitled *Sex, Power, and Conflict: Evolutionary and Feminist Perspectives* was published, featuring articles analyzing phenomena such as rape and gendered violence by both evolutionary and feminist scholars.⁵⁷⁷ However, as later noted by one of the editors, "the book largely failed to have much impact in this attempt at rapprochement."⁵⁷⁸ Likewise in 1997, a collection entitled *Feminism and Evolutionary Biology:*

awarded between 1985 and 2014 showing total degrees conveyed and the gender of recipients," <u>https://doi.org/10.1371/journal.pone.0202528.g001</u>.

⁵⁷² David Buss, "Feminist Evolutionary Psychology: Some Reflections," *Journal of Social, Evolutionary, and Cultural Psychology* 7, no. 4 (2013): 295–96, <u>https://doi.org/10.1037/h0099192</u>, 295.

⁵⁷³ Hrdy, *The Woman That Never Evolved*, xiii.

⁵⁷⁴ Rebecca Burch, "More than Just a Pretty Face: The Overlooked Contributions of Women in Evolutionary Psychology Textbooks," *Evolutionary Behavioral Sciences* 14, no. 1 (2020): 100–114, https://doi.org/10.1037/ebs0000166.

⁵⁷⁵ Rebecca Burch and Maryanne Fisher, "The Naturalistic Phallusy: the Use of Evolution to Justify Treatment of Women." Poster presented at the 2018 Northeastern Evolutionary Psychology conference, New Paltz, NY, April 2018. ⁵⁷⁶ Rosemary Sokol, Maryanne Fisher, and Feminist Evolutionary Psychology Society, "Letter of Purpose of the Feminist Evolutionary Psychology Society," *Journal of Social, Evolutionary, and Cultural Psychology* 7, no. 4 (2013): 286–94, https://doi.org/10.1037/h0099193.

⁵⁷⁷ David Buss and Neil Malamuth, eds., *Sex, Power, Conflict: Evolutionary and Feminist Perspectives* (New York: Oxford University Press, 1996).

⁵⁷⁸ David Buss and David Schmitt, "Evolutionary Psychology and Feminism," *Sex Roles* 64, no. 9–10 (2011): 768–87, <u>https://doi.org/10.1007/s11199-011-9987-3</u>, 771.

Boundaries, Intersections and Frontiers was published.⁵⁷⁹ This was based on an "Evolution and Feminism" symposium and edited by Darwinian feminist Patricia Adair Gowaty. However, she expressed her frustration and disappointment at the mutual inability to communicate between feminists and evolutionists, as well as the resurfacing of the "archaic nature/nurture debates,"⁵⁸⁰ leading to heated arguments over myths of genetic determinism she thought had been "solved fifteen years ago."⁵⁸¹ Despite those repeated overtures and attempts at integration and dialogue, evolutionary psychology is still viewed with suspicion and heavily criticized by non-evolutionary feminist researchers.⁵⁸²

2.c. An Impossible Reconciliation?

Darwinian feminists, such as Hrdy, have repeatedly stressed the absence of fundamental incompatibility between feminism and evolutionary behavioral sciences. Yet, the rift seems persistent, with some even speaking of "irreconcilable differences."⁵⁸³ This section explores the differences in theory, focuses, and agenda underlying this rift.

Firstly, the evolutionary approach to human behavior is a research program with a different agenda than feminist research. Feminist research aims at seeing its concepts and findings influence society, either through cultural change, public policy, or by cross-pollination with activist movements, which in turn leads to social change. Evolutionary science, on the other hand, generally lies at the fundamental level of scientific inquiry. It is supposed to be hypothetical and exploratory, and rarely intended to become applied science.⁵⁸⁴ In fact, evolutionary scholars are so cautious to avoid the naturalistic fallacy (i.e., saying that what is "natural" is good or desirable) that they usually refrain from suggesting applications for their research. Therefore, when they investigate sex differences, they find themselves in a double bind. If they suggest applications for their research, they may be accused of issuing normative statements out of an abusive "naturalizing" of gender differences and breaching the feminist principle that "biology is not destiny." If they refrain from doing so, they may be criticized for not challenging existing gender norms, and for participating in a fundamentally postfeminist and conservative science.⁵⁸⁵

⁵⁷⁹ Patricia Adair Gowaty, ed., *Feminism and Evolutionary Biology: Boundaries, Intersections and Frontiers* (London: Chapman & Hall, 1997).

⁵⁸⁰ Ibid., xiii.

⁵⁸¹ Ibid., 1.

⁵⁸² E.g., O'Neill, "Feminist Encounters with Evolutionary Psychology." As argued by Suzanne Kelly, "[w]ith tensions mounting over the last three decades, the standoff between EP and feminist critics has only become stronger, the cavern between them only deeper," Suzanne Kelly, "Tofu Feminism: Can Feminist Theory Absorb Evolutionary Psychology?," *Dialectical Anthropology* 38, no. 3 (2014): 287–304, <u>https://doi.org/10.1007/s10624-014-9353-2</u>, 289. See also Diana Tietjens Meyers, "FEAST Cluster on Feminist Critiques of Evolutionary Psychology—Editor's Introduction," *Hypatia* 27, no. 1 (2012): 1–2, <u>https://doi.org/10.1111/j.1527-2001.2011.01239.x</u>.

⁵⁸³ E.g., Tang-Martinez, "The Curious Courtship of Sociobiology and Feminism." This is also the case of Suzane Kelly, who argues against the compatibility of evolutionary psychology and feminism, Kelly, "Tofu Feminism."

⁵⁸⁴ There are, however, exceptions. E.g., Glenn Geher and Nicole Wedberg, *Positive Evolutionary Psychology: Darwin's Guide to Living a Richer Life* (New York: Oxford University Press USA, 2019).

⁵⁸⁵ See Laura García-Favaro, "'Porn Trouble': On the Sexual Regime and Travels of Postfeminist Biologism," *Australian Feminist Studies* 30, no. 86 (2015): 366–76, <u>https://doi.org/10.1080/08164649.2016.1150937</u>.

Secondly, evolutionary biology is inherently centered around reproduction. Indeed, natural selection occurs over generations through differential rates of reproduction. For evolutionary biology, the primary function of sex is reproduction, to which any evolutionary approach to behavior is ultimately linked through the concept of fitness. On the other hand, feminists have long been aiming at culturally de-coupling the systematic association of sex with reproduction.⁵⁸⁶ Indeed, this association has historically weighed more on women, whose lives were greatly hampered by it. Liberation of female sexuality, facilitated by generalization of contraception and legalization of abortion, was therefore a correction of long-held double standards and inequalities. With increased control over their reproductive destinies, women were freer to explore and enjoy sex. In that regard, evolutionary biology's insistence on reproduction can appear as rather conservative. Yet, reproduction is not a fact of life among others, it is the very engine of evolution, a fact which biology cannot obscure nor re-write. Indeed, it is through reproduction that alleles get transmitted at differential rates from one generation to the next. If evolutionary scholars seem so eager to associate sex with reproduction, it is because it has proved so fruitful. It does not mean however that they extend this (ultimate) systematic association to humans' (proximate) daily lives, nor that they derive any normative beliefs from it. Yet, since feminist theory aims at shifting cultural values and narratives around sex, its agenda seems to be at somewhat odds with biology, which consistently stresses the reproductive function of sex.

A corollary of this is the fact that evolutionary biology could be accused of being heteronormative. Indeed, its focus on reproduction logically entails great attention to heterosexuality. In the meantime, feminist theory has been challenging heteronormativity, by stressing the existence of other fluid and diverse sexual orientations.⁵⁸⁷ In doing so, it is driving important research to accurately portray the diversity and range of human sexuality at the proximate level, whereas evolutionary scientists are still struggling to provide ultimate explanations for the varied scope of human sexuality. Various hypotheses have been forwarded and are being investigated, but the evolutionary history of homosexuality and its potential genetic or hormonal mechanisms remain a puzzle to be solved.⁵⁸⁸ Thus, evolutionary approaches to human behavior still operate in a framework where heterosexual reproductive sex is ubiquitous, while nonheterosexual practices are relatively unexplained and anecdotal. Here as well, they are at odds with social scientific approaches to sex and gender.

The main bone of contention may be lying around sex and gender differences. Evolutionary theory predicts that behavioral differences between men and women could be derived from their different reproductive interests, which had men and women face different selection pressures,

⁵⁸⁶ For exploration of the role of sexual liberation and recreational sex in second-wave feminism, see Jane Gerhard, *Desiring Revolution: Second-Wave Feminism and the Rewriting of American Sexual Thought 1920 to 1982* (New York: Columbia University Press, 2001).

⁵⁸⁷ For examples of cross-disciplinary approaches to the study of human sexual orientations, see Deborah Amory et al., eds., *An Introduction to LGBTQ+ Studies: A Cross-Disciplinary Approach* (Albany: SUNY Press, 2022).

⁵⁸⁸ For reviews of hypotheses and supporting evidence, see Buss, *Evolutionary Psychology*, e-textbook version, 264-266 for female homosexuality, and 303-306 for male homosexuality; Nicholas Neibergall, Alex Swanson, and Francisco Sánchez, "Hormones, Sexual Orientation, and Gender Identity," in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford (New York: Oxford University Press, 2019), 201–214.

which in turn led to natural selection of different traits and features in each sex. On the contrary, feminist gender studies focus on the historical and geographical variability of gender differences, showing how these are shaped by cultural and political factors.⁵⁸⁹ Fundamentally, these two approaches are not mutually exclusive. They certainly both provide valid insights. Any behavioral difference between men and women is in fact bound to be a complex interaction between physiology and environment at every level, as predicted by the interactionist model. Establishing a strict ontological barrier between "biological" sex differences and "socially constructed" gender differences is a misleading extension of the oversimplistic nature/nurture dichotomy.⁵⁹⁰ Both are intertwined in a web of influences and feedback loops, acting during development, socialization, as well as over evolutionary history.

Yet even though few argue against this interactionist framework, there is widespread disagreement over the particulars. Feminist accounts, for example, acknowledge the influence of "biology" over bodies, but are reluctant to extend it to brain and behavior, with a certain taboo around discussing potential brain-based sex differences.⁵⁹¹ As such, they are particularly critical of evolutionary psychologists who engage with this topic.⁵⁹² This led evolutionary psychologist Anne Campbell to complain that, "It seems eccentric to castigate psychologists for being interested in psychological processes."⁵⁹³ There are countless examples of these controversies around the issue of sex and gender differences. Evolutionary scholars argue that feminist research starts from the premise that all gender differences are socially constructed, thus dismissing their entire disciplinary approach.⁵⁹⁴ On the other hand, gender studies scholars have long been trying to deconstruct normative prescriptions on female behavior, including those (abusively) based on biological arguments. Evolutionary research about sex is thus often labeled by those feminist scholars as "essentialist."⁵⁹⁵ This is seen as a dire condemnation, based on the principle that any sweeping statement about the inherent qualities of men and women is bound to be reductive and oblivious of the wide diversity and variability of gender expressions. Yet, this criticism may be misguided. Indeed, evolutionary behavioral scientists dwell on statistical differences.⁵⁹⁶ Therefore, they do not claim that there are traits or behavior that would be inherent to all women. They just point out some

⁵⁸⁹ E.g., Merry Wiesner-Hanks, *Gender in History: Global Perspectives* (Hoboken: John Wiley & Sons, 2021).

⁵⁹⁰ This point is for example made by Griet Vandermassen, who therefore employs "sex" and "gender" interchangeably, Vandermassen, *Who's Afraid of Charles Darwin?*, 14. Feminist psychologists Eagly and Wood also recognize this: "The intertwining of nature and nurture in contemporary science makes us reluctant to perpetuate the nature-nurture dichotomy inherent partitioning the causes of female-male differences and similarities according to the understanding that sex = nature and gender = nurture," Alice Eagly and Wendy Wood, "Feminism and the Evolution of Sex Differences and Similarities," *Sex Roles* 64, no. 9 (2011): 758–67, <u>https://doi.org/10.1007/s11199-011-9949-9</u>, 759.

⁵⁹² Laurette Liesen, "Women, Behavior, and Evolution: Understanding the Debate between Feminist Evolutionists and Evolutionary Psychologists," *Politics and the Life Sciences: The Journal of the Association for Politics and the Life Sciences* 26, no. 1 (2007): 51–70, <u>https://doi.org/10.2990/21_1_51</u>.

⁵⁹³ Anne Campbell, "The Study of Sex Differences: Feminism and Biology," *Zeitschrift Für Psychologie* 220, no. 2 (2012): 137–43, <u>https://doi.org/10.1027/2151-2604/a000105</u>, 138.

⁵⁹⁴ Barry Kuhle, "Evolutionary Psychology Is Compatible with Equity Feminism, but Not with Gender Feminism: A Reply To Eagly and Wood (2011)," *Evolutionary Psychology* 10, no. 1 (2012): 39-43, <u>https://doi.org/10.1177/147470491201000104</u>.

⁵⁹⁵ E.g., Kelly, "Tofu Feminism," 298-299.

⁵⁹⁶ This statistical conception of determinism found in evolutionary biology is described above in footnote n°508, 110.

trends or tendencies that are more prevalent in women than men, thus falling short of genuine essentialism.

Beyond theoretical disagreements, it is certain that the manosphere's (mis)appropriation of evolutionary science is not helping reconcile feminists with evolutionary science. Some researchers recall having experienced a form of "conversion" moment when they shed their "blank slate" gender constructionist beliefs after being confronted with evidence for evolved behavioral sex differences.⁵⁹⁷ As they report it, their first reaction was one of incredulity or suspicion, before they ended up being won over by the strength of the evidence. They went on to produce influential evolutionarily-informed research, which was enriched by their personal trajectories and feminist backgrounds. However, if evolutionary behavioral sciences are nowadays used by manosphere groups to buttress their antifeminist ideologies, it is hard to expect feminists to accept them uncritically, and it should not come as a surprise to hear them ask: "is it really sufficient for EP scholars to claim that their work is without a political agenda, when EP concepts and theories not only rely on and reproduce normative gendered assumptions, but are routinely invoked elsewhere to maintain and justify gender inequality?"⁵⁹⁸

From an epistemological point of view, feminist scholarship and evolutionary approaches to human behavior are not mutually exclusive. However, they usually operate on different levels, with different focuses, emphases, and agendas, and these divergences are further magnified by longstanding historical, political, and disciplinary divides, as well as by some recurrent misunderstandings. Hopefully the present research can help further dialogue and clarify issues, as it draws on both the feminist and evolutionary bodies of research.

B.3. Circulation and Reception of Evolutionary Behavioral Sciences

While this chapter has so far mostly been discussing academia in the English-speaking world, this dissertation focuses on the wider public circulation and reception of science. This section therefore reviews research on contemporary circulation and reception of evolutionary behavioral sciences among the public.

3.a. Circulation of Evolutionary Scientific Knowledge

Jon Miller, one of the leading US researchers on public understanding of evolutionary science has been investigating adult science learning for decades. The advent of the Internet, he argues, calls for a rethinking of traditional models:

"For at least the last hundred years, the warehouse has been the dominant metaphor for science learning in schools, museums, and many other institutions. The objective was to give learners—students and adults—facts to store in their mental warehouse until needed in the future. Schools

⁵⁹⁷ E.g, Khandis Blake, "Beyond Nature vs. Nurture: An Interdisciplinary Exploration of Sexual Politics and Ideological Divides" (plenary at the Evolution and Human Behavior European Association conference, London, 2023); Vandermassen, *Who's Afraid of Charles Darwin?*, 1-3; Degler, *In Search of Human Nature*, vii-x; Carole Hooven, *T: The Story of Testosterone, the Hormone That Dominates and Divides Us* (New York: Henry Holt and Company, 2021), 14-17.

⁵⁹⁸ O'Neill, "Feminist Encounters with Evolutionary Psychology," 349.

encouraged and tested memorization; museums designed exhibitions to convey memorable chunks of information."⁵⁹⁹

Just like e-commerce has been supplanting traditional warehouses with a Just-In-Time (JIT) model, in which products are manufactured after they are ordered and shipped immediately after manufacture, Miller argues, scientific knowledge is increasingly acquired "just in time" by people on the Internet.⁶⁰⁰ In such an environment, increasing attention should be given to people's skills in navigating and evaluating the myriad of available knowledge sources. Among such sources are media reports of scientific findings, which are concerning to the scientific community.⁶⁰¹ Indeed, scientists have little control over potential exaggerations or distortions of their published journal articles in the media. Sumner et al. thus identified three common exaggerations of scientific findings in a more deterministic way than researchers (e.g., assuming causation from a correlational study); (3) abusively extending animal research findings to humans. Yet, their study revealed that the media was not primarily responsible for those distortions, most of which came from the press releases of the researchers' own universities (which committed those distortions respectively 40%, 33%, and 36% of the time).⁶⁰²

Moreover, in the United States, there is a deep and growing partisan divide in the media sources that Democrats and Republicans trust and rely on.⁶⁰³ Reports of research on sex differences, being so controversial and prone to sensationalistic headlines, also exhibit political bias. In their study of newspaper reports on sex difference research, Brescoll and LaFrance found that "[m]ore politically conservative newspapers and those that held more traditional gender role beliefs attributed gender differences more to biological factors than did more liberal newspapers and newspapers with less traditional gender role beliefs."⁶⁰⁴

Unfortunately, there is close to no research on the spread of evolutionary behavioral scientific knowledge, and on potential distortions thereof, the only exception being textbook research. Indeed, over the years, evolutionary psychologists have surveyed sociology, introductory psychology, social psychology, and "Sex and Gender" textbooks to assess how their discipline was depicted in the social sciences. They found that all of them exhibited some misrepresentation or

⁵⁹⁹ Jon Miller, "Adult Science Learning in the Internet Era," *Curator: The Museum Journal* 53, no. 2 (2010): 191–208, <u>https://doi.org/10.1111/j.2151-6952.2010.00019.x</u>, 192.

⁶⁰⁰ Jon Miller et al., "The Acquisition of Health and Science Information in the 21st Century," *The Information Society* 37, no. 2 (2021): 82–98, <u>https://doi.org/10.1080/01972243.2020.1870022</u>.

⁶⁰¹ For example, medical researchers have been voicing concerns about news media reports (e.g., TV) for over fifty years, and conducing assessment of their reliability for more than twenty-five years, see Matt Oxman et al., "Quality of Information in News Media Reports about the Effects of Health Interventions: Systematic Review and Meta-Analyses," *F1000Research* 10 (2022): 433, <u>https://doi.org/10.12688/f1000research.52894.2</u>.

⁶⁰² Petroc Sumner et al., "The Association between Exaggeration in Health Related Science News and Academic Press Releases: Retrospective Observational Study," *BMJ* 349 (2014): 1–8, <u>https://doi.org/10.1136/bmj.g7015</u>.

⁶⁰³ Pew Research Center, "U.S. Media Polarization and the 2020 Election: A Nation Divided," January 24, 2020, <u>https://web.archive.org/web/20230922164347/https://www.pewresearch.org/journalism/2020/01/24/u-s-media-</u>polarization-and-the-2020-election-a-nation-divided/, archived September 22, 2023.

⁶⁰⁴ Victoria Brescoll and Marianne LaFrance, "The Correlates and Consequences of Newspaper Reports of Research on Sex Differences," *Psychological Science* 15 (2004): 515–20, <u>https://doi.org/10.1111/j.0956-7976.2004.00712.x</u>, 517.

outright dismissal of evolutionary psychology.⁶⁰⁵ My own research focuses on online appropriations of evolutionary scientific knowledge, and thus devotes attention to the circulation of this knowledge.⁶⁰⁶ Given the scarcity of existing scholarship, this aspect of the research is exploratory.⁶⁰⁷

3.b. Public Understanding of Evolutionary Behavioral Science

Public understanding of science is more commonly called "scientific literacy" in the United States.⁶⁰⁸ Scientific literacy has been defined as "what the general public ought to know about science" and "commonly implies an appreciation of the nature, aims, and general limitations of science, coupled with some understanding of the more important scientific ideas."⁶⁰⁹ This simple idea is crucial in many fields such as science education, sociology of science, or public opinion research.

Given the vagueness of the concept, however, many finer classifications have been provided. Benjamin Shen's influential 1975 classification identified "practical science literacy" (ability to put scientific and technical knowledge to use), "civic science literacy" (ability for citizens to grasp scientific matters in relations to public policy), and "cultural science literacy" (driven by the desire to know about the scientific enterprise as a "major human achievement"—or as he puts it "it is to science what music appreciation is to music.")⁶¹⁰ So complex and manyfold have the definitions become that a recent institutional report mentioned "the constellation of features that can constitute science literacy."

Yet, while the concept is notoriously controversial and blurry (a recent literature review counted 74 distinct definitions of science literacy),⁶¹² educators, governments, and institutions all recognize the acute need for it. In democracies, where citizens are called to weigh on issues through the ballot, the need to have a scientifically literate population is self-evident. The current

⁶⁰⁵ For a review of those findings, see Benjamin Winegard, Bo Winegard, and Robert Deaner, "Misrepresentations of Evolutionary Psychology in Sex and Gender Textbooks," *Evolutionary Psychology* 12, no. 3 (2014): 474–508, <u>https://doi.org/10.1177/147470491401200301</u>, 476-477.

⁶⁰⁶ See research questions in Introduction, 27.

⁶⁰⁷ See Chapter VII, 347.

⁶⁰⁸ "The term is usually regarded as being synonymous with 'public understanding of science,' and while 'scientific literacy' is used in the United States, the former phrase is more commonly used in Britain, with 'la culture scientifique' being used in France," Rüdiger Laugksch, "Scientific Literacy: A Conceptual Overview," *Science Education - SCI EDUC* 84 (2000): 71-94, <u>https://doi.org/10.1002/(SICI)1098-237X(200001)84:13.0.CO;2-C</u>, 71.

⁶¹⁰ Benjamin Shen, "Views: Science Literacy: Public Understanding of Science Is Becoming Vitally Needed in Developing and Industrialized Countries Alike," *American Scientist* 63, no. 3 (1975): 265–68, 267.

⁶¹¹ National Academies of Sciences, Engineering, and Medicine, *Science Literacy: Concepts, Contexts, and Consequences,* (Washington, DC: The National Academies Press, 2011), 11. Two scholars reviewing the topic were more critical: "Thus did scientific literacy become an umbrella concept with a sufficiently broad, composite meaning that it meant both everything, and nothing specific, about science education and the competency it sought to describe," Douglas Roberts and Rodger Bybee, "Scientific Literacy, Science Literacy, and Science Education," in *Handbook of Research on Science Education*, ed. Norman Lederman and Sandra Abell, vol. II (New York: Routledge, 2014), 737.

⁶¹² Stephen Norris, Linda Phillips, and David Burns, "Conceptions of Scientific Literacy: Identifying and Evaluating Their Programmatic Elements," in *International Handbook of Research in History, Philosophy and Science Teaching*, ed. Michael Matthews (Dordrecht: Springer Netherlands, 2014), 1317–44.

controversies around climate change or vaccination as well as the long-lasting fundamentalist resistance to evolutionary theory are examples of that imbrication of scientific and political matters.⁶¹³ Indeed, in the United States, Darwinian evolution is still being resisted on a massive scale. This is a well-known US specificity in the Western world, caused in part by fundamentalist Protestant creationism and its appropriation by the Republican Party.⁶¹⁴ Since 1985, Miller et al. have been asking American adults whether they agreed or disagreed with the statement "Human beings, as we know them today, developed from earlier species of animals."⁶¹⁵ Only recently have most American adults agreed with the statement (54% in 2020).⁶¹⁶ Given that context, there are myriads of studies trying to assess Americans' scientific literacy on evolutionary theory, with specialized journals like *Evolution: Education and Outreach*. Scientific literacy is an inherently normative concept, based on standards of what people ought to know. Therefore, instead of having to redefine the standards each time, researchers have been relying on replicating studies based on pre-existing, peer-designed questionnaires.

These survey studies generally assess literacy levels and identify its correlates.⁶¹⁷ Religious fundamentalism has been shown to have a negative effect on science literacy,⁶¹⁸ and is associated with creationist or intelligent design fallacies, as well as denial of evolution.⁶¹⁹ Likewise, women tend to score lower on measures of scientific literacy, acceptance, and knowledge of evolution. Unsurprisingly, respondents' level of education in the United States is highly correlated with science literacy, with the strongest predictor being "number of college courses completed."⁶²⁰ A survey among college undergraduates revealed that students had a better knowledge of evolution and significantly fewer misconceptions after completing an evolutionary psychology class, with no such effect found for biology classes.⁶²¹ However, there are no scientific literacy studies focusing specifically on evolutionary human behavioral sciences. Measuring public understanding of those sciences in the manosphere is one of the focuses of the present research, and *ad hoc* questionnaire

⁶¹³ For a climate scientist's concern about the politicization of climate change science, see Steven Sherwood, "Science Controversies Past and Present," *Physics Today* 64, no. 10 (2011): 39–44, <u>https://doi.org/10.1063/PT.3.1295</u>. As for "anti-vaxx" beliefs, they have come under unprecedented scrutiny during the COVID-19 pandemic.

⁶¹⁴ Liza Gross, "Scientific Illiteracy and the Partisan Takeover of Biology," *PLOS Biology* 4, no. 5 (2006): e167, <u>https://doi.org/10.1371/journal.pbio.0040167</u>; Jon Miller, Eugenie Scott, and Shinji Okamoto, "Public Acceptance of Evolution," *Science* 313 (2006): 765–66, <u>https://doi.org/10.1126/science.1126746</u>.

⁶¹⁵ They avoid using the politically loaded term of "evolution."

⁶¹⁶ Jon Miller et al., "Public Acceptance of Evolution in the United States, 1985–2020," *Public Understanding of Science* 31, no. 2 (2022): 223–38. <u>https://doi.org/10.1177/09636625211035919</u>.

⁶¹⁷ For details on the questionnaire designed to assess knowledge and misconceptions of Darwinian evolution, see Chapter III, B, 146.

⁶¹⁸ Miller et al., "Public Acceptance of Evolution in the United States, 1985–2020"; Miller, "Adult Science Learning in the Internet Era."

⁶¹⁹ Patricia Hawley et al., "What's the Matter with Kansas?: The Development and Confirmation of the Evolutionary Attitudes and Literacy Survey (EALS)," *Evolution: Education and Outreach* 4, no. 1 (2011): 117–32, https://doi.org/10.1007/s12052-010-0294-1.

⁶²⁰ Miller, "Adult Science Learning in the Internet Era."

⁶²¹ Stephen Short and Patricia Hawley, "The Effects of Evolution Education: Examining Attitudes toward and Knowledge of Evolution in College Courses," *Evolutionary Psychology* 13, no. 1 (2015): 67–88, <u>https://doi.org/10.1177/147470491501300105</u>. They hypothesize that this is due to the direct dispelling of those misconceptions in evolutionary psychology textbooks, as well as the constant presence of evolutionary theory in the field, whereas Darwinian evolution is only mentioned at the start of biology courses, before moving to the more mechanistic level (molecular biology, etc.).

items thus had to be designed, drawing from the existing measures of scientific literacy described here.⁶²²

3.c. Public Reception of Evolutionary Behavioral Sciences

There is no existing assessment of evolutionary behavioral scientific literacy in the public. However, given the political controversies surrounding evolutionary approaches to human behavior, there is a wealth of existing research on attitudes towards them. Evolutionary scientists are concerned about hostility towards their disciplines and have tried to measure it and identify its correlates. Perry and Mace, in a survey of UK university staff and students (n=7621), found that the biggest predictor for rejection of evolutionary approaches is studying in the social sciences, with the second being religiosity.⁶²³ Geher and Gambacorta ran an online survey (n=268) trying to assess which findings of the evolutionary behavioral sciences were most resisted on political grounds. They found that only findings pertaining to evolved sex differences triggered political resistance, especially in those who identified as left-wing liberals, and worked in academia (in particular sociology and women's studies).⁶²⁴ Another survey of academics (n=111) revealed a weak positive effect of political liberalism on criticism-level of evolutionary psychology.⁶²⁵

Detractors of evolutionary science insist on the genetic determinism and the status quo criticisms, which have repeatedly been refuted by evolutionary scientists themselves. Yet, those intuitions might still be present in the public and can be empirically assessed. There seems to be evidence that when people encounter arguments about the relevance of genes on behavior, they are more likely to see this behavior as immutable, determined, and "natural."⁶²⁶ For example, Nettle et al. presented UK resident adults (n=200) with different explanations (hormonal, genetic, cultural, motivational, etc.) for a given behavior.⁶²⁷ They found that explanations which sounded more "biological" to people (i.e., hormonal, genetic, and evolutionary) made respondents mistakenly view the behavior as harder to change or correct through social intervention: "demonstrating that there is a 'biological' basis does not necessarily mean that the behaviour could not change easily. However, for our participants, all 'biological' explanations led to the inference of below-average malleability."⁶²⁸ They do note the political implications of this finding, explaining why

⁶²² See details, in Chap. III, B, 150.

⁶²³ George Perry and Ruth Mace, "The Lack of Acceptance of Evolutionary Approaches to Human Behaviour," *Journal of Evolutionary Psychology* 8, no. 2 (2010): 105–25, <u>https://doi.org/10.1556/JEP.8.2010.2.2</u>.

⁶²⁴ Glenn Geher and Daniel Gambacorta, "Evolution Is Not Relevant to Sex Differences in Humans Because I Want It That Way! Evidence for the Politicization of Human Evolutionary Psychology," *EvoS Journal: The Journal of the Evolutionary Studies Consortium* 2, no. 1 (2010): 32–47.

⁶²⁵ Peter Jonason and David Schmitt, "Quantifying Common Criticisms of Evolutionary Psychology," *Evolutionary Psychological Science* 2, no. 3 (2016): 177–88, <u>https://doi.org/10.1007/s40806-016-0050-z</u>. Respondents were non-evolutionary psychologists, hailing from North America (69%), Europe (17%), Australia/New Zealand (10%), South America (2%) and Asia (1%).

⁶²⁶ For evidentiary summary, see Ilan Dar-Nimrod and Steven Heine, "Genetic Essentialism: On the Deceptive Determinism of DNA," *Psychological Bulletin* 137, no. 5 (2011): 800–818, <u>https://doi.org/10.1037/a0021860</u>.

⁶²⁷ Daniel Nettle, Willem Frankenhuis, and Karthik Panchanathan, "Biology, Society, or Choice: How Do Non-Experts Interpret Explanations of Behaviour?," *Open Mind: Discoveries in Cognitive Science* 7 (2023): 625–51, <u>https://doi.org/10.1162/opmi_a_00098</u>.

⁶²⁸ Ibid., 636.

evolutionary accounts of behavior may more easily be politically appropriated by people who view human nature as stable and immutable, as might be the case in the manosphere.

Evolutionary scientists might be cautioning against the naturalistic fallacy and the myth of genetic determinism, but it does not mean that people exposed to their work are immune to these thought processes. This was experimentally tested by Dar-Nimrod and Heine, who showed in two experiments that women (n=111 and n=92) performed worse on math tests after being presented with genetic accounts of sex differences in mathematical performance (as opposed to more proximate causes).⁶²⁹ This is congruent with earlier experimental results indicating that people who believed in more stable and innate essences of racial groups were more likely to endorse stereotypes about those groups.⁶³⁰ In other experiments conducted in Canada, Dar-Nimrod et al. assessed whether evolutionary explanations for rape made men (n=58 and n=67) more or less lenient towards rape, as opposed to sociocultural explanations.⁶³¹ Exposure to evolutionary explanations did not modify subjects' level of suggested punishment for offenders (compared to the control condition), whereas sociocultural explanations made them harsher. This agrees with their overall analysis. They argue that people seem to be inherently essentialist thinkers, and that being confronted with evolutionary or "biological" explanations does not necessarily alter their beliefs.⁶³² However, sociocultural explanations do seem to make them consider behavior as more malleable.

Taken together, these results provide invaluable insights to study online reception and appropriation of evolutionary behavioral science. Firstly, there is resistance to human applications of Darwinism motivated by religious beliefs (mostly from the right) and by ideological/epistemological environmentalist beliefs (mostly from the left, especially present among academics in the social sciences). Secondly, people seem to possess inferential intuitions about scientific explanations for behavior. One of these is that behavioral explanations that sound more "biological" trigger a more fixed and immutable view of behavior. People also mistakenly think that those "biological" explanations are compatible together but less so with sociocultural explanations. Nettle et al. recognize that those lay intuitions might be useful: "for everyday purposes, it might work well to divide the world into some phenomena that need to be thought of biologically, some psychologically, and some structurally, and have different priors about each of these classes."⁶³³ However, they add, those intuitions make the public liable to misrepresent complex multi-level systems of explanation that weave together physiological and environmental influences:

"For example, the evolutionary psychology paradigm characterizes human behaviour as arising from the interaction between current social environments and flexible evolved cognitive mechanisms (Tooby & Cosmides, 1989). However, it is often mischaracterized, even in the

⁶²⁹ Ilan Dar-Nimrod and Steven Heine, "Exposure to Scientific Theories Affects Women's Math Performance," *Science* 314, no. 5798 (2006): 435–435, <u>https://doi.org/10.1126/science.1131100</u>.

⁶³⁰ Sheri Levy, Steven Stroessner, and Carol Dweck, "Stereotype Formation and Endorsement: The Role of Implicit Theories," *Journal of Personality and Social Psychology* 74 (1998): 1421–36, <u>https://doi.org/10.1037/0022-3514.74.6.1421</u>.

⁶³¹ Ilan Dar-Nimrod et al., "Do Scientific Theories Affect Men's Evaluations of Sex Crimes?," *Aggressive Behavior* 37, no. 5 (2011): 440–49, <u>https://doi.org/10.1002/ab.20401</u>.

⁶³² Ibid., 448.

⁶³³ Nettle, Frankenhuis, and Panchanathan, "Biology, Society, or Choice," 646.

scholarly literature and by some adherents, as claiming that human behaviour is innate and inflexible ('hard-wired') and the current environment causally unimportant."⁶³⁴

Such intuitions pose a challenge to science educators and communicators.⁶³⁵ For all they might caution against some fallacies and biases, people seem to gravitate towards those: "It does not suffice to simply communicate scientific ideas, because students and lay people will not understand them and quickly transform them into more palatable, but scientifically inaccurate versions."⁶³⁶ One last obstacle is the ubiquity of motivated reasoning, the process by which people seek and interpret information in accord with their prior beliefs.⁶³⁷ Hence the truism that people "might have motivations other than a concern for truth that constrain the way in which they perceive and interpret scientific information. Religious, political, and ideological beliefs can seriously affect people's understanding and acceptance of scientific concepts and theories."⁶³⁸ All these aspects of the public understanding, circulation, and reception of scientific knowledge were kept in mind during the present study of the manosphere.

Conclusion

After its inception in 1859, Darwinism was appropriated for various and sometimes antagonistic ideological and policy purposes, from women's rights to eugenics, from anarchism to *laissez-faire* economics. Each time, normative implications were added to the Darwinian theory, as evidence from the natural world was selectively chosen to support worldviews. By analogical reasoning, concepts such as survival of the fittest or female choice were extended to the political, social, and economic spheres, far beyond their original scope. Slowly, social sciences started emancipating themselves from the hold of biology and condemning the abuses thereof. After the horrors of World War II and the associations of Nazism with eugenics, approaches stressing heredity, genes, and evolution were discredited in the social sciences.

However, at the same time, evolutionary biology was going through theoretical and methodological breakthroughs. Genetics were the missing piece to Darwin's theory. With progress in molecular genetics, statistics, and new research on animal behavior, the life sciences entered in a new mature paradigm called the modern synthesis. Applying this framework to human behavior was logical, but things did not go as expected. In the 1970s, the discipline of sociobiology was promptly rejected and condemned by the social scientific establishment. Its insistence on the genetic bases of human behavior was wrongly received as an admission of genetic determinism

⁶³⁴ Ibid., 646-647.

⁶³⁵ This problem is eloquently presented in Stefaan Blancke, Koen Tanghe, and Johan Braeckman, "Intuitions in Science Education and the Public Understanding of Science," in *Perspectives on Science and Culture*, ed. Stefaan Blancke, Kris Rutten, and Ronald Soetaert (West Lafayette: Purdue University Press, 2018), 223–42, https://doi.org/10.2307/j.ctt2204rxr.16.

⁶³⁶ Ibid., 234.

⁶³⁷ A study suggested that those most likely to benefit from certain predictions of evolutionary psychology about mating (i.e., physically attractive people) were more likely to be sympathetic towards the discipline, Andrew Ward, Tammy English, and Mark Chin, "Physical Attractiveness Predicts Endorsement of Specific Evolutionary Psychology Principles," *PLOS ONE* 16, no. 8 (2021): e0254725, <u>https://doi.org/10.1371/journal.pone.0254725</u>.

⁶³⁸ Blancke, Tanghe, and Braeckman, "Intuitions in Science Education and the Public Understanding of Science," 235.

and as a dismissal of sociocultural influences on behavior. Sociobiologists were likened to eugenicists and even Nazis, as criticisms often turned more political than scientific.

Feminist academics were at the forefront of the charge against sociobiology. Indeed, feminist theory had built itself on a rejection of the idea that biology was destiny, which had been historically used to justify male dominance. Science was seen as either male-biased, or completely embedded in a patriarchal dominance system. Since sociobiology was trying to explain behavioral differences between men and women through their different evolutionary histories, it was condemned as a simplistic, essentialist, and frankly sexist discipline. Early sociobiologists had not taken the time to ponder the specificities of humans and to get acquainted with the wealth of existing social scientific scholarship. Nor did they realize how much their work was at odds with established political, ideological, and disciplinary interests. Despite their protests, their ambitious attempt at "biologizing" the social sciences was a failure, and the very name of sociobiology remained opprobrious to this day. One of the founders of sociobiology, Robert Trivers, reflected on this failure twenty years afterwards:

"I confidently predicted that in twenty years, in other words right now, you would not be able to walk down the hall of a psychology or a sociology or an anthropology department, without hearing people arguing with each other 'Yes but why would natural selection favour that?'. This has not happened. The parallel fact in biology has been extremely gratifying."⁶³⁹

In spite of this early opposition, evolutionary approaches to human behavior have stayed their course. Sociobiology has morphed into more specific and elaborate approaches, which incorporate developments in cognitive science, endocrinology, genetics, or AI modelling. These disciplines have also witnessed an influx of female researchers, correcting historical male biases, and forcefully defending the idea that nothing in Darwinian theory is inherently sexist. It is just a model to describe and understand reality, which neither entails nor endorses any specific political worldview or social agenda. Despite attempts at bridging gaps with feminist scholars, there is still widespread distrust towards evolutionary approaches to behavior and sex differences, with some feminists arguing that those differences are irreconcilable.

In the United States, evolutionary human scientists thus have to face opposition from creationists on the right, as well as feminists and researchers in the social sciences and the humanities, which can be threatening to scientists who rely too much on biology.⁶⁴⁰ For instance, Harvard evolutionary biologist and hormone expert Carole Hooven was recently attacked from inside her own institution for appearing in a conservative media outlet and insisting that biological sex was a relevant scientific construct.⁶⁴¹ Among all this ideological-scientific conudrum, it appears that evolutionary approaches to human behavior are being widely discussed and

⁶³⁹ Robert Trivers, "I had the future exactly wrong," interview conducted at the conference on "Biological Perspectives in the Social Sciences" at the Gruter Institute, Darthmouth College, Hanover, USA, August 1995, <u>https://web.archive.org/web/20231104152904/http://www.froes.dds.nl/TRIVERS.htm</u>, archived November 4, 2023.

⁶⁴⁰ For examples of politically-motivated contemporary attacks on evolutionary scientists, see Alice Dreger, *Galileo's Middle Finger* (New York: Penguin Press, 2015). For older examples, see Segerstråle, *Defenders of the Truth: The Sociobiology Debate*.

⁶⁴¹ Carole Hooven, "Academic Freedom Is Social Justice: Sex, Gender, and Cancel Culture on Campus," *Archives of Sexual Behavior* 52, no. 1 (2023), <u>https://doi.org/10.1007/s10508-022-02467-5</u>.

appropriated in the online antifeminist communities of the manosphere. This understandably furthers and justifies the hostility of mainstream social scientists and feminists towards evolutionary behavioral sciences.

The present dissertation aims at disentangling those complicated issues. A prerequisite of this was to present the evolutionary behavioral sciences as they really are, a fruitful, diverse, and self-critical research program which encompasses insights and methods from a wide range of disciplines. This dissertation is solidly grounded in the state of the art of those disciplines and is supervised by an evolutionary anthropologist. On the other hand, this is a work of social scientific research, which does not formulate any evolutionary hypothesis. Its aim is to scrutinize the appropriations of evolutionary science occurring in the manosphere. Indeed, there has been little work yet on contemporary political appropriations of evolutionary science, although research has shown the influence of motivated reasoning, political and religious affiliations, and the intuitive basis of certain common scientific misunderstandings. Very recently, social and evolutionary sciencing this phenomenon and calling for more research. In the next chapter, I detail the data and methods used to research the phenomenon.

CHAPTER III: METHODS

Ethics, Data Collection, and Data Analysis

Introduction

This dissertation focuses on a multifaceted phenomenon, as it examines understanding, appropriation, and circulation of science in the manosphere. Consequently, there is no self-evident set of variables to measure, nor is there one source of data which could possibly yield answers to all our research questions. Moreover, the manosphere is no united movement, which also calls for attention to diversity between communities, thus complexifying data collection and analysis. In order to answer the three axes of my research in-depth, a variety of data were analyzed through mixed methods, which are reviewed in this chapter. Methodological choices were in no small part guided by constraints in data availability, as well as concerns about researcher safety, ethics, and data protection.

Internet communities are easily accessible, usually just a few clicks away. "In this respect online ethnography is surely a researcher's dream,"⁶⁴² British sociologists wrote, adding, "It does not involve leaving the comforts of your office desk; there are no complex access privileges to negotiate; field data can be easily recorded and saved for later analysis; large amounts of information can be collected quickly and inexpensively."⁶⁴³ Indeed, access to manosphere platforms is not particularly difficult. As a result, online discourse analysis—whether qualitative or quantitative and AI-driven—is by far the most common type of study design in manosphere research.⁶⁴⁴ Such designs have the advantage of collecting data which were "naturally" created by manospherians without researchers' intervention. The present work is therefore based on the qualitative analysis of a manosphere-wide discourse corpus spanning thirty years of content (1993-2023). Section A details the ethical choices made during research design, the inclusion criteria for selecting the materials, and the analysis thereof.

However, there are also downsides to online discourse studies. The main one is the absence of sociodemographic data. People can register on Internet forums and social media with very little information (an email address is usually enough), which usually stays hidden to the public. In these conditions, a lot of relevant data is inaccessible. What are their gender, age, ethnicity? What is their level of income? There is no public census of "the manosphere population," nor any accessible baseline statistics to allow for estimation. These data (or metadata) are in fact owned by the private companies operating websites and social media, who decide how and what to release to the public and to researchers.⁶⁴⁵ Location is one such data that is often impossible to retrieve, obscuring key geographical factors.⁶⁴⁶ As such, the present research had relatively little sociodemographic or geographic manosphere data to work with. When trying to assess educational levels in the

 ⁶⁴² Jason Rutter and Gregory Smith, "Ethnographic Presence in a Nebulous Setting," in *Virtual Methods: Issues in Social Research on the Internet*, ed. Christine Hine (Oxford, New York: Berg Publishers, 2005), 81–92, 84.
 ⁶⁴³ Ibid.

⁶⁴⁴ a

⁶⁴⁴ See manosphere literature review above, Chap I, C, 79.

⁶⁴⁵ This is done through APIs (Application Programming Interfaces). Some Internet companies decide to release more data than others, leading to biases in research. For example, Twitter has a comparatively rich API, which explains the prevalence of Twitter research.

⁶⁴⁶ There are exceptions, where an Internet dataset allows for geolocation, which can lead to groundbreaking research, e.g., Khandis Blake et al., "Misogynistic Tweets Correlate with Violence against Women," *Psychological Science* 32, no. 3 (2021): 315–25, <u>https://doi.org/10.1177/0956797620968529</u>.

manosphere—a key element to understand scientific literacy—, the need for direct contact with manospherians became evident.

Yet, such direct contacts are relatively rare in manosphere research due to the hostility of manospherians.⁶⁴⁷ This type of research is usually hampered for two reasons, which are ubiquitous in the methodological literature on the study of hard-to-reach, suspicious, or even hostile groups and populations. Firstly, the suspiciousness of research subjects makes data collection harder. Respondents might question the researcher's *bona fide*, especially if they are used to be being investigated by the authorities (e.g., drug users, sex workers).⁶⁴⁸ They might be more reluctant to speak their minds as well, for fear of being castigated. Furthermore, they tend to be very protective of their personal identities. In the manosphere, these things proved true. Secondly, researchers studying inimical communities also need to protect themselves from potential harm. This puts them in a double bind. Either they decide to be open about their identity and research objectives, as usually required by institutional guidelines, thus running risks of unwarranted attention, hostility, and intrusion in their private lives. Or they can choose to conceal this information, at the cost of playing into the participants' suspiciousness.⁶⁴⁹ Here again, these dynamics limit the quality and scope of data collection, as researchers have to be constantly mindful of where they go, how they present themselves, to whom, etc.

Research ethics frameworks traditionally focus on participants' welfare and tend to ignore the researcher's wellbeing and safety, an issue that two manosphere researchers labeled "a loophole in current ethics guidelines."⁶⁵⁰ I experienced this firsthand, and realized that no one at my universities was specifically qualified to assist researchers with the cybersecurity, privacy and safety issues that came with studying hostile groups.⁶⁵¹ In spite of these challenges, I managed to conduct a questionnaire survey which gathered 148 responses from manospherians, shedding light on their educational levels, scientific literacy, and scientific knowledge acquisition practices. Section B details this questionnaire study, from survey design to security challenges and data analysis.

⁶⁴⁷ For a review of existing survey and interview research, see the manosphere literature review, Chap. I, C, 85.

⁶⁴⁸ See Teela Sanders, "Researching the Online Sex Work Community," in *Virtual Methods: Issues in Social Research* on the Internet, ed. Christine Hine (Oxford, New York: Berg Publishers, 2005), 67–80.

⁶⁴⁹ For an example of a manosphere researcher's reflecting on dealing with these challenges, see Sugiura, "Engaging with Incels."

⁶⁵⁰ Anita Lavorgna and Lisa Sugiura, "Direct Contacts with Potential Interviewees When Carrying out Online Ethnography on Controversial and Polarized Topics: A Loophole in Ethics Guidelines," *International Journal of Social Research Methodology* 25, no. 2 (2020): 261–67, <u>https://doi.org/10.1080/13645579.2020.1855719</u>.

⁶⁵¹ I thus had to navigate between my research supervisors, the Data Protection team, the cybersecurity department, the IT services and the Social Media and Communications team to piece together appropriately protective and institutionally approved research protocols. Some other states and universities offer more help: a fellow manosphere researcher from the University of California, Los Angeles, told me about the protective support surrounding their research, with assistance from the campus police's Threat Management Unit, and legal protection in the form of the state's Safe at Home program 6208.1, see respectively UCLA Police Department, https://web.archive.org/web/20221015044808/https://police.ucla.edu/about-ucpd/operations-bureau/threatmanagement-unit; 2021 California Government Code,

https://web.archive.org/web/20230523163025/https://law.justia.com/codes/california/2021/code-gov/title-1/division-7/chapter-3-1/section-6208-1/, both archived May 23, 2023.

In section C, I detail all the additional sources of data and targeted research designs which were used to complement the main two studies presented above. These include the constitution of a scientific textbook corpus to compare lexicons with the manosphere discourse corpus, as well as qualitative interviews conducted with evolutionary scientists and manosphere figures. This dissertation hinges on the use of mixed methods: qualitative discourse analysis, quantitative linguistics, quantitative survey analysis, qualitative interviews. By triangulating these original data with analyses and data from the existing literature, the goal was to provide rich and detailed empirical research, whose results are presented in Chapters IV to VII.

A. QUALITATIVE MANOSPHERE DISCOURSE CORPUS STUDY

A.1. Study Framework

1.a. General Aim

To study the role of science in the manosphere, online discourse was an obvious starting point. Firstly, because it is easily accessible, but most importantly because producing discourse is the principal activity of most manosphere communities. Indeed, with the exception of Men's Rights Activists, they rarely organize events, create organizations, or even meet in person. For most manospherians, participating in a community primarily consists of online consumption and production of discourse. Stated otherwise, discursive phenomena call for discursive analysis. As such, a broad and ambitious qualitative manosphere discourse study is the cornerstone of the present dissertation.

The general aim of the study is to examine the narratives originating from the manosphere, to identify recurring issues and themes, as well as the underlying values and biases, with particular attention given to discourse on sex differences, science, and evolution. The selection of material (henceforth referred to as the "corpus") is large enough to include variation, outliers, and exemplify differences between communities. It also includes different websites and media to avoid platform biases and paint a comprehensive picture of manosphere ideologies. To that effect, it also contains material from currently inactive but formerly influential websites and platforms. In short, the corpus was designed to provide a faithful representation of the manosphere over the last two decades.

1.b. Ethics and Data Protection

When designing this study, it appeared that different norms (legal, institutional, ethical) conflicted with feasibility, and that traditional sociological guidelines were not always applicable to Internet research.⁶⁵² Inspired by reports from the Association of Internet Researchers (AoIR), I followed a case-by-case ethical decision-making process, informed by legal and institutional injunctions, academic guidelines, and peer-practice.⁶⁵³ A detailed ethics protocol was submitted and granted ethics approval by the Universities of Kent and Lille, along with the University of Lille's Data Protection Officer.⁶⁵⁴ This corpus study raised three major sets of concerns: informed consent, data protection, and potentially harmful content. Major decisions regarding those concerns are summarized below.⁶⁵⁵

Informed Consent

⁶⁵² To help other researchers navigate these gray areas, I published a journal article on the ethical dilemmas and choices encountered during this study's design, Louis Bachaud, "Navigating Grey Areas: Ethical Issues in Studying Online Antifeminist Communities," *Revue Française Des Sciences de l'information et de La Communication*, no. 25 (2022), https://doi.org/10.4000/rfsic.13374.

⁶⁵³ Aline Shakti Franzke et al., "Internet Research: Ethical Guidelines 3.0" (The Association of Internet Researchers, 2020).

⁶⁵⁴ Ethics ID respectively 8-PGR-20/21 (Kent) and QSMDC 2021-478-S91 (Lille).

⁶⁵⁵ To see the full ethics protocol with the rationale behind each decision, see Appendix 3, 468.

Considering the amount of Internet users whose posts and comments are included in the corpus, seeking informed consent from each of them was considered impractical. In fact, this is a practice that, although still held to be the "cornerstone of research ethics,"⁶⁵⁶ is falling out of favor in Internet research, particularly of the Big Data variety. Moreover, given the potential hostility of manospherians, asking for informed consent might have severely harmed the feasibility of the study. Finally, a lot of the platforms included in the corpus are now inactive, and it would have been impossible to contact users of these defunct websites. For all these reasons, informed consent was not sought for analyzing online manosphere discourse. Yet, analyzing online material without consent does not mean that privacy should not be protected. On the contrary, it makes privacy and data protection even more salient.

Data Protection

Although all the content included in the corpus was publicly accessible, a distinction was drawn on a case-by-case basis between two types of content, based on reasonable expectations of privacy.⁶⁵⁷ On the one hand, pseudonymous manospherians posting on forums or Reddit presumably do not expect their content to be widely discussed and cited. Their data is thus protected accordingly. When cited, no hyperlinks towards the original webpage are provided, nor is any identifiable information reproduced (such as location, name, or pictures). Throughout the dissertation, such citations are only referenced by year and manosphere group, e.g. (incel, 2017). On the other hand, public manosphere figures such as bloggers, YouTubers, and writers do expect their content to be shared and cited, and full citations are therefore provided.

Harmful Content

Internet content can be potentially harmful or shocking, for instance the corpus contains instances of hateful language (sexist, antisemitic, homophobic) or pornography. The following measures were therefore put in place prior to data collection:

"Any tangible indication of criminal activity, or intent thereof, will be immediately reported to competent authorities. Suicidal declarations will not be reported.

All content will be screened before retrieving to ensure that no illegal material such as child pornography be possessed at any point.

A disclaimer about potentially shocking, pornographic, or hateful content will be added at the beginning of the PhD dissertation, warning about the content of the dissertation, and about the hyperlinks contained in it.

No pornographic content will be reproduced in the PhD dissertation, although it may be linked to.

Quotations will be unambiguously signaled."658

⁶⁵⁶ European Commission, *Ethics and Data Protection*, 2018, 10.

⁶⁵⁷ Ibid., "It is not enough that the data be accessible; they must have been made public to the extent that the data subjects do not have any **reasonable expectations of privacy**," 13.

⁶⁵⁸ Reproduced from the ethics protocol, see Appendix 3, 468.

After describing the general aims and ethics of the corpus study, it is time to address corpus constitution.

A.2. Constituting a Manosphere Discourse Corpus

2.a. Why Form a Bounded Corpus?

It would be possible to conduct a qualitative study without a clearly bounded corpus. This is in fact a widespread practice in qualitative research.⁶⁵⁹ It would also entail great flexibility. However, defining a bounded corpus has many advantages. First and foremost is transparency. Some qualitative Internet studies do not specify the platforms or websites under study.⁶⁶⁰ This is regrettable, for a list of studied websites would be of great interest to other researchers and to knowledgeable readers.⁶⁶¹ Indeed, by exactly specifying which sources were analyzed, researchers enable readers to critically assess those sources. Similarly, the reasoning behind material selection should be made transparent too, to allow criticism and reproducibility.

Secondly, constituting a corpus is in itself a valuable contribution to manosphere research. Indeed, this entails gathering content that is dispersed over the web, and even doing archive work on defunct or suspended websites. A corpus established on precise and transparent principles could thus prove useful to other researchers.⁶⁶² A last advantage of constituting a bounded corpus is peace of mind. Indeed, once the corpus was constituted and the data collected, I could serenely turn towards analysis. Otherwise, there would always be pressure to browse more, to constantly look for additional material. Especially in the case of Internet research, where the amount of available material grows every day, far exceeding human reading capacities, bounding ensures feasibility and realistic expectations.

2.b. Inclusion Criteria and Corpus Size

Inclusion Criteria

The goal of this corpus analysis is to study manosphere ideology firsthand. The corpus should therefore be composed exclusively of primary manosphere sources. Yet, identifying primary sources is harder than it looks. Indeed, manospherians sometimes link to articles in

⁶⁵⁹ So widespread is this practice that most of the sociological and historical monographs cited in Chapter II above fit this description, i.e., Londa Schiebinger, *Nature's Body*; Kimberly Hamlin, *From Eve to Evolution*; Carl Degler, *In Search of Human Nature*.

⁶⁶⁰ Sometimes, the website selection process is briefly described, but ends with a frustrating absence of listed websites, e.g.: "In the end, I closely examined approximately fifty different fathers' rights Web sites."; "Each Web site was examined for links to other fathers' rights Web sites, and those Web sites were searched for links to additional fathers' rights Web sites until all sites were exhausted," Dragiewicz, "Patriarchy Reasserted," 124; Leora Rosen, Molly Dragiewicz, and Jennifer Gibbs, "Fathers' Rights Groups: Demographic Correlates and Impact on Custody Policy," *Violence Against Women* 15, no. 5 (2009): 513–31, <u>https://doi.org/10.1177/1077801209331409</u>, 521.

⁶⁶¹ For example, Ribeiro et al.'s landmark study included a list of Reddit communities which greatly helped my exploration of the manosphere. This transparency was mutually beneficial, because I was able to spot some errors and omissions in the dataset, and to communicate them to the lead author. This happened while the paper was in pre-print however, and the published version does not link towards this list anymore. Ribeiro et al., "The Evolution of the Manosphere across the Web."

⁶⁶² In fact, the present corpus was already shared once with a team of US AI researchers, see Appendix 27, 555.

traditional media outlets, or on Alt-Right news websites. They repost content from popular books or works from pundits like Jordan Peterson. While those pundits and authors gravitate towards the manosphere and are very well-known to its members, they were excluded from the corpus.

Mixing different types of media and discourse is usual in qualitative research. For example, most historical studies rely on documents of different natures to make sense of a period or a person's life: speeches, letters, memoirs, laws, etc. As a consequence, no type of document was excluded *a priori* from the corpus. It thus contains tweets, reddit posts, blog posts, web articles, forum threads, YouTube videos, e-books, books, and online encyclopedia entries. Depending on their interest, comment sections were excluded or included. Similarly, the images contained in the documents were included if relevant to the analysis (memes, charts, illustrations), and excluded if not (such as commercial ads).

Corpus Size

To assess the quantity of this diverse material, and guarantee even distribution between groups, a single unit was necessary. Throughout the dissertation, this unit is simply called "pages." It represents book pages or PDF pages. Indeed, as online corpus material was downloaded and stored in PDF form, even comments or tweets could be amounted to a number of pages. As for video content, it was transcribed, allowing for conversion into pages.⁶⁶³ This unit is just a convention to ensure that equal time was roughly devoted to each part of the corpus and each manosphere community. It therefore cannot be used for quantitative analysis of the corpus.

To go beyond superficial understanding, and obtain a fine sense of periods, trends, and factions among each manosphere group, the corpus needed to be sizeable. However, it also needed to be read extensively over a reasonable period. I aimed at a six-month reading period, with fifteen hours of weekly reading. After estimating my average reading and note-taking time (30 pages/hour), I settled on a total corpus length of 9,000 pages.⁶⁶⁴

2.c. Corpus Constitution

The manosphere discourse corpus was divided into three sections: "Central Content" (70%), "Random Sample" (15%), and "Other Related Material" (15%).

Central Content (CC) - 70%

The use of the term "central" here is meant to designate the most influential and popular texts of the manosphere. It only makes sense when studying an ideology to start by analyzing its founding texts and chief thinkers, whether one agrees with them or not. This is customary in the humanities and social sciences.⁶⁶⁵ The benefits of this approach are twofold: first of all, one ensures that the ideology is given a fair treatment, by not singling out mediocre or illiterate contributions; secondly, studying central texts also means studying the texts that have the most social impact and

⁶⁶³ For details on the conversion of different types of documents to a single unit, see Appendix 6, 480.

 $^{^{664}}$ 30 pages x 15 hours x 20 weeks (with a basis of 12 vacation weeks per year) = 9,000 pages.

⁶⁶⁵ For example, when studying the history of Social Darwinism in the United States, historian Richard Hofstadter focuses on the academic heavyweights of the time: Spencer, Graham Sumner, and Lester Ward, rather than on secondary or tertiary renditions of their ideas, Hofstadter, *Social Darwinism in American Thought*.

enduring legacy—making discourse analysis more sociologically relevant. For these reasons, all the documents in this section were included in their entirety. For the same reasons too, the CC section of the corpus was made to represent the largest part of the corpus (70%), with the rest evenly divided between two additional sections.

To select central discourse, I did not want however to rely on arbitrary judgment. Fortunately, manospherians tend to curate their favorite texts and gather them in specific places. Texts from sections such as "Must-Read Content," "Most Popular," or "Top Posts" were ideal candidates for inclusion. I also relied on existing social scientific research and manosphere hyperlinking to identify popular content. Lastly, some platforms display quantitative metrics, or "platform signals," which clearly indicate the most influential content, e.g., the number of views on a YouTube video, or of upvotes on a Reddit post.⁶⁶⁶ All the selected documents in the CC section and the rationale behind their inclusion are detailed in Appendix 8 (page 488) and summarized in Appendix 9 (page 501). However, only focusing on central content could cause biased analysis. What if the popular ideologists in a movement took care to produce a carefully tailored and palatable discourse while the rank and file were more virulent? What if there were some discreet but significant trends that did not have any key speaker or writer? To ensure that the corpus was somewhat representative, a randomly sampled section was added.

Random Sample (RS) - 15%

The goal of this random sample is to have a picture of the base. Notorious ideologists and their writings are already present in the Central Content section of the corpus. The random sample should therefore primarily consist of texts written by lay community members. To achieve this, the sampling was conducted on websites where content is user-generated with no editing or selection for publication, i.e., forums and subreddits.⁶⁶⁷ Furthermore, content needed to be easily accessible, navigable, and countable. For each manosphere branch, random selection was conducted on the websites from the former CC selection that fit those criteria.⁶⁶⁸ The RS section was sampled over three years, with a random draw in 2021, another one in 2022, and a final one in 2023.⁶⁶⁹

Other Relevant Material (ORM) - 15%

This third section was filled with relevant material encountered in the course of browsing the manosphere. It mostly contains material mentioning science or related topics of interest. To constitute this section, things were not solely left to chance browsing, as keywords, tags, and search engines were extensively used on manosphere platforms (e.g., searching for "Darwinian" or "evolutionary"). For this section of the corpus only, targeted passages were allowed to be excerpted from their original source. Material from each manosphere branch was divided between those three sections as detailed in table 3.1 below.⁶⁷⁰

⁶⁶⁶ For an illustration of the relevance of platform signals in studying manosphere communities, see LaViolette and Hogan, "Using Platform Signals for Distinguishing Discourses."

⁶⁶⁷ There is, however, always some form of moderation.

⁶⁶⁸ Those sites are listed in Appendix 7, 481.

⁶⁶⁹ Technical explanations and details of the sampling procedure and schedule are provided in Appendix 7, 481.

⁶⁷⁰ For a complete summary of selected and sampled material, see Appendix 9, 501.

	Central Content	Random Sample	Other Related Material
Men's Rights Activists	1260	270	270
Pickup Artists	1260	270	270
The Red Pill	1260	270	270
MGTOW	1260	270	270
incels	1260	270	270

 Table 3.1: Manosphere Corpus Constitution (in number of pages +/- 5%)⁶⁷¹

Updating the Corpus

Things move quickly in the manosphere. This is well illustrated by Ribeiro et al., who show how the popularities of different manosphere communities can wax and wane in just a few years.⁶⁷² How to reconcile this with the decision to use a bounded corpus? Should it be updated periodically?

The CC section of the corpus was not updated. Indeed, it is composed of texts that have withstood the passage of time and have been recognized as key manosphere documents. The content of this section was thus fixed at the beginning of 2021. However, the randomly sampled material was selected over three years (2021-2023) to include more up-to-date manosphere content. Finally, the ORM section is by nature the most flexible of the three, remaining open to new documents for the whole duration of the research. Ultimately, the CC section might not feature the most recent discourse, but considerable attention was devoted to the 2020s in the other two sections, guaranteeing that no gross oversights or anachronisms occur. This offered a balance between the peace of mind and stability of having a pre-bounded corpus, and the adjustability of having none.

A.3. Corpus Analysis

In line with my empirical focus, qualitative analysis of the corpus was conducted by being open to the new themes and issues that came out of the data itself. Some pre-existing research avenues, on the other hand, proved to be dead-ends. For example, I initially thought that comparisons with the animal kingdom and evidence from animal behavior would be commonplace in the manosphere, which was not the case. To make analysis easier, information from each corpus document was extracted and summarized in a standardized template, as well as labeled with different "tags"—a form of thematic qualitative coding.⁶⁷³

Throughout Chapter IV to VII, I present qualitative analyses drawn from this manosphere discourse corpus. Unless stated otherwise, all arguments, examples, and manosphere citations found in those chapters come from this bounded and transparently defined selection of materials. It was also the main source of data for the overview of the manosphere found in Chapter I.

 $^{^{671}}$ Actual page numbers are within +/-5% of these figures. Indeed, it is highly unlikely that material length would exactly match the expected number of pages.

⁶⁷² Ribeiro et al., "The Evolution of the Manosphere across the Web."

⁶⁷³ This standardized template is reproduced in Appendix 10, 505.

A.4. Limitations

Reading and analyzing the discourse corpus made for a thorough understanding of manosphere communities, in all their historical and ideological breadth. In that regard, it achieved its stated purpose. However, this could have been done with a smaller corpus. The sheer size of the material selection (9,000 pages) made the whole process slow and inefficient. Qualitative researchers insist on the concept of "saturation," which they define as "that moment in research where no additional data can shed any additional light on the studied phenomenon."⁶⁷⁴ Saturation is felt when "new data collection appears as repetitive or fruitless *vis à vis* the relevant phenomenon."⁶⁷⁵ While this is saluted as a sign of comprehensive qualitative inquiry, in my case this saturation point was reached well before the end of corpus analysis. This made for a sort of "over-saturation" feeling. Put otherwise, after reading seven thousand pages of manosphere discourse, there was not much to be learned from the remaining two-thousand, nor were new theoretical avenues generated. To palliate the usual limitations of qualitative research, the corpus analysis was accompanied by a quantitative survey study.

B. QUANTITATIVE MANOSPHERE SURVEY STUDY

B.1. Study Framework

1.a. General Aim

Qualitative analysis of the manosphere discourse corpus yielded insights on several aspects of science understanding in the manosphere. It revealed the ideas and concepts that were particularly popular, as well as the underlying biases. It also provided a fine-grained understanding of those communities, and of the way scientific knowledge fit their narratives, values, and ideas. Yet, qualitative analysis cannot really determine the prevalence of those elements. In fact, a qualitative monograph on a specific aspect of a community can give the impression that the phenomenon is much more central to that community than it really is.⁶⁷⁶ For that reason, a quantitative survey study was designed, allowing to confirm (or contradict) the impressions drawn from the discourse analysis, and to estimate the prevalence of some beliefs and misconceptions.

Moreover, my research also aims at understanding the way knowledge circulates online. This cannot easily be revealed by discourse analysis. A better way to know where people get their knowledge from, and how they share it, is to ask them directly. As such, a survey proved an ideal method to study online circulation of science. Finally, survey research enabled comparison with other groups, or "counterparts."⁶⁷⁷ While my extensive qualitative discourse analysis was

⁶⁷⁴ Colette Baribeau and Chantal Royer, "L'entretien individuel en recherche qualitative : usages et modes de présentation dans la Revue des sciences de l'éducation," *Revue des sciences de l'éducation* 38, no. 1 (2012): 23–45, <u>https://doi.org/10.7202/1016748ar</u>, 33 (translation mine).

⁶⁷⁵ Pierre Paillé and Alex Mucchielli, *L'analyse qualitative en science humaines et sociales*, 4th ed. (Malakoff: Armand Colin, 2016), e-textbook version, 422, translation mine.

⁶⁷⁶ This is for example the case with Donna Zuckerberg's book on the use of the Greek and Roman Classics in the manosphere, which gives the impression that this is a core component of manosphere ideologies—which is not the case, Zuckerberg, *Not All Dead White Men*.

⁶⁷⁷ For more details on the counterparts used, see Chap. III, B, 156.

manosphere-centric, this survey was also administered on a group of US nationals recruited online, thus grounding the analysis in the broader cultural context.

1.b. Research Focuses

Focus 1: Scientific literacy. As mentioned above, an evident goal of my research is to assess scientific understanding, or literacy, in the manosphere (How knowledgeable are manospherians about life sciences and evolution? How well do they know the theories and concepts?) To answer this, the survey featured a 20-question multiple-choice science quiz.⁶⁷⁸

Focus 2: Biases and misconceptions. Widespread biases and misconceptions were apparent in the manosphere corpus analysis. In particular, overestimating the importance of sex differences, and the strength of genetic/biological determinism. By disseminating some false multiple-choice quiz answers, or "distractors," the prevalence of such misconceptions or "alternative conceptions" was measured.⁶⁷⁹ In addition, some common misconceptions about evolution and natural selection were tested for in the same manner.⁶⁸⁰

Focus 3: Circulation of science. What are people's favorite sources of scientific content? What online knowledge-sharing practices do manospherians engage in? Can different profiles of "science learners" be established?

1.c. Ethics, Data Protection, and Researcher Safety

The contents of the survey questionnaire itself did not pose any particular ethics problems.⁶⁸¹ This was mostly a science quiz, which did not dwell on sensitive topics, nor did it collect identifiable personal data. A clear consent form was included at the beginning of the survey, followed by a data protection notice, after the recommendation of the University of Kent's Data Protection team. Following standard practice, respondents were informed about the aim of the survey, and allowed to drop at any point. A project-specific email address was created to answer their potential concerns and questions.

Researcher safety was a major concern. Indeed, the survey was to be disseminated all over the manosphere, on dozens of platforms, servers, and websites. In total, it would be seen by tens—if not hundreds—of thousands of Internet users, some of them particularly hostile. Because of reports of cyber-harassment or hacking from other manosphere researchers, I was reluctant to widely disclose and broadcast my personal identity.⁶⁸² With the assistance of the University of

⁶⁷⁸ For complete survey materials, see Appendix 9, 501.

⁶⁷⁹ In their quiz measuring knowledge about natural selection, Anderson et al. seeded some false answers called "distractors," in order to measure the popularity of misguided beliefs, which they called "alternative conceptions." I adopted the same idea and terms. See Dianne Anderson, Kathleen Fisher, and Gregory Norman, "Development and Evaluation of the Conceptual Inventory of Natural Selection," *Journal of Research in Science Teaching* 39, no. 10 (2002): 952–78, <u>https://doi.org/10.1002/tea.10053</u>.

⁶⁸⁰ For the full list of distractors and alternative conceptions, see Appendix 14, 524.

⁶⁸¹ For a full-form version of the questionnaire, see Appendix 12, 507.

⁶⁸² A researcher studying the French manosphere had his personal online accounts hacked (personal communication). Manosphere researchers have also reported being subjected to cyberbullying, death and rape threats, and even intimidation using a dead animal body. See respectively Lucy Nicholas and Christine Agius, "#Notallmen, #Menenism,

Kent's Data Protection and Information Services teams, I thus decided to create a pseudonymous alias. Manosphere communities would be contacted through that alias, which had its own University IT account and email address. This account was only accessed through campus computers, to have no link with my personal devices.

Even though this type of participant deception is unusual, it was justified by security concerns. The consent form, data protection notice, and survey contained no deception, and the alias was used only to disseminate the link to the survey questionnaire. This was approved by the School of Anthropology and Conservation's Ethical Review Board, with one of the reviewers enthusiastically stating: "This is a well thought through project with significant planning to protect the researcher, and seemingly no threat to participants. A pioneering test for Kent and others on how to conduct such sensitive research online."⁶⁸³

Unfortunately, those preparations were not enough. Indeed, although the pseudonym was randomly generated, and although it did not match the name of any current or former University of Kent member, it closely resembled that of a professor at the University of Kent. When this professor received messages from manospherians, he asked for the study to be suspended. The use of the alias was discontinued, online traces were removed, and a new ethics protocol was submitted. This time, manosphere communities would be approached without an attached name or an alias. Such anonymity did make some potential respondents suspicious but prevented risks to other people. These changes were approved by the Ethical Review Board.⁶⁸⁴ After this regrettable accident, no similar issues arose.

B.2. Questionnaire Design

2.a. Sociodemographic Items

Manospherians are very suspicious of academia. As a rule, they keep their personal identity private, and would be very reluctant to answer questions that could lead to their potential identification. In order to assuage these suspicions, I decided to ask as few sociodemographic questions as possible. Although asking for income, ethnicity, or nationality would have provided richer data and helped identify potential confounding factors, manospherians would have presumably refused to answer those questions. Yet, it was necessary to screen participants to ensure that they participated in the manosphere. Distributing the survey solely on manosphere platforms was not enough to guarantee that. A self-identification question was therefore included:

Manospheres and Unsafe Spaces: Overt and Subtle Masculinism in Anti-'PC' Discourse," in *The Persistence of Global Masculinism: Discourse, Gender and Neo-Colonial Re-Articulations of Violence*, ed. Lucy Nicholas and Christine Agius (Cham: Springer International Publishing, 2018), 31–59, <u>https://doi.org/10.1007/978-3-319-68360-7_2</u>, 47; Jane, "Systemic Misogyny Exposed", 3; Mélissa Blais and Francis Dupuis-Déri, "Introduction à La Nouvelle Édition : Discours et Actions Masculinistes," in *Le Mouvement Masculiniste Au Québec : L'antiféminisme Démasqué*, ed. Mélissa Blais and Francis Dupuis-Déri (Montréal: Remue ménage, 2015), 11–42, 30.

⁶⁸³ University of Kent's School of Anthropology and Conservation Ethics Review Board Decision, Ethics ID 20221668424647171.

⁶⁸⁴ Submission number for the new ethics protocol, Ethics ID 20221671538022231.

- "Do you think of yourself as belonging to one of these communities?"⁶⁸⁵ (Group)

Additionally, I reviewed the literature on scientific literacy and acceptance of evolution. These studies document the effect of many variables (such as personality, religion, gender, age, education) on science literacy results. This allowed to identify potential confounds to measure in the study. The following sociodemographic items were included:

- "What is your sex?" (Sex)

In all the reviewed studies mentioning it, female sex/gender had a negative effect on scientific literacy (or knowledge of evolution).⁶⁸⁶ Even though respondents were expected to be overwhelmingly male, there are some women in the manosphere. Hence the inclusion of this standard survey item in the questionnaire. Since the manosphere is openly unsympathetic to feminism and gender self-identification, this variable was just expressed as a binary measure of "sex" rather than "gender."⁶⁸⁷

- "What is your age?" (Age)

Age is a standard sociodemographic variable in survey studies, which I anticipated respondents would not mind sharing, as it is does not allow personal identification. It has been shown to be negatively correlated with science literacy.⁶⁸⁸ Hence the inclusion of a question on age.

- "What is your level of education?" (Edu)

In studies measuring science literacy, respondents' level of education was unsurprisingly a strong predictor. The more educated tended to be more scientifically literate.

- "How many college/university science courses did you complete?" (CollSci)

Someone could have a PhD in philosophy or arts and not necessarily be more scientifically literate. As a consequence, John Miller's influential survey studies on scientific literacy include this additional item on the number of university science courses completed by respondents. This variable has unsurprisingly proved the strongest predictor of overall scientific literacy.⁶⁸⁹ Miller's question was consequently included in the questionnaire.

⁶⁸⁵ In addition to each of the five manosphere branches, an open-ended option allowed respondents to specify the group affiliation they favored. A "Pro-feminist men" option was also included to alleviate fears of this just being an antimanosphere "smear piece" or "false flag operation" (which some manospherians thought). See Appendix 12, 507, for full survey materials.

⁶⁸⁶ See literature review on scientific literacy above in Chap. II, B, 127.

⁶⁸⁷ However, for the counterpart group, it was expressed in terms of gender, including a non-binary open-ended "Other" option. For differences between the manosphere and counterpart questionnaires, see Appendix 13, 523.

⁶⁸⁸ E.g., Jon Miller, "Adult Science Learning in the Internet Era," 200.

⁶⁸⁹ Ibid.

Finally, religious fundamentalism has been shown to have a negative effect on science literacy,⁶⁹⁰ and is associated with creationist or intelligent design fallacies, as well as denial of evolution.⁶⁹¹ However, asking for people's religious beliefs is sensitive, and might scare off suspicious respondents. To identify fundamentalist creationist respondents, the following item was however included in the questionnaire:

- What do you think about the following statement: "Human beings, as we know them, developed from earlier species of animals." (EvoAccept)

Since 1985, Miller et al. have been measuring US acceptance of evolution with this item. Using a pre-established question allows for comparison with the population's base rate. In fact, Miller's studies have been asking this very question over the world for decades.⁶⁹² In the same spirit, most of the items in the science quiz were selected from pre-existing questionnaires. The following section details the choice of these items and questionnaires.

2.b. Science Quiz Items

The science quiz was composed of multiple-choice questions with four options, only one of which was correct. To mitigate the bias coming from question ordering (order-effect bias), those were shuffled randomly for each respondent. Similarly, the four options inside each multiple-choice question were randomly shuffled as well.⁶⁹³ I review the item-selection process, which focused on fields relevant to manosphere appropriations and understanding of science (evolutionary biology, evolutionary psychology, genetics, endocrinology, and general understanding of science).

Measuring general scientific literacy

Scientific literacy research on US adults has been dominated by the framework of Jon Miller. He and his team have been measuring "civic scientific literacy" (CSL) for decades, providing this definition: "a level of understanding of scientific terms and constructs sufficient to read a daily newspaper or magazine and to understand the essence of competing arguments on a given dispute or controversy."⁶⁹⁴ To Miller, a scientifically literate person's knowledge should be

⁶⁹⁰ Miller, "Adult Science Learning in the Internet Era."; Miller et al., "Public Acceptance of Evolution in the United States, 1985–2020."

⁶⁹¹ Hawley et al., "What's the Matter with Kansas?"

⁶⁹² Miller, Scott, and Okamoto, "Public Acceptance of Evolution."

⁶⁹³ When reflecting on this issue in 1975, a public opinion researcher wrote, "if order bias is not treated statistically, it should be controlled by randomizing its effect across respondents. This type of control requires that the researcher produces different questionnaires comprised of random orderings of relevant items (while maintaining proper overall sequence) for *each* respondent. The initial expense and clerical difficulties of producing many different questionnaires are obvious and are further compounded by the problems of coding the data from the completed questionnaires into a consistent (machine-interpretable) form." Nowadays, this can be achieved by simply selecting a few options on an online survey questionnaire tool. William Jr Perreault, "Controlling Order-Effect Bias," *The Public Opinion Quarterly* 39, no. 4 (1975): 544–51,545.

⁶⁹⁴ Jon Miller, "The Measurement of Civic Scientific Literacy," *Public Understanding of Science* 7 (1998): 203–23, <u>https://doi.org/10.1088/0963-6625/7/3/001</u>, 204.

"sufficient to read and comprehend the Tuesday science section of *The New York Times*."⁶⁹⁵ Since 1988, Miller et al. have been asking standard questions to large samples of respondents (EU, US, Japan, Canada), including general aspects of scientific inquiry (e.g., "provide a correct open-ended definition of an "experiment") and basic knowledge questions in astronomy, physics, and biology. These results are then computed in a literacy score between 0 and 100, with score over 70 qualifying as "scientifically literate."

Even though this measure of general scientific literacy is widely used, it did not fit my purpose. Only by computing all the answers into a score can it assess scientific literacy. Yet arbitrarily extracting just a few questions from the questionnaire would not make much sense: should I select the one on dinosaurs or planets? There exists however a more targeted test of generic scientific literacy, with a focus on scientific skills rather than specific knowledge: Gormally et al.'s TOSLS (Test of Scientific Literacy Skills).⁶⁹⁶ Designed specifically for undergraduates, it assesses skills such as "evaluate the validity of sources," "identify a valid scientific argument," or "understand elements of research design and how they impact scientific findings/conclusions." Five questions from the TOSLS questionnaire were therefore included in the questionnaire to evaluate the generic scientific reasoning of the manosphere (see Table 3.3 below for quiz composition).

Subject-specific scientific literacy

Education professionals in fields such as physics, biology or genetics often wonder: were courses efficient in raising students' knowledge of key concepts? Did they leave the course with fewer biases and misconceptions than when they entered? Each field thus has its own literature on the topic. Usually, the goal is to measure student's subject-specific literacy before and after a semester,⁶⁹⁷ or to assess which teaching method was the most effective.⁶⁹⁸ These assessments are usually carried out through questionnaires designed by scientists, quantitatively and/or qualitatively pre-tested on student populations and experts. Designers of the questionnaires then publish articles on the thought-process and statistical tests behind those. The goal being for other researchers to use their questionnaires, aiming at replication and comparability between studies. These subject-specific literacy questionnaires were therefore perfectly suited for my research purpose. They are highly legitimate, publicly accessible, and their design process is transparent. Moreover, since they have already been field-tested, there is available data on past test results. Finally, these tests tend to be designed for measuring undergraduate-level expected scientific

⁶⁹⁵ Jon Miller, "Public Understanding of, and Attitudes toward, Scientific Research: What We Know and What We Need to Know," *Public Understanding of Science* 13, no. 3 (2004): 273–94, <u>https://doi.org/10.1177/0963662504044908</u>, 274.

⁶⁹⁶ Cara Gormally, Peggy Brickman, and Mary Lutz, "Developing a Test of Scientific Literacy Skills (TOSLS): Measuring Undergraduates' Evaluation of Scientific Information and Arguments," *CBE—Life Sciences Education* 11 (2012): 364–77, <u>https://doi.org/10.1187/cbe.12-03-0026</u>.

 ⁶⁹⁷ Bethany Bowling et al., "Genetic Literacy of Undergraduate Non–Science Majors and the Impact of Introductory Biology and Genetics Courses," *Bioscience* 58 (2008): 654-660, <u>https://doi.org/10.1641/B580712</u>; Stephen Short and Patricia Hawley, "The Effects of Evolution Education: Examining Attitudes toward and Knowledge of Evolution in College Courses," *Evolutionary Psychology* 13, no. 1 (2015): 67–88, <u>https://doi.org/10.1177/147470491501300105</u>.
 ⁶⁹⁸ Ross Nehm and Leah Reilly, "Biology Majors' Knowledge and Misconceptions of Natural Selection," *BioScience*

^{57,} no. 3 (2007): 263–72, <u>https://doi.org/10.1641/B570311</u>.

literacy, which is the exact level that is relevant to my research. Indeed, high-school level literacy tests might be too easy to provide interesting data, while postgraduate-level literacy is an unreasonable expectation to have for laypeople online.⁶⁹⁹ I reviewed the literature for such standardized tests in four relevant fields:

Genetics

Since it is a well-established field, with a lot of public health and policy implications (GMOs, stem cell research, cloning), there has been a lot of research on the "genetic literacy" of the public. In fact, Miller's assessment of scientific literacy includes basic genetics question, such as defining DNA. He also designed an Index of Genetic Literacy (IGL) composed of ten True/False items such as "Ordinary tomatoes do not have genes, whereas genetically modified tomatoes do," or "All humans share exactly the same DNA."⁷⁰⁰ Other questionnaires for the general public have a similar difficulty level. For instance, one of them contains True/False Items such as "A gene is a disease."⁷⁰¹ Those were considered too easy for the needs of the study. However, there are several other available options.⁷⁰² Out of these, Bowling et al.'s Genetic Literacy Assessment Instrument was selected (GLAI).⁷⁰³ It has been thoroughly designed and tested, and "is based on the central concepts in genetics that an undergraduate non-science major should understand, as determined by a subcommittee of the American Society of Human Genetics."⁷⁰⁴

Evolutionary Biology

Even setting aside creationist denial of evolution, several misconceptions are very common regarding evolutionary theory. For example, people may believe that acquired characteristics are passed on to offspring,⁷⁰⁵ or that adaptation to the environment occurs during the lifespan of one organism (as in, a giraffe will grow its neck longer to reach for higher branches).⁷⁰⁶ Many such

⁶⁹⁹ For similar reasons, the textbooks included in the life sciences textbook corpus are undergraduate-level. See below, Chap. III, C, 160.

⁷⁰⁰ Jon Miller, Eugenie Scott, and Shinji Okamoto, "Public Acceptance of Evolution," *Science* 313 (2006): 765–66. Supporting Online Material, 2-3.

⁷⁰¹ Sara Fitzgerald-Butt et al., "Measuring Genetic Knowledge: A Brief Survey Instrument for Adolescents and Adults," *Clinical Genetics* 89, no. 2 (2016): 235–43, <u>https://doi.org/10.1111/cge.12618</u>.

⁷⁰² Rebecca Bruu Carver et al., "Young Adults' Belief in Genetic Determinism, and Knowledge and Attitudes towards Modern Genetics and Genomics: The PUGGS Questionnaire," *PLOS ONE* 12, no. 1 (2017): e0169808, <u>https://doi.org/10.1371/journal.pone.0169808</u>; Robert Chapman et al., "Genetic Literacy And Attitudes Survey (Iglas): International Population-Wide Assessment Instrument," *The European Proceedings of Social & Behavioural Sciences EpSBS* 33, n°6 (2017): 45–66, <u>https://doi.org/10.15405/epsbs.2017.12.6</u>; Bethany Vice Bowling et al., "Development and Evaluation of a Genetics Literacy Assessment Instrument for Undergraduates," *Genetics* 178, no. 1 (2008): 15– 22, <u>https://doi.org/10.1534/genetics.107.079533</u>.

⁷⁰³ Bowling et al., "Development and Evaluation of a Genetics Literacy Assessment Instrument for Undergraduates." A full copy of the questionnaire was kindly provided to me by the authors.

⁷⁰⁴ Bowling et al., "Genetic Literacy of Undergraduate Non–Science Majors and the Impact of Introductory Biology and Genetics Courses," 655.

⁷⁰⁵ This belief is called Lamarckism, after 18th century French naturalist Jean-Baptiste Lamarck.

⁷⁰⁶ Anderson et al., "Development and Evaluation of the Conceptual Inventory of Natural Selection."

misconceptions have been documented in samples of undergraduate students,⁷⁰⁷ biology majors,⁷⁰⁸ graduate students,⁷⁰⁹ and even high-school biology teachers.⁷¹⁰ This is a major concern in the field of biological education, which has spurred the design of many literacy scales, for example, the Biological Evolution Literacy (BEL) survey, composed of 23 Agree/Disagree statements,⁷¹¹ or the Evolution Attitudes and Literacy Survey (EALS), which has 106 such statements.⁷¹² I selected Anderson et al.'s Conceptual Inventory of Natural Selection (CINS). It is a thoroughly tested multiple-choice questionnaire which evaluates basic understanding of Darwinian natural selection.⁷¹³

Endocrinology

To my knowledge, there has been no attempt yet at designing standardized tests for assessing endocrinological literacy. In the absence of standardized tests, I drew on Nelson and Kriegfseld's textbook, *An Introduction to Behavioral Endocrinology*, which contains a test bank for instructors, including multiple-choice questions.⁷¹⁴

Evolutionary Psychology

To my knowledge, there exists no available standardized test to evaluate evolutionary psychology (EP) literacy. Since it is the core of the research, it was an opportunity to design my own EP questions. To make sure they were scientifically sound and understandable by the public, all ad hoc survey-items were tested on a non-academic layperson, an anthropology postgraduate student, and an EP professor. Their feedback allowed to tailor item wording in the clearest and most accurate manner. I did not possess the budget to further run a pilot study and allow for psychometric evaluation of those survey-items. In Anderson et al.'s CINS questions, some false options are called "distractors" because they illustrate a common misconception of natural selection. In keeping with the spirit of CINS design, and based on my qualitative analyses of the manosphere corpus, I seeded my survey-items with distractors, to carefully evaluate the prevalence of specific manosphere biases and misconceptions. Table 3.2 below summarizes the distractors included in the science quiz.

⁷⁰⁷ Beth Bishop and Charles Anderson, "Student Conceptions of Natural Selection and Its Role in Evolution," *Journal of Research in Science Teaching* 27, no. 5 (1990): 415–27, <u>https://doi.org/10.1002/tea.3660270503</u>.

⁷⁰⁸ Nehm and Reilly, "Biology Majors' Knowledge and Misconceptions of Natural Selection."

⁷⁰⁹ T. Ryan Gregory and Cameron Ellis, "Conceptions of Evolution among Science Graduate Students," *BioScience* 59, no. 9 (2009): 792–99, <u>https://doi.org/10.1525/bio.2009.59.9.11</u>.

⁷¹⁰ Tony Yates and Edmund Marek, "Is Oklahoma Really OK? A Regional Study of the Prevalence of Biological Evolution-Related Misconceptions Held by Introductory Biology Teachers," *Evolution: Education and Outreach* 6, no. 1 (2013): 1-20, <u>https://doi.org/10.1186/1936-6434-6-6</u>; Tony Yates and Edmund Marek, "Teachers Teaching Misconceptions: A Study of Factors Contributing to High School Biology Students' Acquisition of Biological Evolution-Related Misconceptions," *Evolution: Education and Outreach* 7, no. 1 (2014): 1-18, <u>https://doi.org/10.1186/s12052-014-0007-2</u>.

⁷¹¹ Ibid.

⁷¹² Hawley et al., "What's the Matter with Kansas?"

⁷¹³ Anderson, Fisher, and Norman, "Development and Evaluation of the Conceptual Inventory of Natural Selection."

⁷¹⁴ Randy Nelson and Lance Kriegsfeld, *An Introduction to Behavioral Endocrinology*, 6th ed. (New York and London: Oxford University Press, 2022).

Misconception	Definition	Example of Distractor	Amount
		r r	715
Extreme Environmentalism (the "Blank Slate")	The notion that human behavior can only be accounted for by environmental factors, holding the influence of innate factors to be negligible.	"Genetic differences among humans are so minor that essentially all variations observed among individuals are due to the environment in which they were reared."	3
Extreme Biological Determinism	The notion that human behavior can only be accounted for by innate factors, holding the influence of environmental factors to be negligible.	"Geneticists typically accept that most traits are determined heavily by genetics with the environment having little effect on complex traits."	3
Intentionalistic Fallacy	Failing to distinguish between the reasons why behavior evolved (ultimate), and the mechanisms that make animals behave this way (proximate).	"Men look for a healthy mate to bear children and propagate their genes, which is why they tend to select women with long hair, because hair length is correlated with health."	3
Sex Differentialism	Overestimating the innate differences between men and women.	"Testosterone is not found in women."	3
Group Selection	"The notion that adaptations evolved for the benefit of the group through the differential survival and reproduction of groups." ⁷¹⁶	"Over evolutionary history, human groups which developed a sexual division of labor prospered and those that did not failed, explaining how this would have spread to the whole population."	3
Naturalistic Fallacy	"The belief that what happens in nature is good," ⁷¹⁷ and consequently that scientific discoveries about human nature should dictate our choices.	"By highlighting the mate preferences that have been selected over time, evolutionary science can help people know what to look for in a mate."	2
Manosphere Sexism	The belief that women are more emotional/less rational, more self-interested/less empathetic,	"Since men were historically in charge of public affairs and women of domestic affairs, the	2

Table 3.2: Misconceptions and Distractors in the Science Quiz

⁷¹⁵ All the distractors in the science quiz are listed in Appendix 14, 524.

⁷¹⁶ Buss, *Evolutionary Psychology*, e-textbook version, 43. Group selection has mostly fallen out of fashion in evolutionary biology, but remains a recurrent misunderstanding of natural selection, for more details on group selection, see Chap. V, A, 235.

⁷¹⁷ Pinker, *The Blank Slate* (New York: Penguin Books, 2002), 150. For more on this misconception, see Chap. VI, B, 341.

	and overall less morally developed than men.	moral sense of women is less sensitive to moral norms and the common good."	
Male Disposability	The belief that male mammals are inherently less biologically valuable than females, given their lesser role in reproduction, and that evolution selected propensities for treating females as precious and males as disposable.	"Since men are male mammals, they have a lower reproductive value than women and are consequently perceived as more disposable across cultures."	1

The science quiz composition is summarized below in table 3.3:

Discipline	Number of Questions	Source
Scientific Literacy	5	TOSLS (5)
Genetics	3	GLAI (3)
Endocrinology	2	Textbook (1), Personal design (1)
Evolutionary Biology	5	CINS (3), Personal design (2)
Evolutionary Psychology	5	Personal design (5)

Table 3.3: Science Quiz Composition

2.c. Circulation of Science Items

In order to evaluate their favorite sources of scientific knowledge, respondents were asked to rate several types of sources and media on a 7-point Likert scale (Internet videos, books, research papers, etc.) For richer qualitative analysis, they were also offered to specify the scientific sources that they found particularly instructive and influential on an open-ended question. Finally, using a 7-point Likert scale, they were asked how frequently they engaged in the following activities: (1) "Publicly sharing scientific content on social media, forums, reddit," (2) "Citing scientific content and data to prove your point," (3) "Analysis and discussion of scientific theories and concepts."⁷¹⁸ These Likert-scale questions provide a wealth of data points for each individual respondent, which can then be linked with quiz answers and sociodemographic variables, in order to get a better understanding of these matters.⁷¹⁹

B.3. Disseminating the Questionnaire

3.a. Reaching out to the Manosphere

The survey was designed and administered with Qualtrics XM. The aim was to disseminate the questionnaire as widely as possible. Given the hostility of potential respondents, as well as the

⁷¹⁸ See full survey materials reproduced in Appendix 12, 507.

⁷¹⁹ To see analyses of this data, see Chapter VII, B, 357.

length of the questionnaire, a far-reaching communication campaign was necessary to gather a sufficient number of responses. Thanks to a long-term observation of the manosphere, I established a list of active online platforms and communities.⁷²⁰

Study-specific accounts were created on a wide array of platforms. For groups with moderation and administration teams, such as Discord servers, forums, or subreddits, I asked for an authorization to post the survey link.⁷²¹ Many refused or did not answer, but some accepted, and even showed remarkable interest in the study. This was done to avoid being perceived as intruding on manosphere spaces (which was a frequent reaction, even after receiving moderator authorization), and thus avoid having the post immediately taken down. A MGTOW forum moderator appreciated these efforts, "You've been very respectful and I'm sure that would carry over to the forums in how you conduct yourself and your survey. You're welcome to post, but that's no guarantee on how you'll be received!" (MGTOW, 2023)

On social media platforms such as Twitter, Gab, Parler, Pinterest, and Imgur, accounts were created to promote the questionnaire by using hashtags, or by tagging influential manosphere accounts.⁷²² Finally, for some unmoderated groups and platforms, the link to the survey was posted directly. Each time, the link was accompanied with a short descriptive text about the nature and aims of the survey.⁷²³ As an incentive for participating, estimates of the quiz scores were communicated to respondents upon completion, and the study was promoted accordingly: "Come Test Your Scientific Knowledge!"⁷²⁴

Data collection proved difficult, owing to the many refusals and hostile reactions of targeted platforms and communities. The lack of financial means also meant an inability to promote my posts on platforms with such a commercial model, such as Twitter or Pinterest. Finally, I was unable to reach the wide audience of Facebook and Instagram, which do not authorize such anonymous accounts to be created. Overall, 148 complete answers to the questionnaire were collected over a period of eight months, from November 2022 to July 2023.

3.b. Engaging with the Manosphere

Once the link to the survey was posted on manosphere platforms, a new question arose. Should I then leave the platform, or stay and engage with comments and reactions? On Reddit, and more generally on social media, posts get featured more prominently if they are active, and garner many comments and reactions. Hence the decision to interact with manospherians, who were mostly critical of the project.

⁷²⁰ For a list of websites and platforms where the survey was distributed, see Appendix 15, 527.

⁷²¹ For an example of the messages sent to community gatekeepers, see Appendix 17, 530.0

⁷²² For example the @EvoStudyKent Twitter account, <u>https://web.archive.org/web/20230404130158/https://twitter.com/EvoStudyKent;</u> see also Pinterest, <u>https://web.archive.org/web/20230404153748/https://www.pinterest.co.uk/pin/993606736517337565/</u>, both archived April 4, 2023. All promotional accounts are listed in Appendix 15, 527.

⁷²³ For an example of these promotional texts, see Appendix 16, 529.

⁷²⁴ Disclosing the exact score on the quiz would threaten to reveal the full questionnaire answers if a respondent found all the correct ones. Respondents were consequently only given their score range. See full survey materials on Appendix 12, 507.

I decided to systematically address the concerns expressed in comments. A lot of those hinged on security (some thought this was a police operation, or an attempt to collect their IP addresses and personal data), and on the purposes of the study. When anonymously interacting with manospherians, I insisted on being polite, respectful, and truthful. This alleviated some concerns, while showing other people viewing the post that this was a serious study conducted in a spirit of good faith and transparency. After trying to engage with some of the most far-fetched and hateful comments to no avail, those were however ignored.⁷²⁵

3.c. Counterpart Groups

A manosphere-only survey study would not allow for generalization. For some questions, such as age or acceptance of evolution, the base rate of the population is known, allowing for comparison. However, for other questions, in particular the ones specifically designed for the study, there is no such possibility. Hence the necessity to administer the survey on other control groups of sorts. However, the term "control group," coming from the experimental sciences, implies that other factors than the one under study (here, participation in the manosphere) are held constant, which is impossible to meet in a complex social setting. Mamié et al. recognize this in their comparison of manosphere communities with generic Reddit communities: "we avoid referring to those comparison groups as 'controls,' due to the term's causal nature, which does not hold in the observational setting we study," they write.⁷²⁶ They use the term "counterparts" instead, arguing that "counterparts provide a sanity check on the effect sizes observed across different communities."⁷²⁷ I henceforth follow their terminology. By "counterpart," I refer to non-manosphere respondents who took the same survey as the manospherians to allow for comparison.

The counterpart was a group of US respondents (n=151). This group was recruited using the platform Prolific, which is specifically designed to assist survey researchers find paid research participants and gather quality data.⁷²⁸ The sample was required to be evenly distributed between male and female participants, and composed of US nationals, with a minimum response approval rate of 95% on the platform.⁷²⁹ It opened on March 27, 2023, and closed on March 29, 2023. I intended to have a second counterpart group composed of evolutionary behavioral sciences undergraduate students from the University of California, Santa Barbara (UCSB), one of the leading universities in evolutionary psychology. This was done in collaboration with EP professors at UCSB, which kindly assured the distribution of the questionnaire to their students, and the ethics

⁷²⁵ For an example of online conversations about the study with manospherians, see Appendix 18, 531.

⁷²⁶ Mamié et al., "Are Anti-Feminist Communities Gateways to the Far Right?," 142.

⁷²⁷ Ibid.

⁷²⁸ For presentation of Prolific, see Stefan Palan and Christian Schitter, "Prolific.Ac—A Subject Pool for Online Journal of Behavioral and Experimental Experiments." Finance 17 (2018): 22 - 27. https://doi.org/10.1016/j.jbef.2017.12.004. For quality assays of the data gathered on the platform, see Eyal Peer et al., "Data Quality of Platforms and Panels for Online Behavioral Research," Behavior Research Methods 54, no. 4 (2022): 1643-62, https://doi.org/10.3758/s13428-021-01694-3; Leib Litman et al., "Reply to MTurk, Prolific or Panels?" Choosing the Right Audience for Online Research," SSRN Scholarly Paper (Rochester, NY, January 28, 2021), https://doi.org/10.2139/ssrn.3775075; Benjamin Douglas, Patrick Ewell, and Markus Brauer, "Data Quality in Online Human-Subjects Research: Comparisons between MTurk, Prolific, CloudResearch, Qualtrics, and SONA," PLoS ONE 18, no. 3 (2023), <u>https://doi.org/10.1371/journal.pone.0279720</u>.

⁷²⁹ This is a standard pre-screening criterion to ensure better data quality, see Peer et al., "Data Quality of Platforms and Panels for Online Behavioral Research."

approval by their university.⁷³⁰ However, even after opening up survey distribution to other US universities, I was not able to collect sufficient number of responses for data analysis, and this part of the study was therefore abandoned.

Those two counterpart survey studies were approved by the University of Kent's School of Anthropology and Conservation's Ethical Review Board.⁷³¹ Each time, the questionnaire was slightly altered to fit the group under study, and to adapt to the specific needs of the data collection context.⁷³² Yet, none of these modifications concerned the science quiz questions. They did not harm the validity of comparisons between groups.

B.4. Data Analysis

4.a. Data Cleaning

In total, 417 people answered the manosphere survey on Qualtrics. However, most of these answers had to be discarded. Firstly, I needed to be certain that respondents actually identified as manospherians. Respondents who did not self-identify with one of the five manosphere branches were dismissed, unless they provided an answer to the open-ended self-identification question. On a case-by-case basis, respondents on the open-ended question were either re-categorized as belonging to the manosphere—including a non-branch-specific "general manosphere" category— or dismissed.⁷³³ Respondents whose age was under 18 years old were dismissed, as indicated in the survey's consent form. Lastly, this was a long questionnaire, which many respondents started but did not finish. Therefore, only respondents who answered at least 75% of the 20 science quiz items were retained. This arbitrary cutoff was selected to allow for averaging and comparing scores, which would have been difficult with respondents who only provided three answers. After these filters were applied, there remained 148 sets of manospherians' answers ready for analysis.⁷³⁴

On Prolific, following the platform's rules, respondents who completed the questionnaire too rapidly or failed the attention checks were dismissed and not paid.⁷³⁵ This was the case for one respondent. Otherwise, all respondents completed the entire survey and fit the selection criteria or "filters" already set by the platform (i.e., US national, over 18 years-old, mixed gender sample).

4.b. Missing Values

Respondents were given the option to skip answers in the survey, so as to let them choose what personal information to disclose. As a result, there are missing values in the manosphere survey responses. For example, six manospherians did not specify their age, and three did not specify their sex. When presenting descriptive statistics, respondents with missing values on the relevant variables are removed, which explains why sample sizes might differ between tables and

⁷³⁰ Many thanks to Dr Daniel Conroy-Beam at UCSB for his enthusiastic support and assistance. Survey distribution was approved by UCSB's Internal Review Board (protocol n°: 13-23-0192).

⁷³¹ Ethics ID: 20231677250257264.

 ⁷³² For example, the question asking manospherians their community-affiliation did not make sense with other groups.
 For a summary and justification of those slight changes between versions of the questionnaire, see Appendix 13, 523.
 ⁷³³ This case-by-case re-categorization process is detailed in Appendix 20, 537.

⁷³⁴ Exhaustive details of exclusions from the survey are found in Appendix 32, p.591.

⁷³⁵ For more details on the attention checks included for Prolific respondents, see Appendix 13, 523.

figures. For statistical tests such as chi-square or Pearson correlation as well, responses with missing values on the relevant variables were removed when conducting the tests, which explains why sample sizes might vary. Finally, for the linear regression model, which cannot handle missing values, assumptions were made in order to conduct statistical analysis.⁷³⁶

4.c. Software

The survey data analysis was conducted with IBM SPSS Statistics, version 28.

B.5. Limitations

Manosphere respondents were recruited on a voluntary basis. This means the most inimical and mistrustful probably did not participate. Similarly, the survey was only posted on the presumably more moderate manosphere platforms whose administrators accepted, a case of gatekeeper bias. Finally, this was a long survey, and the people who took the time to complete it were supposedly more interested in and knowledgeable about science than average. However, random probability sampling is known to be impossible with hard-to-reach populations.⁷³⁷ As such, using some form of non-probability sampling is the norm when studying "hard-to-reach," "hidden," or "underrepresented" populations.⁷³⁸ In their review of these suboptimal sampling methods, Bonevski et al. write, "Selection bias and gatekeeper bias which limit validity of the sample are the primary limitations of these strategies."⁷³⁹ My survey study unsurprisingly features those biases, as do all manosphere survey studies. This calls for a high level of caution when trying to generalize findings.

Similar selection and platform biases are also present in the counterpart. The US nationals' counterpart is only composed of Prolific members, which cannot be assumed to be representative of the general population.⁷⁴⁰ These limitations come from having limited financial means as a PhD student, as random probability sampling is a costly method reserved to polling institutes and established research teams. To avoid multiple submissions, I decided against offering cash incentives for manosphere respondents to participate. Prolific respondents, however, were as always financially compensated for their time, but the platform includes identity-checks to avoid multiple accounts and submissions. Handing out cash rewards to the best scorers or best scoring group on the quiz was likewise avoided to prevent cheating. In fact, respondents were explicitly asked to "**please refrain from consulting outside resources** to answer the quiz." Nonetheless,

⁷³⁷ E.g., "Random sampling of gay male, lesbian, and bisexual respondents has been hampered because the population is unknown. The absence of known population parameters makes impossible the reliable estimation of sample statistics," Robin Mathy et al., "Methodological Rigor with Internet Samples: New Ways to Reach Underrepresented Populations," *CyberPsychology & Behavior* 5, no. 3 (2002): 253–66, https://doi.org/10.1089/109493102760147259, 254.

⁷³⁶ Results of this linear regression model are presented below, Chap. IV, A, 171-172. For complete breakdown of the assumptions and results from the linear regression, see Appendix 31, 590.

 ⁷³⁸ For a review of these methods, see Billie Bonevski et al., "Reaching the Hard-to-Reach: A Systematic Review of Strategies for Improving Health and Medical Research with Socially Disadvantaged Groups," *BMC Medical Research Methodology* 14, no. 42 (2014): 1–29, <u>https://doi.org/10.1186/1471-2288-14-42</u>.
 ⁷³⁹ Ibid. 4.

⁷⁴⁰ For example, as of writing in June 2023, self-declared Biden voters in the 2020 presidential election outnumber Trump voters more than four-to-one on Prolific, whereas the total difference in the popular vote was only of 4.5%.

this was a remotely-administered survey, and there is no way to guarantee absence of cheating, or purposefully disingenuous answers.

Overall, the study gathered fewer responses than desired, based on lack of means to promote the study on social media platforms, lack of control on the algorithms governing these private platforms, refusals of community gatekeepers, and mistrust of manosphere communities.⁷⁴¹ In spite of these limitations, this survey study was still disseminated on an unprecedented scale over the manosphere and social media, and is the first of its kind to encompass all manosphere communities. Description and analysis of survey results feature in each of the analysis chapters, IV to VII.

C. COMPLEMENTARY SOURCES OF DATA

C.1. Science Textbook Corpus

Part of the corpus analysis consists in comparing manosphere science to current scientific knowledge. This entailed lexical comparisons, for which I needed a reference body of scientific knowledge.⁷⁴² To that effect, a science textbook corpus was constituted. Among the possible options in science communication—popular science books, scientific journals, theses, textbooks, courses—textbooks were chosen. Indeed, they tend to contain widely accepted knowledge, while still briefly presenting the latest cutting-edge theories. Undergraduate textbooks represent the ideal compromise between scientific legitimacy and accessibility. Finally, textbooks do tend towards exhaustivity, covering most fields and topics in a discipline, which is not the case with more specialized material. Given the scientific topics that are the most common in the manosphere (human nature and instincts, sex differences, mating strategies and preferences, hormones, genetics and evolution), the following textbooks were selected after consulting with scientists researching and teaching in those fields:⁷⁴³

Discipline	Authors/Editors	Title	Publisher	Date	Edition
Evolutionary	David Buss	Evolutionary Psychology:	Routledge	2019	6 th
Psychology		The New Science of the			
		Mind			
Behavioral	Lisa Welling	The Oxford Handbook of	Oxford	2019	1 st
Endocrinology	Todd Shackelford	Evolutionary Psychology	University Press		
	(ed.)	and Behavioral			
		Neuroendocrinology			
Behavioral	Davies et al.	An Introduction to	Wiley-	2012	4 th
Ecology		Behavioural Ecology	Blackwell		

⁷⁴¹ The initial target goal was to gather at least a hundred responses from each manosphere group, which would have permitted statistically robust between-group comparison.

 ⁷⁴² It was used to assess the prevalence of some terms in scientific literature: "wired," "hardwired," "reptilian brain,"
 "lizard brain," "imperative," "alpha," and "hypergamy." Since all these terms proved inexistent or extremely rare, there was no need to compute more elaborate frequency statistics, see respectively pages 189; 189; 193; 194; 268; 308.
 ⁷⁴³ Thanks to Professor Darren Griffin, Dr Sarah Johns, and Dr Brandon Wheeler at the University of Kent, and to Professor Petroc Sumner from Cardiff University.

Evolutionary	Jobling et al.	Human Evolutionary	Garland Science	2014	2^{nd}
Genetics		Genetics			
Neuroscience	Allan Siegel	Essential Neuroscience	LWW Health	2018	4 th
	Hreday Sapru		Library		

Although this corpus was designed for lexical comparisons with the manosphere corpus, it was also used to acquire a solid base of scientific knowledge and provide a go-to reference on scientific matters. Those being recently published textbooks, it was not considered necessary to update the selection.

C.2. Qualitative Interviews

On May 12th, 2023, I interviewed Warren Farrell in his hometown of Mill Valley, California (as cited throughout Chapter I). The goal was to gain insight into the history of US men's movements, from the perspective of this lifelong activist and leader, then 79 years of age. Moreover, I also sought his opinion on the ubiquity of biological/evolutionary perspectives in current online men's groups, as well as his analysis of the impact of the Internet on men's movements and gender activism. Besides, we discussed the current positioning of the Men's Rights movement in the contemporary US political landscape. The interview lasted about an hour and a half. This was a semi-structured interview, i.e., where "the researcher has a specific topic to learn about, prepares a limited number of questions in advance, and plans to ask follow-up questions."⁷⁴⁴

On June 2nd, 2023, I interviewed Michael Mills at the Human Behavior and Evolution Society conference in Palm Springs, CA. This professor is one of the only evolutionary academics to have appeared several times on manosphere YouTube channels.⁷⁴⁵ As such, I was curious to know more about these appearances and his take on the manosphere. This was a semi-structured interview, which lasted approximately an hour.⁷⁴⁶

On June 15th, 2023, I interviewed Glenn Geher remotely. Like Michael Mills, he is one of the only evolutionary researchers to have appeared on manosphere YouTube channels.⁷⁴⁷ This semi-structured interview lasted for approximately fifteen minutes.

MGTOW Talks: Professor Mills on Evolutionary Psychology and Free Will," YouTube.com, July 14, 2015,https://web.archive.org/web/20240617160314/https://www.youtube.com/watch?v=vS83cewe2KM&t=26s&ab_channel=Thinking-Ape;CSM Archives, "The Evolutionary Psychology of Human Sex and Gender MGTOW,"YouTube.com,November23,https://web.archive.org/web/20240617163203/https://www.youtube.com/watch?v=PvPEJRR6q6Q&t=1020s&ab_cha

⁷⁴⁴ Herbert Rubin and Irene Rubin, *Qualitative Interviewing: The Art of Hearing Data*, 3rd ed. (Los Angeles; London; New Delhi; Singapore; Washington DC: SAGE Publications, 2012), 31. The questions prepared in advance for the interview are reproduced in Appendix 23, 546.

⁷⁴⁵ Appearing on three occasions: Thinking-Ape, "MGTOW Talks: Professor Mills On Aetherism And Feminist Academia," YouTube.com, August 4, 2015, https://web.archive.org/web/20210611151814/https://www.youtube.com/watch?v=hdm76drqzs0&t=315s;

nnel=CSMArchives, all links archived June 17, 2024. For discussion of these interventions, see Chap. VII, D, 369.

⁷⁴⁶ Dr Mills asked for themes and questions to be sent in advance in order to know what the interview would be about; this document is reproduced in Appendix 24, 547.

 ⁷⁴⁷ Glenn Geher in CSM Archives, "Evolutionary Psychology 2 0 with Glenn Geher PhD MGTOW," YouTube.com, November
 23, 2018,

On May 31st, 2024, I interviewed Macken Murphy remotely. This PhD student in evolutionary science is also a successful science popularizer on social media. As such, he has been confronted to manospherians online, and has even debated Red Pill and blackpill manosphere influencers live on YouTube. I wanted to have his feedback on this unique experience, as well as his broader analyses on manosphere science, and what researchers can do about it.⁷⁴⁸ This semi-structured interview lasted for approximately forty minutes.

Interviewees signed a consent form stating their agreement to be interviewed and recorded, and informing them about their rights.⁷⁴⁹ This was approved by the University of Kent's School of Anthropology and Conservation's Ethical Review Board.⁷⁵⁰

C.3. Survey of the Evolutionary Behavioral Sciences Community

In the Spring of 2023, as the first research findings were presented to the evolutionary behavioral sciences academic community, I carried out a quick survey on evolutionary scientists themselves. The goal was to assess their level of concern and awareness about potential sexist (and racist) misuses of evolutionary science. This was also an opportunity to evaluate their familiarity with different manosphere communities.⁷⁵¹ Organizers of three major evolutionary science conferences were contacted. The Evolution and Human Behaviour European Association (EHBEA) declined, whereas the two US-based academic societies accepted. The New England Evolutionary Psychology Society (NEEPS) kindly helped distribute the survey to their members by email.⁷⁵² The Human Behavior and Evolution Society (HBES) authorized me to distribute the survey at their 2023 Conference in Palm Springs, California.⁷⁵³ The survey remained open during the month of May 2023, and gathered 44 answers from academics in the evolutionary sciences.

The content of the questionnaire being fully anonymous, it did not pose any major data protection issue, nor did it raise ethical concerns. This study followed standard practice by including a clear consent form at the beginning, and was approved by the University of Kent's School of Anthropology and Conservation's Ethical Review Board.⁷⁵⁴ The questionnaire was designed and administered through Qualtrics XM. The six questions on familiarity with different manosphere communities were randomly shuffled to mitigate order-effect bias. Due to the small sample size, there was no data analysis *per se* conducted on the survey, which was just used for indicative descriptive statistics.⁷⁵⁵

https://web.archive.org/web/20240617163203/https://www.youtube.com/watch?v=PvPEJRR6q6Q&t=1020s&ab_ch annel=CSMArchives, archived June 17, 2024. For analysis of the interview, see Chap. VII, D, 373.

⁷⁴⁸ For description of his involvement, see Introduction, 25. For analysis of the interview, see Chap. VII, D, 374.

⁷⁴⁹ See signed consent forms in Appendix 25, 548. Glenn Geher sent me the filled consent form, but there was a technical error with the file which could not be opened. He has not answered my requests for a new consent form since. ⁷⁵⁰ Ethics ID: 20231678778764297 for the 2023 interviews, and Ethics ID: 20241716219903754 for Macken Murphy's interview.

⁷⁵¹ The full questionnaire is reproduced in Appendix 26, 551.

⁷⁵² Thanks to NEEPS president Dr Rebecca Burch for her assistance and enthusiasm about the project.

⁷⁵³ Thanks to HBES president, Dr David Schmitt, for authorizing this.

⁷⁵⁴ Ethics ID: 20231679068189311).

⁷⁵⁵ Such descriptive statistics can be found on pages 24, 88 and 383.

Conclusion

There is no single ubiquitous methodological framework in manosphere research. Moreover, this research object is uniquely challenging for several reasons: it is international, immaterial, ever-changing, and its sympathizers can be either suspicious or hostile. As a consequence, I had to navigate unforeseen challenges in data availability or cybersecurity. Nonetheless, by designing multiple *ad hoc* research designs, and triangulating data from these various sources, I was able to reach a thorough and nuanced understanding of the phenomenon. In Chapters IV to VII, I present analyses drawn from these studies.

CHAPTER IV: EVOLUTIONARY SCIENCES IN THE MANOSPHERE

How Scientifically Literate Online Communities Appropriate Evolutionary Reasoning in Distinctive Ways "Here at The Red Pill, we have an enduring respect for The Natural Order. We respect it because we are products of it. Far better than fighting an impossible battle against it, we explore its realities so that we can understand and fully embrace what we are. Men are nature's designated risk-takers, innovators, and pathfinders, so it falls upon each one of us to master our environments geographical, social, and sexual" (TRP, 2018).

Introduction

The citation above showcases key elements of "manosphere science." Firstly, the reference to nature illustrates that in the debates around nature and nurture, most manosphere communities have firmly embraced the side of "nature," as they routinely use concepts and theories from the evolutionary scientific literature to account for human behavior. Secondly, those communities pride themselves on using this science-based knowledge to rationally make sense of the world around them ("understand and fully embrace what we are"), and to uncover hidden truths ("explore its realities"). This is often linked to goals of mastery, as this alleged better knowledge of the world is meant to be applied to everyday life. Since this knowledge often revolves around differences between men and women, its practical application is targeted at the context of intergender social and sexual interactions. Yet, the normative elements in this citation, such as the mention of a natural "order," or the idea that nature would have "designated" men for certain tasks, reveal that appropriations of evolutionary science in the manosphere are far from value-neutral. This chapter therefore explores the role of science in the manosphere, with a particular focus on evolutionary science. It reveals both a widespread use of adaptationist reasoning and evolutionary concepts, and differences between scientific literature and its appropriations in the manosphere. Those differences are substantial enough that it warrants labeling this phenomenon as a distinctive form of "manosphere science" (although the term "science" here is not to be taken literally).

Section A focuses on the centrality of science in manosphere communities. It reviews survey findings on scientific literacy, education levels, and acceptance of Darwinian evolution: creationism is almost nonexistent, and manospherians as a whole have high levels of educational achievement and scientific literacy. Rationality, truth, and science are highly valued, as the manosphere depicts itself as a community of independent truth-seekers, in opposition to a feminism which is portrayed as anti-scientific. This leads to ambiguous attitudes towards science, which is revered, while attitudes towards the scientific establishment itself can be rather hostile. Some manospherians claim to be engaging in applied science, by using scientific findings and methods to become more successful in social and sexual interactions—and evolutionary psychology is often their discipline of choice.

Section B thus explores the general application of evolutionary psychological principles in the manosphere and the underlying vision of human nature thereof. Human instincts—or evolved psychological mechanisms—are often presented as inflexible and irresistible forces driving human behavior. However, this framing is disproportionately applied to women, who are seen as a uniformly instinct-driven group, with little to no interpersonal variability. As "students" of human behavior, male manospherians therefore construe themselves as better suited than women themselves to understand female behavior, which can in turn justify automatic dismissal of feminist arguments, problematic views of sexual consent, and even violent dehumanization of women.

Section C investigates the nature of the evolutionary explanations for behavior found in the manosphere. Indeed, those do not all come from the scientific literature: manospherians regularly use adaptationist reasoning to hypothesize about human behavior and make sense of the world around them. Those manosphere-made hypotheses should be epistemologically considered as "just-so stories," that is, as more or less plausible speculations lacking empirical tests. This is a unique phenomenon, whereby laypeople appropriate evolutionary scientific principles to produce their own body of knowledge. This phenomenon is systematically reviewed here, in order to better understand the underpinnings of manosphere science and the way established hypotheses from the scientific literature are seamlessly blended with Internet just-so stories.

A. SCIENCE IN THE MANOSPHERE: EDUCATION, LITERACY, AND ATTITUDES

A.1. The Prominent Role of Science in the Manosphere

1.a. A Highly Educated and Scientifically Literate Population

It is not uncommon for people in the manosphere to mention their level of higher education in the sciences. For instance, in a Red Pill Reddit post linking to an evolutionary psychology study, the poster starts by this disclaimer: "I am not an expert in biology, I am just an undergrad bio student. But I believe that I can read and interpret studies well enough with my current scientific literacy" (Reddit, 2020).⁷⁵⁶ Other Red Pillers then applauded his post and foregrounded their biological education, in this comment for example: "As a Bio undergrad myself, this is some good research […]" (Reddit, 2020). A third one added, "As an upperclass undergrad bio student, I also appreciate a quality posts backed by scientific literature. Thank you for this" (Reddit, 2020).

There is little sociodemographic data on manospherians, including for educational attainment. However, an internal survey to the r/mensrights subreddit conducted in 2013 (n=600) seemed to reveal relatively high levels of educational attainment among MRAs.⁷⁵⁷ My survey is the first to measure this across the whole manosphere. Results are compared below in table 4.1:

Highest Level of Education	Manospherians (n=147)	MRAs (n=600)
Reached		R/mensrights internal poll,
		2013
Some High School	2.7% (4)	11.82%
High School Diploma	12.2% (18)	12.16%
Some Undergraduate College	20.9% (31)	29.56%
Trade/Vocational Training	4.1% (6)	4.39%
Undergraduate Degree	29.7% (44)	27.20%
Some Postgraduate Education	7.4% (11)	N/A
Postgraduate Degree	22.3% (33)	14.86% ⁷⁵⁸

 Table 4.1: Educational Attainment of MRAs and Manospherians

It must be kept in mind that measuring educational attainment is not as straightforward as it seems. Indeed, respondents in their late teens and early twenties cannot be expected to have completed university degrees yet. For example, more than 44% of respondents on the r/MensRights survey were between 18 and 24 years old. This explains the high proportion of respondents on this

⁷⁵⁶ The study discussed is the following, Patrick Durkee et al., "Men's Bodily Attractiveness: Muscles as Fitness Indicators," *Evolutionary Psychology* 17, no. 2 (2019), <u>https://doi.org/10.1177/1474704919852918</u>.

⁷⁵⁷ R/mensrights, "RESULTS FROM THE R/MENSRIGHTS SURVEY," June 20, 2013, https://web.archive.org/web/20230602040341/https://www.reddit.com/r/MensRights/comments/1gp2u6/results_from the rmensrights survey/, archived June 2, 2023.

⁷⁵⁸ With 8.78% Master's degrees and 6.08% PhDs/MDs.

2013 survey who said they just had completed "some college"—a high proportion of whom have since presumably graduated. For this reason, the US Census Bureau and other institutions (such as the UNESCO Institute for Statistics) only measure educational attainment for people aged 25 and above.⁷⁵⁹ In order to compare my survey results to established baselines, figure 4.1, table 4.2, and table 4.3 only include respondents aged 25 and above from the manosphere survey and the US counterpart group.

Highest Level of Education	Manospherians	US Counterpart	US Population
Reached	(n=89)	Group (n=121)	2022^{760}
Aged 25 or more			
Did not Reach High School	N/A	N/A	4.7%
Some High School	1.1% (1)	0% (0)	5.7%
High School Diploma	3.4% (3)	9.9% (12)	26.1%
Some Undergraduate College	19.1% (17)	24.8% (30)	19.1%
Trade/Vocational Training	4.5% (4)	3.3% (4)	8.8%
Undergraduate Degree	34.8% (31)	40.5% (49)	21.6%
Some Postgraduate Education	7.9% (7)	6.6% (8)	N/A
Postgraduate Degree	29.2% (26)	14.9% (18)	14%

 Table 4.2: Educational Attainment of Manospherians and the US population

⁷⁵⁹ Although this assumption and practice might be questioned, since people increasingly complete college education throughout their lifespan, as shown by US Census statistician Kurt Bauman, "Over the Hill at 25? College Completion Higher Ages," United States Census Bureau, March 31. 2016, at https://web.archive.org/web/20240118141635/https://www.census.gov/newsroom/blogs/researchmatters/2016/03/over-the-hill-at-25-college-completion-at-higher-ages.html, archived January 18, 2024. 760 American Community Survey 1 Year-Estimates, the Census retrieved on US website,

https://web.archive.org/web/20240118145606/https://data.census.gov/table?q=DP02, archived January 18, 2024.

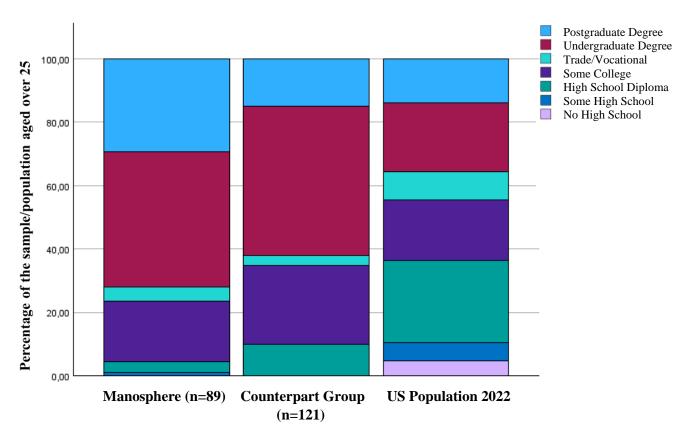


Figure 4.1: Educational Attainment of Manospherians and the US Population

With over 70% of manosphere respondents over 25 holding an undergraduate or postgraduate college degree, it is clear that manospherians have a much higher educational attainment than the US population as a whole.⁷⁶¹ Although educational attainment has been shown to be a predictor of scientific literacy, another metric has been identified as more relevant by Jon Miller and his colleagues, who showed that the number of college science courses taken by an individual was the strongest predictor of their scientific literacy.⁷⁶² For this reason, respondents were asked the following question: "**How many college/university science courses did you complete?** *Such as physics, mathematics, biology, chemistry, etc.*" Results are shown in table 4.3 below:

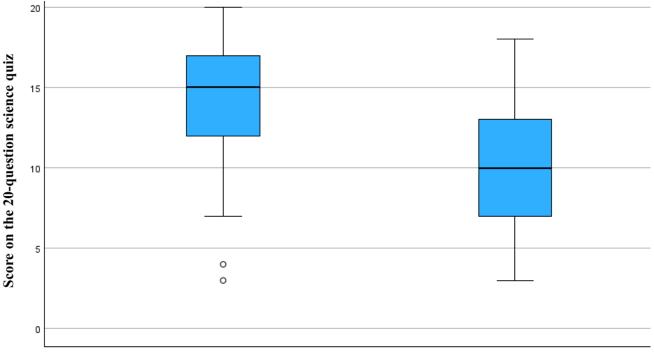
Table 4.3: Levels of Scientific Higher Education in the Manosphere

Number of College Science Courses	Manospherians (n=89) (Aged 25 and over)	Counterpart (n = 121) (Aged 25 and over)
None	12.4% (10)	16.5% (20)
1-3	22.5% (22)	42.1% (51)
4+	65.2% (57)	41.3% (50)

⁷⁶¹ However, a bias might be introduced by age here: the US Census includes more elderly people, who grew up at a time where college education was much less commonplace than in the past decades.

⁷⁶² Miller, "Public Understanding of, and Attitudes toward, Scientific Research," 289.

Here again, manospherians' answers are distributed to the top, with a majority of respondents having followed more than four science courses in college, likely indicating a science-related major.⁷⁶³ The results of the life sciences literacy quiz are also quite striking, with manospherians doing significantly better than the counterpart group.⁷⁶⁴





Manospherians (n=148)

US Counterpart Group (n=151)

Given the extremely high scores of manospherians, a potential bias must be mentioned here. The survey was advertised in a way that probably would have appealed more to people interested in science, as respondents were invited to come test their scientific knowledge.⁷⁶⁵ However, this can also be said for the US counterpart group. Moreover, the massive difference in score between manospherians (M = 14.07, SD = 3.30) and the US counterpart group (M = 10.13, SD = 3.2) is extremely significant, t(297) = 10.49, p < .001. A linear regression model was applied, with score on the science quiz as the dependent variable, and age, sex, level of education, scientific education,

⁷⁶³ Jon Miller designed this question in order to separate non-science majors from science majors. Indeed, the United States has the specificity of requiring all its college graduates to complete general education courses, including basic introductory science: "Those individuals with one to three courses reflect the students who took college-level science courses as a part of a general education requirement rather than as a part of a major or a supplement to a major," Ibid., 289. To compare the distributions of the manosphere and counterpart responses on this question, a nonparametric Mann-Whitney U Test was run, U = 6573, p < .003.

⁷⁶⁴ To read the box plot below: the central bold lines represent the median, and the upper and lower edges of the box the first and third quartiles. The whiskers go from the highest value to the lowest value. Statistically, values that are more than 1.5 times the interquartile range above or below the box are considered as outliers and excluded from the whiskers. Here, those are represented by two circles, i.e., manospherians who respectively scored 3/20 and 4/20 on the quiz.

⁷⁶⁵ Details on the survey dissemination and promotion can be found in Appendixes 15-17, 527-530.

acceptance of evolution, and a binary variable to differentiate between manospherians and the counterpart group as explanatory variables. Belonging to the manosphere turned out to be the strongest predictor by far. All other things being equal, a manospherian scored 4.14 points higher on the quiz than a non-manospherian (standard error = 0.45, p < .001, goodness of fit of model r^2 =0.37).⁷⁶⁶ Considering all these results, it seems safe to characterize manospherians as relatively highly educated, particularly in terms of scientific college education, and as highly scientifically literate.

1.b. Rationality, Truth, and Science

Manosphere discourse and identity often hinge on the values of rationality, truth, and science. While it is commonplace for activist, religious, or political groups to claim valuing truth and being truer than others, truth in the manosphere is not construed as revealed from above or coming from a charismatic guru or leader, but as the product of each man's independent and rational inquiries. This is the core of the "pill" metaphor. The idea of the red pill is to swallow an uncomfortable truth, to open one's eyes to a previously hidden reality and escape a world of lies and illusions, represented by the blue pill. As mentioned before, this trope comes from the *Matrix* movie, which is widely recognized as an interpretation of Plato's Allegory of the Cave.⁷⁶⁷ In the allegory, philosophers are on a quest for truth and escape the cave to confront reality, but this is a world of painfully blinding sunlight. Only by resisting this pain can a philosopher accustom their eyes and finally see the true forms of objects. This is an allegory for reason, representing higher levels of understanding the world removed from sensory illusions and subjectivity, which for Plato included natural sciences, mathematics, and deductive logic.⁷⁶⁸

Similarly, manospherians believe that the blackpill or red pill can be quite painful to swallow. Red Pill pundit Rollo Tomassi thus opens his book *The Rational Male* with this short quote: "Why do my eyes hurt?' - 'You've never used them before."⁷⁶⁹ The process of accepting uncomfortable truths is seen as both liberating and grueling. In fact, Tomassi's writings center around this idea of "unplugging from the Matrix." Just as Plato's philosopher left the cave, Tomassi aims at having men escape culturally imposed fantasies of romantic love, and embrace a more realistic and cynical worldview based on Game, power dynamics, social hierarchies, and ultimately grounded in what he calls "hard psychology" and "the hard science of biology."⁷⁷⁰ He realizes that most men will resist this at first, just like the prisoners of Plato's cave resist the philosopher who has been outside. After stages of denial or grief, however, he claims they can come to terms with the truth, although it leaves a "bitter taste": "The truth will set you free, but it doesn't make truth

⁷⁶⁶ For more details on the models and complete breakdown of the results, see Appendix 31, 590.

⁷⁶⁷ A rapid query for "Matrix Plato Cave" on Google Scholar yields dozen of academic results in literary and philosophical studies,

https://web.archive.org/web/20240315093330/https://scholar.google.com/scholar?start=0&q=Matrix+Plato+cave&hl =fr&as_sdt=0.5, archived March 15, 2024.

⁷⁶⁸ Plato, *The Republic* (Harmondsworth: Penguin Books, 1955), 278-286.

⁷⁶⁹ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), v.

⁷⁷⁰ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 247.

hurt any less, nor does it make truth any prettier [...]," he writes.⁷⁷¹ Incels have a similar relationship towards their blackpill worldview. Although they defend it, they also recognize it as an uncomfortable and distressing truth. In fact, among incels, a "blackpill" is also a name for a particularly distressing fact which reminds incels of the inescapability of their celibacy. Sometimes, these facts are even called "suicide fuel."⁷⁷²

However, in spite of these upsetting consequences of "unplugging," there is neither doubt nor regret expressed in the manosphere about swallowing the red pill or blackpill. Uncomfortable truths are preferred to comforting illusions. This is both because truth is seen as valuable in itself, but also, more pragmatically because only with a true understanding of the world can people rationally make the best decisions. This is a cornerstone of rationalistic thinking, and indeed the conclusion of Plato's allegory, where the philosopher-ruler is deemed to be the ablest political leader.⁷⁷³

In the manosphere, people pride themselves on being self-reliant thinkers in search for truth, ready to face even the most uncomfortable truths. As the foundational post of the Red Pill subreddit states: "Keeping your eyes closed and ignoring evidence and facts will not benefit you. Opening your eyes and acknowledging everything no matter how good, bad, or painful it may seem, is instrumental in making decisions that will lead to the happiest, most successful outcomes" (Red Pill, 2012). Here, truth is valued pragmatically because it enables rational decision-making. In the same text, the Red Pill founder advises his nascent community to act as everyday-life empiricists: "I think our focus should always remain on ensuring that we challenge the reality we perceive and discuss precisely and objectively whether or not our beliefs line up with the testable results we can replicate" (Red Pill, 2012). Manospherians themselves are urged here to embody and live the scientific method. Through constant questioning of assumptions, theorizing, as well as real-life observation and experimentation, it is thought that they will rationally advance towards truth. In that regard, they sometimes present themselves as no less than a community of amateur scientists. However, they do not admit this amateur status, for they see the scientific method as accessible to any rational person. As will be explored, this leads to an oscillation between reverence for academic research and rejection of mainstream science.

1.c. From Citing Scientific Research to Manosphere as Science

A striking feature of the manosphere is its apparent reverence for, and reliance on science. In fact, all manosphere communities often ground their claims in academic research. On Reddit, they devote entire subreddits to sharing scientific research congenial to their worldviews, each post

⁷⁷¹ Rollo Tomassi, "The Bitter Taste of the Red Pill," April 10, 2012, <u>https://web.archive.org/web/20230530142959/https://therationalmale.com/2012/04/10/the-bitter-taste-of-the-red-</u> <u>pill/</u>, archived May 30, 2023.

⁷⁷² For discussions of "suicide fuel" among incels, see Louis Bachaud and Sarah Johns, "The Use and Misuse of Evolutionary Psychology in Online Manosphere Communities: The Case of Female Mating Strategies," *Evolutionary Human Sciences* 5 (2023), <u>https://doi.org/10.1017/ehs.2023.22</u>; Louis Bachaud, "'I'll Always Be a Subhuman, I Just Lost the Genetic Lottery': Subaltern Identity-Building in Online Incel Discourse and Ideology," *Nuevo Mundo Mundos Nuevos*, 2024, <u>https://doi.org/10.4000/nuevomundo.95206</u>.

⁷⁷³ Plato, *The Republic*, 285-286.

linking to a science paper. This is for example the case of r/BlackPillScience, the only remaining incel community on Reddit, with 21,600 members.⁷⁷⁴ It has counterparts in other groups, such as r/redpillscience for The Red Pill and r/puascience for Pickup-Artists.⁷⁷⁵ The Men's Rights movement even keeps three such competing online subreddits: r/mensrightslinks, r/MensRightsScience, and r/Male_Studies.⁷⁷⁶ The latter self-describes as "explicitly pro-science," adding that "[a]ny comment which attacks the scientific method will get you a temporary ban from this sub. Any post attacking the scientific method will get you a permanent ban."777 Peer-review is recognized as a standard of quality, with the Black Pill Science subreddit rules stating that "[p]eerreviewed science is the primary aim of this subreddit." This massive use of scientific citations is also present in the online encyclopedias or "wikis" of the manosphere: Wiki4Men (MRAs) and incels.wiki (incels).⁷⁷⁸ The most impressive collection of academic citations in the manosphere is without doubt the "Scientific Blackpill" page on incels.wiki, which links to hundreds of papers.⁷⁷⁹ The discussions of the contributors to this collaborative wiki page are publicly available and they reveal the underlying respect for established scientific sources, as one of them tells the others that "sources should absolutely be kept to prestigious and reputable journals, articles, studies, etc."⁷⁸⁰ Grounding claims in scientific research is of course a common way to establish credibility, which is used by a variety of activist groups.⁷⁸¹ One of the incels.wiki contributors advocates quoting directly from scientific papers: "this allows us to clearly make the point we want in the scientists' own words. No one can say we have 'got it wrong," he explains.⁷⁸²

However, in the manosphere, there is a thin line between citing scientific research and claiming that manosphere ideology itself is science. For instance, Pickup-Artists selling seduction

⁷⁷⁴ As of writing, December 26, 2023. https://web.archive.org/web/20231226132018/https://www.reddit.com/r/BlackPillScience/?rdt=49152, archived December 26, 2023. Respectively, https://web.archive.org/web/20230208103915/https://www.reddit.com/r/puascience/, archived 775 February 8, 2023, and https://web.archive.org/web/20240108115804/https://www.reddit.com/r/redpillscience, archived January 8, 2024. https://web.archive.org/web/20230208104814/https:/www.reddit.com/r/mensrightslinks/. Respectively, https://web.archive.org/web/20230208104559/https://www.reddit.com/r/MensRightsScience/, and https://web.archive.org/web/20230208104704/https:/www.reddit.com/r/Male Studies/, all archived on February 2, 2023.

⁷⁷⁷ R/Male_Studies, <u>https://web.archive.org/web/20230208104704/https://www.reddit.com/r/Male_Studies/</u>, archived on February 2, 2023.

⁷⁷⁸ Wiki4men, <u>https://web.archive.org/web/20231113131006/https://wiki4men.com/wiki/Main_Page</u>, archived November 13, 2023; incels.wiki, <u>https://web.archive.org/web/20231226103558/https://incels.wiki/w/Main_Page</u>, archived December 26, 2023.

⁷⁷⁹Incels.wiki,"TheScientificBlackpill,"https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific Blackpill,archivedDecember 25,2023.

⁷⁸⁰ Incels.wiki, "The Scientific Blackpill," Discussion page, <u>https://web.archive.org/web/20231226145156/https://incels.wiki/w/Talk:Scientific_Blackpill</u>, archived December 26, 2023. For exploration of the scientific journals cited in the manosphere, see Chap. VII, A, 352.

⁷⁸¹ For example in activist groups whose activity is related to health or environmental issues, see Marta Conde, "From Activism to Science and from Science to Activism in Environmental-Health Justice Conflicts," *Journal of Science Communication* 14, no. 2 (2015): C04, <u>https://doi.org/10.22323/2.14020304</u>.

⁷⁸² Incels.wiki, "The Scientific Blackpill," Discussion page, <u>https://web.archive.org/web/20231226145156/https://incels.wiki/w/Talk:Scientific Blackpill</u>, archived December 26, 2023.

seminars and guides have a strong commercial incentive to present their methods as scientific. This is the case of Nick Savoy's 2007 seduction guide, *Magic Bullets*, which claims to encompass the result of years of cumulative and empirical inquiry by "dating science" experts, although he acknowledges that "dating science does not respect absolute laws like physical science does."⁷⁸³ PUA celebrity Heartiste concurs: "The art of seduction is not a new discovery, but it's transformation into a science that can be executed in the field to produce relatively reliable results is new."⁷⁸⁴ This is also exemplified by the use of the phrase "Scientific Blackpill" to frame incel ideology as science. And there is evidence that incels see it that way, as incel.wiki is often linked towards to justify claims in online discussions. "[B]lackpill is a scientific Blackpill wiki page (incel, 2020).

How do manosphere groups justify the need to have their own online encyclopedias, if they claim to only be reflecting established mainstream scientific knowledge? The Wiki4men homepage provides an answer—mainstream venues are not to be trusted anymore:

"Negative and inaccurate portrayals of men and boys have permeated mainstream media and online knowledge repositories such as Wikipedia, where the bias is particularly evident. Wikipedia editors routinely write negative commentaries about men and Wikipedia admins protect those commentaries while censoring counter-narratives that might show less biased, more accurate information. This practice is reinforced by feminist editing gangs who congregate in regular 'edit-a-thons' with the sole purpose of increasing feminist ideology within Wikipedia articles, and to censor male-positive discourse and research on men."⁷⁸⁵

The Men's Rights wiki is then presented as a home for "rational and evidence-based conclusions," rejecting the "gender bigotry" of feminism.⁷⁸⁶ Indeed, as will be seen, feminism is unanimously portrayed in the manosphere as an anti-science enterprise.

A.2. Feminism as "Anti-Science"

The manosphere portrays itself as a male, rational, and science-based space. By contrast, it depicts women and feminism as fundamentally irrational and hostile to science.

2.a. The Hard Truths of Science Opposed to Female Emotions

A common trope in the manosphere is to portray women as irrational or even childlike.⁷⁸⁷ In his canonical *Venusian Arts Handbook*, published in 2005, dating coach Mystery describes women as "Creatures of Sentiment,"⁷⁸⁸ which explains why he tells his readers to avoid rationally engaging with women: "Don't bother trying to convince her, argue with her, or engage her in any

⁷⁸³ Nick Savoy, *Magic Bullets*, Version 1.5 (Self-published, 2007), 7.

⁷⁸⁴ Heartiste, On Game (Self-published, 2019), 370.

⁷⁸⁵ Wiki4men, "Main Page," <u>https://web.archive.org/web/20240129085218/https://wiki4men.com/wiki/Main Page</u>, archived January 29, 2024.

⁷⁸⁶ Ibid.

⁷⁸⁷ This is discussed at length in Chap. VI, A, 303.

⁷⁸⁸ Mystery, *The Venusian Arts Handbook*, 2nd ed. (Self-published, 2007), 26.

other way on a logical level."⁷⁸⁹ Instead, aspiring Pickup-Artists (or "venusian artists" as he calls them) should rather focus on stimulating women's emotions. What matters the most to women's decision-making, he explains, is how they feel: "As long as it feels right, your romantic interest will invent her own reasons for what is happening."⁷⁹⁰ Although he recognizes that both men and women might act first on their feelings and rationalize their actions afterwards, he asserts that women are much more susceptible to doing this.

In the manosphere, this is echoed by a concept called the "rationalization hamster," which is widely shared between communities, in particular MGTOW, The Red Pill, and Pickup-Artists. The metaphor of a hamster spinning its wheel represents women's supposed tendency to behave and reason primarily based on their feelings, and to rationalize afterwards. Here is an excerpt from a MGTOW definition of rationalization hamster:

"A creature which lives in a woman's brain, and feverishly spins the hamster wheel which helps her rationalize and justify her thoughts, behavior and actions regardless of how counterintuitive they may be. No amount of logic or reason can stop the hamster from spinning."⁷⁹¹

According to this popular manosphere representation of female actions, women behave by seeking immediate emotional gratification. In the intellectual realm also, they are thought to just immediately dismiss ideas that make them feel bad, and embrace those that make them feel good. The rationalization hamster will then provide a veneer of logic on these intuitive emotional judgments. Since the scientific method theoretically proceeds by a dispassionate examining of hypotheses and scrutiny of facts, women are consequently frequently portrayed in the manosphere as incapable of engaging in such reasoning. This is captured in this parodic MGTOW summary for the rules of female behavior named "The Rules of Cupcake Club":

"**Rule 10:** Emotions trumps facts, logic, and science. It doesn't matter what the facts are. It doesn't matter what logic says. Even if they are uncouth enough to bring up science, it doesn't matter. What you *feel* trumps everything. If they argue otherwise, throw a huge shit fit and bring up every grievance you can think of" (MGTOW, 2014).

Thus, while men are depicted as truth-seekers, willing to accept even uncomfortable truths (i.e., "the red pill" or "blackpill") on their quest for knowledge, women are seen as congenitally incapable of logical reasoning. Feminist scholarship, i.e., gender studies or women's studies, is a primary target of criticism, accused of being no more than a pseudo-scientific justification enterprise for female behavior—no less than an institutionalized rationalization hamster.

2.b. Criticism of Gender Studies

As an openly feminist academic perspective, gender studies are a common target of criticism and mockery in the manosphere. The field is accused of being ideologically driven, and

⁷⁸⁹ Ibid.

⁷⁹⁰ Ibid.

⁷⁹¹Mgtow.com,"GlossaryofTerms,"https://web.archive.org/web/20210104143807/https://www.mgtow.com/glossary/,archived January 4, 2021. Thisglossary entry credits PUA blogger Heartiste aka Roissy for coining the phrase "rationalization hamster."

of disregarding facts in order to reach pre-settled conclusions. The "feminism" entry on incels.wiki illustrates this idea with a cartoon (see figure 4.3).

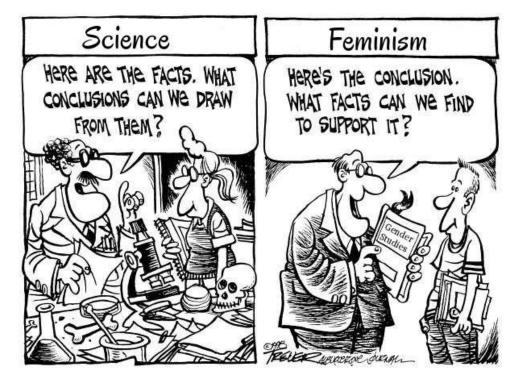


Figure 4.3: Manosphere Cartoon on Science vs Feminism⁷⁹²

As such, the manosphere is particularly attentive to news events related to gender studies. For example, in 2018, Hungary decided to cut public accreditation and funding for gender studies education programs, with the deputy Prime Minister Zsolt Semjen arguing that it had "no business (being taught) in universities," because it was "an ideology, not a science."⁷⁹³ This decision was cheered on by MGTOW, becoming one of the most popular discussions of all time on the r/MGTOW subreddit, with many people discussing moving to Hungary as a more congenial anti-feminist country. On incels.wiki as well, this Hungarian "ban" was saluted and mentioned in the encyclopedia's entry on feminism. When in 2010, a Norwegian documentary miniseries titled *Hjernevask* ("Brainwash") critically investigated gender studies and humanities scholarship by unfavorably contrasting them to research in the evolutionary and life sciences, ⁷⁹⁴ it was also applauded in the manosphere, earning its way on the r/TheRedPill sidebar in a post entitled "Gender Studies is Nonsense." In its summary of documentary, the Red Pill poster explains that "every claim by the gender studies institute" was "destroyed," with "proof from actual scientists, biologists, psychologists etc." (TRP, 2014). The lines are drawn quite clearly here; on the one hand

 ⁷⁹² Incels.wiki, "Feminism," <u>https://web.archive.org/web/20210107144415/https://incels.wiki/w/Feminism</u>, archived January 7, 2021. For more details on the original cartoon from which this was adapted, see footnote n° 819, 184.
 ⁷⁹³ France 24, "Hungary Gender Studies Ban Draw University Anger," October 16, 2018, <u>https://web.archive.org/web/20230604161110/https://www.france24.com/en/20181016-hungary-gender-studies-ban-</u>

draws-university-anger, archived June 4, 2023.

⁷⁹⁴ *Hjevernask*, conceived by Harald Eia, produced and aired by the state channel NRK1 in 2010.

is "actual" science and on the other hand gender studies, as shown in this Redditor's mention of *Hjernevask*: "In Norway they cut all government funding for gender studies. Maybe the world is beginning to lean more on science, biology, logic and reason. Who knows? I sure hope so!" (MGTOW, 2019).

Feminist postmodernist epistemologies, which question the fundamentals of the scientific method itself and the possibility of ever objectifying knowledge, are also ridiculed: "SJW types don't believe in science and facts, those are tools of the patriarchy"⁷⁹⁵ (TRP, 2017). More generally, since manospherians unanimously reject any notion of structural oppression of women by men, they associate gender studies with this notion:

- "Seriously, Gender Studies has poisoned university campuses over here in Australia......Teaching young women that they are all victims, and that all males are sexual predators. Time to end this toxic women's hate club once and for all......WORLD WIDE" (MGTOW, 2019).
- "Gender studies is a pile of bullshit. It's a bunch of morons who come up with bizarre ways say that every problem in the world is due to men suppressing women" (MGTOW, 2019).

2.c. Ambivalent Attitudes towards Academia

Beyond this predictable opposition of manosphere communities to feminist scholarship, the whole university system is often branded as having reneged on its ideals of scientific inquiry and quest for truth in favor of left-wing and feminist dogmatism:

- "Universities are no longer places for serious thinkers to hone their minds. They're places where braying young idiots go to learn to parrot feminist and Marxist slogans" (TRP, 2014).⁷⁹⁶
- "I am always distrustful of these studies because the authors are most likely feminists with an agenda to push" (incel, 2020).
- "This is a new kind of church with its own dogma, asserting its own bigoted agenda. Criticize feminism and you will get charged with the modern equivalent of heresy. Clearly, something has gone awry in science—or, should I say, mainstream science" (MRA, 2014).⁷⁹⁷

In a 2014 article entitled "The Success of Feminism Is the Failure of Science," MRA writer Stephen Jarosek thus indicts the whole scientific establishment:

⁷⁹⁵ Feminist postmodernist epistemologies are described in Chapter II, A, 114. For a definition of Social Justice Warrior (SJW), see also Appendix 30: Glossary of Manosphere Terms, 586.

⁷⁹⁶ Steve McMahon, "Women should not be allowed to vote," Return of Kings, May 15, 2014, <u>https://web.archive.org/web/20201107223808/https://www.returnofkings.com/34330/women-should-not-be-allowed-to-vote</u>, archived November 7, 2020.

⁷⁹⁷ Stephen Jarosek, "The success of feminism is the failure of science," A Voice for Men, August 21, 2014, https://web.archive.org/web/20220920111727/https://avoiceformen.com/featured/the-success-of-feminism-is-the-failure-of-science/, archived September 20, 2022.

"Contemporary mainstream science—where physics, math, biology, and engineering faculties are located within the same university grounds as women's studies faculties—can no longer be relied on to subscribe to the scientific method. Formal recognition of academic achievement in STEM disciplines has generally been in the awarding of titles, such as Doctor or Professor, while these days the same titles are awarded within women's studies faculties. A science where political correctness defines the limits of acceptable discourse is not science. Increasingly, it resembles propaganda. We judge people by the company they keep, and this should apply no less to organizations. We should judge contemporary science by the company that it keeps with women's studies faculties and other institutions of the Left."⁷⁹⁸

These elements reveal a deep ambivalence towards science in the manosphere. On the one hand, it is hailed as a supremely important value, embraced by manospherians in their quest for truth. As such, scientific studies and research are often cited as a token of legitimacy. Moreover, as shown by my questionnaire, manospherians as a whole have a high level of scientific college education. On the other hand, there is deep-seated suspicion, if not hostility, towards the actual scientific establishment, the people and institutions who produce academic research. I now explore this ambivalence and the way the manosphere addresses this apparent paradox.

Manospherians exhibit a double standard towards academic research. On the one hand, when it is congenial to their worldviews, they applaud and cite it. This is most notably the case with research on evolved sex differences. On the other hand, any contradictory piece of research can be discarded through accusations of being dogmatic or ideologically motivated. This double standard can be seen running through discussions in manosphere online communities. For instance, after criticizing academia as a hotbed of feminist dogmatism, the author of the anonymous *Masculine Principle* e-book paradoxically defends the reputation of fellow manospherian blogger Angry Harry using the legitimacy of academic degrees: "Angry Harry has *multiple* degrees, a Ph D. in Psychology and the others I believe are related to childhood education – making him *extremely* qualified to critique the research and comment on what it means."⁷⁹⁹ Similarly, the few manosphere authors who hold academic degrees invariably use them to advertise and legitimize their books, as is the case with Warren Farrell (PhD in political science) or Tara Palmatier (MD).

As a result of this paradox, controversies sometimes arise in the manosphere, for example inside the incel community, which is strongly pro-science in its stance, all the while harboring various unfounded conspiracy theories, which some incels point out: "Personally, I am very disappointed that lots of incels deny it [climate change] while claiming to be based in science, you can't just take science shit for what you like and disregard what you don't" (incel, 2020). This prompts internal debates between anti-science and pro-science attitudes. Some incels regard academic research as unreliable, especially if it originates from groups such as women, and left-wing or Jewish academics:⁸⁰⁰

⁷⁹⁸ Ibid.

⁷⁹⁹ Anonymous, "Woman: The Most Responsible Teenager in the House?," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105100334/http://masculineprinciple.blogspot.com/2015/03/woman-most-responsible-teenager-in-house.html</u>, archived January 5, 2021.

⁸⁰⁰ Antisemitism is a notable feature of the incel community, it is illustrated and discussed further in Chap. VI, B, 333.

- "There was a study that showed in bio and psych, it is majority women and like 95% leftists with almost no one right wing. hard to trust that kind of people when it comes to this stuff" (incel, 2020).
- "I just don't take studies made by kike scientists for granted since most studies are bullshit and full of errors, I would rather trust my personal observation" (incel, 2020).

This last remark was promptly met by a response from another incel who tried to uphold the community's pro-science posture by characterizing this criticism as typical of the anti-incel camp:

• "jfl at arguing on a blackpill website that studies shouldn't be taken into account. That's typical bluepill/foid/ITcel behavior" (incel, 2020).

Scholars investigating pseudoscience have documented this ambivalence. On the one hand, defenders of pseudoscience claim the legitimacy of science by mimicking it, by citing and producing data, employing this as an argument from authority. On the other hand, since their views are not accepted by the scientific establishment, they have to dismiss mainstream science. As revealed by sociologist of science Romy Sauvaire in her analysis of 19th-century spiritism and 20th-century New Age, it is common for "pseudoscientists" to portray the mainstream science of their time as too conformist, too dogmatic, etc.⁸⁰¹ In fact, sociologist Valéry Rasplus counts this as one of the criteria to define pseudoscience: a stance of being persecuted, misunderstood, nonconformist and opposed to "official and dogmatic science."⁸⁰² This bears resemblance to the posture of many manospherians, such as Stephen Jarosek, the MRA author cited above, who claims that "the problem is not with science (as in, the scientific method)—the problem is that scientists of the Establishment have stopped being scientific."⁸⁰³ When his unconventional homemade scientific theories are challenged by readers in the comments of another one of his articles, he aggressively dismisses those as coming from "armchair theorists," arguing that "there's more to science than the quackery that often, these days, is making it through the peer-review process."⁸⁰⁴

In her investigation of Pickup-Artist discourse, sociologist Rachel O'Neill highlights the same dynamic. Even though seduction coaches ground their teaching in evolutionary science, they are prone to dismiss the scientific establishment and assert their own superiority over it. Citing an article from Rollo Tomassi, Rachel O'Neill shows the reasons advanced are two-fold: Pickup-Artists claim both to collect better empirical data in a naturalistic setting, and more importantly, not to be restrained by the feminism and political correctness of academia:

⁸⁰¹ Romy Sauvayre, "Comment la science alimente les croyances.," in *Sciences et Pseudo-Sciences: Regards Des Sciences Humaines*, ed. Valéry Rasplus (Paris: Matériologiques, 2014), 81–92.

⁸⁰² Valéry Rasplus, "Ce que la science veut dire, ce que la pseudo-science veut faire," in *Sciences et Pseudo-Sciences: Regards Des Sciences Humaines* (Paris: Matériologiques, 2014), 7–28, 26, translation mine.

⁸⁰³ Stephen Jarosek, "The success of feminism is the failure of science," A Voice for Men, August 21, 2014, <u>https://web.archive.org/web/20220920111727/https://avoiceformen.com/featured/the-success-of-feminism-is-the-failure-of-science/</u>, archived September 20, 2022.

⁸⁰⁴ Stephen Jarosek, "Transcending the Matriarchy," A Voice for Men, June 15, 2015, <u>https://web.archive.org/web/20240111164922/https://avoiceformen.com/featured/transcending-the-matriarchy/</u>, archived January 11, 2024.

"Now, imagine for a moment that, today, all men had to build on was the antiseptic studies and controlled experiments of a social science academia firmly steeped in a feminine-primary, feminine-correct social context ... Only the PUAs of then and now have had the unfettered freedom to perform in-field social experiments, and relate their collected evidence and observations with other men; the types of which social science has been forbidden from due either to ethical considerations or by feminine-primary social conventions."⁸⁰⁵

PUA coach Nick Krauser concludes: "Stop acting as if scientists are the authority on seducing women. When academia disagrees with successful players [i.e., PUAs], it's the academics who are wrong. Just look at their wives."⁸⁰⁶ Science, Krauser explains, is not about "wearing a lab coat," "citations in journal," or "a set of framed postgrad degrees on your wall," it is an "epistemology," "a way of knowing the world." After advising his readers to "go read some Karl Popper," he concludes that the PUAs' naturalistic experiments are more valid and reliable than any lab experiment. Therefore, PUA coaches appropriate scientific theories and concepts, glorify rationalistic values and scientific methods, and even engage in theorizing and experimentation, without ever delegating their judgment to the scientific establishment. The figure of the lone man in search for truth, and of the nonconformist maverick rejected by the scientific establishment thus enjoys some popularity in the manosphere, as it allows to combine reverence for science and dismissal of the scientific mainstream or "intelligentsia," as shown in the *Masculine Principle*:

"Did you know that neither of the Wright Brothers graduated from high-school? Yet, they proved all of the academics of the day's 'lift equation' to be, obviously, wrong. [...]

Did you know that Louis Pasteur was ridiculed by the medical community for his 'Germ Theory' and suggesting that surgeons should wash their hands before cutting people open? [...]

When we talk of the religious persecution of those such as Galileo, it is just as fair to claim the intelligentsia persecuted him (and other discoverers) as it is to claim religion did. In fact, you can see this phenomenon everywhere. Rarely does the intelligentsia discover anything or even really 'do' anything except for defend their position, while adding little of significance to it, which real mavericks already paved the way for. Academics have a vested interest in telling everyone that which they have learned is 100% correct, and discrediting all those opposed to them."⁸⁰⁷

As shown in Chapter II, evolutionary psychology is a controversial discipline. Manospherians' enthusiasm for it, which is introduced next, is thus rife with the ambivalence we have just documented, between reverence for science and defiance of academia.

 ⁸⁰⁵ Rollo Tomassi, cited in Nick Krauser, "Players Outrank Scientists in the Art of Seduction," October 21, 2014, https://web.archive.org/web/20240125103536/https://krauserpua.com/2014/10/21/players-outrank-scientists-in-the-art-of-seduction/, archived January 25, 2024. Both cited in Rachel O'Neill, *Seduction: Men, Masculinity, and Mediated Intimacy* (New York: John Wiley & Sons, 2018), 111;112.
 ⁸⁰⁶ Ibid.

⁸⁰⁷ Anonymous, "Peer Reviewed Research: The Holy Grail of Truth?," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105094916/http://masculineprinciple.blogspot.com/</u>, archived January 5, 2021.

A.3. Evolutionary Sciences in the Manosphere

The present research chose not to deal with inorganic scientific disciplines such as physics or mathematics, for they are not a major component of manosphere discourse and ideology. Conversely, human life sciences are omnipresent. As manospherians discuss social dynamics, in particular relationships between men and women, they often invoke the effects of genes, hormones, and the consequences of Darwinian evolution on human behavior.

3.a. Enthusiastic Darwinians

The manosphere is home to a rare level of enthusiasm for the evolutionary sciences. In fact, for many, those sciences are consubstantial with manosphere worldview. For example, in the 2012 founding manifesto of the Red Pill, the creator's subreddit reminds that the sexual strategies exposed in the Red Pill should be grounded in evolutionary psychology: "A large portion of Red Pill discussion revolves around evolutionary psychology. Understanding the facets of this psychology are key to developing a good sexual strategy" (TRP, 2012). When asked about their favorite sources of scientific content, manospherians cite works by renowned evolutionary scientists, including Darwin's 1859 *Origins of Species* itself.⁸⁰⁸ In the manosphere, showing knowledge of evolutionary science is valued, while "you don't understand evolution" is seen as a dire condemnation in online discussions. After being thus accused in a blog's comments section in 2015, a manospherian retorted with an impressive list of Darwinian credentials:

"I have an undergraduate degree in a field that incorporates "evolutionary theory" as its foundations. Have been reading and thinking about it for more than 25 years. I used to consider myself a Darwinist many years ago. I've attended many conferences related to the topic and even took a trip to the Galapagos islands" (TRP, 2015).⁸⁰⁹

The role of evolutionary science in manosphere discourse, ideology and personal trajectories is analyzed in detail throughout this chapter and Chapters V-VI. Notable features include the fact that manospherians devise their own "homemade" evolutionary hypotheses.⁸¹⁰ Moreover, some also use concepts and theories from the evolutionary scientific literature to make sense of their own lives and trajectories.⁸¹¹ Evolutionary scientific research is routinely cited, interpreted, and sometimes distorted to the extent that the manosphere can be said to have its own version of evolutionary science,⁸¹² with substantial differences and even disagreements between groups.⁸¹³

⁸⁰⁸ The results of this survey question are analyzed in Chap. VII, A, 351. All answers to this open-ended question are reproduced in Appendix 21, 541.

⁸⁰⁹ The Galapagos islands in the Pacific are highly symbolic in the history of evolutionary science. When visiting aboard *HMS Beagle* in 1835, Darwin collected specimens and observations. Upon his return to England, the different beaks of the Galapagos finches, seemingly adapted to each island's specific ecological conditions, were a decisive piece of evidence for his nascent theory of natural selection.

⁸¹⁰ See Chap. IV, C, 210.

⁸¹¹ See Chap. VI, B, 337.

⁸¹² This argument is made in this chapter's conclusion, Chap. IV, Conclusion, 226-227.

⁸¹³ For an analysis of the group-by-group specificities, see Chapter V: The Avatars of Manosphere Science, 228.

However, the prevalence of evolutionary science in the manosphere is highly variable. Some writers and popular content creators (such as Red Piller Rollo Tomassi, PUA Heartiste, or MRA Karen Straughan) refer to it constantly, while others (e.g., MRA Janet Bloomfield or Red Pill blogger Dalrock) do not. In order to assess more precisely the level of manospherians' familiarity with evolutionary sciences, they were asked two questions in the survey. Those questions pertain to concepts and areas of evolutionary science which cannot be expected to be known by everyone—in contrast for instance with "survival of the fittest" and "natural selection."

Are you familiar with Richard Dawkins's "Selfish Gene" idea?	Manospherians (n=148)	US Counterpart Group (n=151)
I've never heard about it	29.1% (43)	66.2% (100)
Somewhat familiar	50.7% (75)	29.1% (44)
I know it well	19.6% (29)	4.6% (7)
Chose not to answer	0.7% (1)	0% (0)

 Table 4.4: Knowledge of the Selfish Gene Metaphor among Manospherians

Table 4.5: Knowledge of Evolutionary Psychology among Manospherians

Are you familiar with Evolutionary Psychology?	Manospherians (n=148)	US Counterpart Group (n=151)
I've never heard about it	14.2% (21)	41.7% (63)
I know some elements of it	46.6% (69)	45% (68)
I know the basic concepts and principles	27% (40)	10.6% (16)
I know it well	7.4% (11)	2.6% (4)
Chose not to answer	4.7% (7)	0% (0)

As expected from their higher scores on the scientific literacy test, manospherians also displayed a much higher level of familiarity with evolutionary sciences than the counterpart group.⁸¹⁴ Before going further, creationism must be addressed, as it is a major aspect of the politicization of Darwinism in the United States.⁸¹⁵ One would expect those communities who are fond of evolutionary sciences to have low levels of creationism, which is one of the things measured in my survey.

⁸¹⁴ To compare distributions between the two samples on those two questions, nonparametric Mann-Whitney U Tests were run. For the selfish gene question (table 4.4), U = 15577.5, p < .001; for the evolutionary psychology question (table 4.5), U = 14553.5, p < .001.

⁸¹⁵ This is discussed above in Chap. II, B, 130.

3.b. Creationism and Acceptance of Evolution

Although the manosphere is adjacent to or overlapping with some segments of the online American Right, creationism is almost nonexistent among its communities. The only exception in the corpus is the conversion of PUA celebrity Roosh V to Orthodox Christianity. As he explains in an article entitled *How I Turned To God*, discarding Darwinian evolution was one of the last crucial steps in his conversion process:

"The second accident was reading *Darwinian Fairytales* by David Stove in early 2015. As a trained scientist, the biggest blockage I had for turning to God was the supposed infallibility of evolution. We were not created by God, I believed, but evolved over billions of years from a primordial soup that randomly developed consciousness. Stove's book poked so many holes into my faith of evolution that I could intellectually and rationally discard it as the main theory for explaining how humans were created."⁸¹⁶

Significantly, his abandonment of Darwinian evolution can be said to concur with his departure from the manosphere. Indeed, as a Conservative Christian pundit, Roosh V has repudiated his former Pickup-Artist years and all manosphere-related activities. As indicated by the survey results on the EvoAccept item, creationism enjoys much less credence in the manosphere than in the American population at large.

What do you think about the following statement: ''Human beings, as we know them, developed from earlier species of animals.''	Manospherians (n=148)	US Counterpart Group (n=151)
Definitely False	0.7% (1)	7.3% (11)
Probably False	2% (3)	5.3% (8)
Probably True	11.5% (17)	25.8% (39)
Definitely True	84.5% (125)	58.3% (88)
Don't know/Not Sure	0.7% (1)	3.3% (5)
Chose not to Answer	0.7% (1)	0% (0)

 Table 4.6: Creationism Among Manospherians (EvoAccept)

Combining the Probably True and Definitely True answers, both respondents' samples had a much higher level of acceptance of the theory of evolution than the US population, which was estimated at 54% in 2019 using the same metric.⁸¹⁷ With 95% of respondents accepting the theory

⁸¹⁶ Roosh V, "How I Turned To God," January 27, 2020, <u>https://web.archive.org/web/20200314091434/https://www.rooshv.com/how-i-turned-to-god</u>, archived March 14, 2020. David Stove (1927-1994) was an Australian philosopher famous for his controversial challenges to feminism and Darwinism, David Stove, *Darwinian Fairytales*, (Aldershot: Averbury Press, 1995).

⁸¹⁷ Miller et al., "Public Acceptance of Evolution in the United States." For comparison between the distributions of the manosphere and counterpart respondents samples, a nonparametric Mann-Whitney U Test was run, U = 13603.5, p < .001.

of evolution, manospherians stand out for their almost unanimous answer, above the levels of evolution acceptance in even the best-ranked countries (Iceland, Denmark, and Sweden).⁸¹⁸

Creationism is sometimes mentioned to disparage people who disagree with manosphere ideas: "the blackpill, at its core, is just basic evolutionary science. the people denying it are no different from creationists" (incel, 2019). Since the blackpill is framed as science, it follows that opponents of the blackpill can be labeled with the opprobrious label. Thus, the creationist epithet is sometimes used to discredit one's opponent in a conversation:

"in trying to make your point you've resorted to suicide baiting and denying science. let me guess, you're a creationist [...]

- I'm not a creationist, why would you think that? [...]
- because you're denying science" (incel, 2018).

As the most reviled of "anti-science" forces, feminism is occasionally associated with creationism.⁸¹⁹ For example, in a document revealingly titled *Evolutionarily Correct Cyclopedia*, Men's Rights Activist Roy Den Hollander vituperates: "Feminazis are as ignorant and blind to science as the prosecutors in the Scopes trial,"⁸²⁰ after accusing them of relying "on pseudo facts and unscientific reasoning," and comparing them to the 19th-century "proponents of slavery who relied on polygenesis and ethnographic pseudo sciences."⁸²¹ As will now be explained, this parallel is not too surprising, given the fact that feminism, like creationism, is portrayed in the manosphere as denying the realities of evolution by natural selection.

3.c. Evolutionary Psychology as an Anti-Feminist Discipline

The Red Pill blogger known as The Private Man wrote a humorous fictional scene of a woman visiting the veterinarian to check on her rationalization hamster:

"Doctor, I'm worried about my hamster."

⁸¹⁸ For a country-by-country breakdown of results, see Miller et al., "Public Acceptance of Evolution," 765.

⁸¹⁹ In fact, the incel cartoon on gender studies reproduced on page 176 above was originally about creationism, with "Genesis" in place of "Gender Studies," John Trever, Untitled Cartoon, *Albuquerque Journal*, 1998. See <u>https://web.archive.org/web/20240115192237/https://www.talkorigins.org/indexcc/CA/CA230_1.html</u>, archived January 15, 2024.

⁸²⁰ Held in 1925 in Dayton, Tennessee, the Scopes "Monkey" Trial was a legal case where a high-school teacher was accused of violating a law which made it illegal to teach human evolution in state-funded schools. It attracted national attention and has remained a symbol of the opposition between Darwinism and Christian fundamentalism in the United States. See Marvin Olasky and John Perry, *Monkey Business: The True Story of the Scopes Trial* (Nashville: Broadman and Holman, 200

⁸²¹ Roy Den Hollander, "Evolutionarily Correct Cyclopedia," https://web.archive.org/web/20240115195008/http://www.roydenhollander.com/main/Writings/CyclopediaUpdate2.

<u>20.19.pdf</u>, archived January 15, 2024. Polygenesis was a common feature of 19th century US ethnologic scientific racism. It meant "the separate creation of the races, categorized as distinct species within the genus Homo," this view was not accepted by all proponents of slavery however, as some proslavery fundamentalist white Christians in the South rejected this theory that went against Biblical teachings, Christopher Luse, "Slavery's Champions Stood at Odds: Polygenesis and the Defense of Slavery," *Civil War History* 53, no. 4 (2007): 379–412, https://doi.org/10.1353/cwh.2007.0080, 388.

"What seems to be the problem?"

"I was surfing the web and discovered something called the 'Manosphere'"

"Oh, that is serious. Let me guess, your hamster now seems unresponsive."

"Yes, how did you know? I can't seem to rationalize anything."

"The Manosphere is deadly to rationalization hamsters. You probably read something about evolutionary psychology or entitlement princesses."

"Yeah, I found it very disturbing yet oddly compelling."822

Here, not only is evolutionary psychology seen as an integral part of the manosphere, but it is also presented as a body of knowledge that necessarily runs against feminist ways of thinking. In Ian Ironwood's *The Manosphere: A New Hope for Masculinity* as well, evolutionary psychology is described as a science that "undermines 50 years of feminist theory," adding: "It's interesting to note that the feminist's only real response to the inconvenient truth about human mating is that Evolutionary Psychology 'can't prove that'. Which is precisely what the murderer says when they've tacitly admitted the crime, but are struggling for a way out."⁸²³ In its entry on feminism, incels.wiki also states that feminism is at odds with evolutionary psychology:

"In general, feminists hate any studies which have to do with mating, including but not limited to studies from sociology, social psychology, and evolutionary biology. The main arch nemesis of feminism in the social sciences is evolutionary psychology, which many feminists regard as a pseudo-scientific veneer over its practitioners misogyny, despite there existing a minor trend in feminism that attempts to integrate some of its findings as they pertain to women and the relations between the sexes."⁸²⁴

It is noteworthy that the feminist rejection of evolutionary psychology, documented in Chapter II, is deemed significant enough to be mentioned in a generic manosphere encyclopedia entry on feminism. Indeed, since manospherians are united by their antifeminism, interest for evolutionary sciences becomes a token of opposition to feminism and gender constructionism:

"it seems to me that a great many MGTOW are followers of inate biology instead of fabricated gender bullshit..it warms my heart to see rational who keep learning..if any of you guys have any more studies or links to evolutionary biology lectures I would be grateful if you could put in the links on this thread" (MGTOW, 2015).

Conversely, any mention of feminism or gender is construed by manospherians as a denial of evolved sex differences, as expressed by PUA blogger Heartiste:

"Maxim #81: Whenever you hear or read the words "gender", "gendered", "gendered norm", "subtle gender bias", or "increasingly egalitarian, yet there remains..." know that you are dealing with a

⁸²² The Private Man, "A Woman Visits the Veterinarian," July 22, 2011,

https://web.archive.org/web/20201112004947/https://theprivateman.wordpress.com/2011/07/22/a-woman-visits-the-veterinarian/, archived November 12, 2020.

⁸²³ Ian Ironwood, *The Manosphere: A New Hope for Masculinity* (Red Pill Press, 2012), e-book location 79%.

⁸²⁴ Incels.wiki, "Feminism," <u>https://web.archive.org/web/20210107144415/https://incels.wiki/w/Feminism</u>, archived January 7, 2021.

leftwing equalist, blankslate believing fruitcake who cannot deal with the fact that men and women are biologically different from birth."⁸²⁵

A comment on a PUA website also reveals this association of feminists and progressives with denial of sex differences, in a parallel with creationism: "Sheeple on the right deny evolution but agree than men and women are naturally different. Sheeple on the left deny that men and women are different but agree that evolution is real" (PUA, 2015). The use of the term "sheeple" here, a portmanteau of "sheep" and "people," suggests that people on both sides of the political spectrum have a herd mentality and uncritically accept their side's dogma: in that case, creationism on the religious right and the blank slate on the progressive left. Manospherians, picturing themselves as independent truth-seekers, claim to eschew those dogmas and partisan divides. Creationism, however, is rarely mentioned or attacked in the manosphere. On the other hand, feminists and the blank slate are a constant target of derision and hostility—a discrepancy which is revealing of the manosphere's right-wing political leaning.

In fact, it could be argued that evolutionary psychology's appeal in the manosphere resides partly in its being unpopular among feminists.⁸²⁶ As explained by a former Red Piller to a British newspaper, "The movement's use of evolutionary psychology convinced my rational mind that everything I read was a scientific fact suppressed by feminists."⁸²⁷ This dovetails with the concept of a red pill, an inconvenient truth that is being suppressed by some sort of "mainstream" and hegemonic establishment. As a controversial field, evolutionary psychology thus enjoys the double advantage of appealing to manospherians' rationalistic and scientific bent, all the while fitting their anti-feminist tendencies.⁸²⁸ Indeed, several manospherians recall their discovery of evolutionary science as a sort of epiphany or red/black pill moment, such as the Red Pill blogger known as The Private Man. About discovering evolutionary psychology, he wrote in 2011: "This was a serious worldview shift for me and I'm thankful that this concept is being shared widely."⁸²⁹

3.d. Evolutionary Psychology as a Life-changing Epiphany

When manospherians present their life stories, it tends to include some sort of transformative narrative, usually including a process or moment when they shed their former mainstream feminist beliefs to embrace their new worldview. Often, this is presented as discovering "the truth about women." Sometimes, evolutionary sciences feature in this narrative. For example, when introducing himself, a MGTOW explains that he used to have long-term relationships and to cohabit with female partners, before realizing he preferred being alone. He adds that he has since "discovered the red pill and the truth about women," before adding, "I enjoy evolutionary explanations to gender dynamics" (MGTOW, 2020). Likewise, in a text entitled

⁸²⁵ Heartiste, On Game, 468.

⁸²⁶ For a summary of feminist critiques of evolutionary psychology, see Chap. II, A, 108; Chap. II, B, 124.

⁸²⁷ Amelia Tait, "Spitting out the Red Pill: Former Misogynists Reveal How They Were Radicalised Online," *New Statesman*, February 28, 2017, <u>https://web.archive.org/web/20231004102921/https://www.newstatesman.com/long-reads/2017/02/reddit-the-red-pill-interview-how-misogyny-spreads-online</u>, archived October 4, 2023.

 ⁸²⁸ Reasons for the popularity of evolutionary psychology in the manosphere are discussed in Conclusion, 388.
 ⁸²⁹ The Private Man, "Being Thankful – The Manosphere Way," November 24, 2011,

https://web.archive.org/web/20200814045124/https:/theprivateman.wordpress.com/2011/11/24/being-thankful-themanosphere-way/, archived August 14, 2020.

"Confessions of a reformed incel," a man recounts his unhappy years of celibacy and trying to be nice to women: "That's when i finally delved into the realm of the internet and discovered about Game, dominance, attraction triggers, evo psych, mra's, pua's, the manosphere. All the pretty lies perished, like domino's falling in unison" (TRP, 2012).

Here, there is no clear distinction between starting to delve into manosphere content and into evolutionary psychology, the two being complementary, as in the personal story of this man who recalls started becoming distrustful of women after a divorce:

"With each new woman...I became more sensitive to warning signs...and less inclined to believe what she said. Then I happened across some Red Pill Articles...and my eyes became wide open although I didn't understand the REASONS behind a woman's behavior...WHY they did what they did...THAT didn't come until I came across articles on Evolutionary Psychology" (MGTOW, 2020).

Another MGTOW presents his discovery of evolutionary psychology as a transformative moment. Beforehand, he describes himself as clueless regarding relationships: "I can't say I had much of an idea regarding the dynamic between the sexes because as a child I spent most of my time by myself when I was home and didn't tend to date." Then he recalls:

"[G]oing down the rather long rabbit hole of red pilled content such as that of a plethora of YouTube content providers. It was from here that I began shaping all of my presentations at university around evolutionary research regarding the contemporary dynamic between the sexes. [...] Even now, this is a topic that I enjoy looking into outside of subjects such as health, and provides me with a reference point when traversing everyday life instances that involve women" (MGTOW, 2020).

There are striking similarities and recurring features in those testimonies. The first one is that discovering evolutionary psychology is usually concomitant, if not synonymous, with discovering the manosphere. The second one is a feeling of epiphany, of a life-changing discovery of previously hidden truths. This is something that feminist and progressive authors also recall: how their encounter with the evolutionary behavioral sciences forced them to shed their blank slate beliefs and rethink gender dynamics.⁸³⁰ However, this did not entail their abandoning their commitment to feminism. After all, there is no fundamental incompatibility between evolutionary sciences and feminism, as shown for instance by the existence of feminist evolutionary psychologists.⁸³¹ The manosphere narrative differs in that it sees evolutionary psychology as deadly to feminism, as expressed by this comment on a Red Pill blog: "Evolutionary psychology is the reason the manosphere is ensured victory in the long run. Once the research gets better and better and connected to specific genes feminism is dead and the red pill gets much easier to swallow for people" (TRP, 2011). In those manosphere narratives, discovering evolutionary psychology is thus part of a broader process, in which manospherians become antifeminist, renounce their ideas of romantic love and gender egalitarianism, and embrace "hard truths" about female behavior. This epiphany is usually followed by a radical change in behavior or attitudes towards women, such as becoming an adept of seduction, or on the contrary, a voluntary celibate MGTOW. Each time, this

⁸³⁰ See Chap. II, B, 127.

⁸³¹ See Chap. II, B, 122.

change is based on the premise that female behavior is monolithic, invariable, and easily understood through evolutionary psychology. The next section explores this use of evolutionary science by manospherians regarding female behavior and evolved sex differences. One of the key findings of this analysis, as already made evident by the examples discussed above, is the near exclusive focus on women. Indeed, evolutionary sciences are much more rarely invoked when it comes to explaining men's behavior, a double standard which is at the core of the manosphere's appropriation of scientific research on evolved psychological and behavioral adaptations.

B. INSTINCTS IN THE MANOSPHERE: INFLEXIBLE AND FEMALE

B.1. Instincts as Invariable and Inflexible Imperatives

While evolutionary research does hypothesize about instincts—that is, about evolved propensities to certain behaviors—it also emphasizes the flexibility of such propensities: most are context-dependent and attuned to environmental influences. In fact, a lot of the research tries to determine the extent and flexibility of those instincts: What specific cues trigger them? Are they moderated by other environmental factors? How variable are they between individuals? etc.⁸³² However, the picture that emerges from manosphere discourse is quite different: individuals seem to be moved by strong subconscious instincts with very little individual variation or environmental flexibility.

1.a. The "Hardwiring" of Human Brains

This idea is illustrated by the rather common use of the term "hardwired" in manosphere discourse, conveying the impression that some behavioral responses are just inevitable.⁸³³ Pickup-Artist seduction guides insist on these in the context of (heterosexual) partner preferences:

"There are certain hardwired attraction switches in every woman's mind. Attraction is not a conscious choice that people make. Rather, it's a response that they feel automatically as a result of these switches being flipped."⁸³⁴

Here the response is both universal ("in every woman's mind") and automatic, as conveyed by the "switch" metaphor. To some of these dating coaches, there are some characteristics in a partner that women just simply cannot resist because of female nature, such as aloofness or indifference:

⁸³² See Buss, *Evolutionary Psychology*, "Chapter 2: The New Science of Evolutionary Psychology," e-textbook version, 82-144.

⁸³³ Cambridge Online Dictionary, "Hardwired," "If someone or something is hardwired to do a particular thing, they automatically do it and cannot change that behaviour," https://web.archive.org/web/20171013161027/http://dictionary.cambridge.org/dictionary/english/hardwired,

archived February 15, 2022.

⁸³⁴ Mystery, The Venusian Arts Handbook, 82.

"Of all the compulsions hard-wired in a female's hindbrain, this one is etched deeper and more enduringly. Every woman, to a greater or lesser degree, feels the burn of lust and the agony of love for a man who projects a "take it or leave it" attitude."⁸³⁵

While dating coach Heartiste believes in a universal female "hard-wiring," he acknowledges its variability between individuals ("to a greater or lesser degree"). Another passage reveals the rather ambiguous or even figurative use of "hardwired" (and its variant "hard-wired.") Indeed, the wiring does not seem very hard in that case, as it is not universal and can even be reinforced by environmental factors:

"Hard to believe, but it is often easier to bed a very young woman than an older woman, if you are an older man. This is because 20-40% of women are specifically attracted to older men. It is hardwired in them, and this hard-wiring can be reinforced by poor family upbringing resulting from divorce of parents or absentee fathers."⁸³⁶

The term "wired" is also found in the corpus and is used in a similar manner. For example, another dating coach writes: "A girl will never say that she wants a man with the temper of a grizzly bear because that would force them to admit they're wired to be illogical and irrational."837 It is hard to determine whether the use of these terms is metaphorical: metaphors after all permeate evolutionary science writing, making concepts and ideas more tangible and understandable.⁸³⁸ Saying that minds share a same "wiring" might just be a way to refer to the psychological adaptations of evolutionary psychology. Yet, such "wiring" metaphors do not seem very popular in scientific literature. In fact, none of the textbooks in my undergraduate science textbook corpus employ either "wired" or "hardwired," no doubt because those images do not evoke much flexibility in the processes they describe.⁸³⁹ As explained by psychologist Janet Shibley Hyde, "you'll never hear a good neuroscientist use the term 'hardwired' because the brain is anything but hardwired—it is plastic."840 There is just one occurrence of the term "prewired" in David Buss's textbook Evolutionary Psychology: The New Science of the Mind.⁸⁴¹ Writing that something is "prewired" gives the impression that there are some initial fixed characteristics, but that they do not preclude later variations and flexibility. This metaphor is thus more aligned with the dominant vision of human nature present in the evolutionary sciences.

This widespread use of "wiring" metaphors, it must be noted, is certainly not limited to the manosphere. It can also be found in the popular science media that circulates on the Internet. Short

sinks-stereotypes-with-data, archived March 5, 2024.

⁸³⁵ Heartiste, On Game, 28.

⁸³⁶ Ibid., 65.

⁸³⁷ Roosh V, The Best of Roosh: Volume One (Self-published, 2013), 16.

⁸³⁸ For example, Richard Dawkins's "selfish gene" metaphor, or Spencer's "survival of the fittest." However, sometimes the use of metaphors ends up planting wrong intuitions about biological process in the public, as explained in Blancke et al., "Intuitions in Science Education and the Public Understanding of Science."

⁸³⁹ In fact, two evolutionary scientists have openly challenged this "hardwired" metaphor, Gillian Brown and Melissa Hines, "Sex Differences in the Brain: A Critique of the 'Hardwired' Metaphor," presentation given in 2017. I reached out to the two scholars for more details on this presentation, but they could not remember more.

⁸⁴⁰ Kim Armstrong, "Janet Shibley Hyde Sinks Stereotypes With Data," *APS Observer*, January 30, 2019, <u>https://web.archive.org/web/20240305040615/https://www.psychologicalscience.org/observer/janet-shibley-hyde-</u>

⁸⁴¹ David Buss, *Evolutionary Psychology: The New Science of the Mind* (New York: Routledge, 2019), e-textbook version, 514.

press articles describing the findings of psychological studies are indeed shared and cited quite often in the manosphere. For example, the manosphere corpus contains hyperlinks to three such articles entitled "Study Finds our Desire for 'Like-Minded Others' is Hard Wired,"⁸⁴² "The Hard-Wired Difference Between Male and Female Brains Could Explain Why Men Are 'Better at Map-Reading,"⁸⁴³ and "Why We Are Wired to Connect."⁸⁴⁴ Yet, while the use of those wiring metaphors to discuss biology is quite commonplace,⁸⁴⁵ their prevalence in the manosphere is still noteworthy, especially given their absence from the scientific literature itself.

In a rare occurrence of direct contact between academia and the manosphere, evolutionary psychologist Michael Mills was invited to a discussion on a MGTOW YouTube channel.⁸⁴⁶ This video allows to directly compare the language of a manosphere EP aficionado with that of an evolutionary psychologist. Strikingly, while the MGTOW host uses "hardwired" no less than four times over a 53-minute interview, Professor Mills never does, preferring to use "prewired" once. This is concordant with my analysis: while the two speakers in the video seem to agree on most points, manospherians are less wary of postulating strong and inflexible instincts than scientists.⁸⁴⁷

Another document is quite revealing of the popularity of the "hardwired" metaphor among manospherians. On incels.wiki, the "Scientific Blackpill" page reviews hundreds of scientific studies.⁸⁴⁸ The studies are factually described, then sometimes followed by more speculative or ideological incel-oriented reflections in a "discussion" section. There are three occurrences where the term "hardwired" is abusively added to the study findings' description. For instance, in their experiment, Di Dio et al. tried to determine whether there was such a thing as "objective beauty," that is a "biological" (here, neurological) basis for aesthetic judgments. Their findings lend credence to that idea, by showing activation of different brain zones in different conditions (stimuli judged-as-beautiful vs judged-as-ugly).⁸⁴⁹ Incels.wiki concludes its description of the study as

⁸⁴² The University of Kansas, News, "Study Finds our Desire for 'Like-Minded Others' is Hard-Wired," February 23, 2016, <u>https://web.archive.org/web/20210812223028/https://news.ku.edu/2016/02/19/new-study-finds-our-desire-minded-others-hard-wired-controls-friend-and-partner</u>, archived August 12, 2021.

⁸⁴³ Steve Connor, "The Hard-Wired Difference Between Male and Female Brains Could Explain Why Men Are 'BetteratMap-Reading,"Independent,December3,2013,https://web.archive.org/web/20210811123204/https://www.independent.co.uk/life-style/the-hardwired-difference-

between-male-and-female-brains-could-explain-why-men-are-better-at-map-reading-8978248.html, archived August 11, 2021

⁸⁴⁴ Gareth Cook, "Why We Are Wired to Connect," *Scientific American*, October 22, 2013, <u>https://web.archive.org/web/20220214120854/https://www.scientificamerican.com/article/why-we-are-wired-to-</u>connect/, archived February 14, 2022.

⁸⁴⁵ Some dictionaries recognize this use, with Merriam-Webster's second definition of "hardwired" being "genetically or innately determined" and also "genetically or innately predisposed," <u>https://web.archive.org/web/20220307134016/https://www.merriam-webster.com/dictionary/hardwired</u>, archived March 7, 2022.

⁸⁴⁶ CS MGTOW, "The Evolutionary Psychology of Human Sex and Gender MGTOW," YouTube.com, November 23, 2018, <u>https://www.youtube.com/watch?v=rrBFkm-uAdI&t=7s</u>, consulted March 7, 2022.

⁸⁴⁷ This interview is analyzed at greater length below in Chap. VII, D, 369.

⁸⁴⁸ Incels.wiki, "The Scientific Blackpill," <u>https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific Blackpill</u>, archived December 25, 2023.

⁸⁴⁹ Cinzia Di Dio, Emiliano Macaluso, and Giacomo Rizzolatti, "The Golden Beauty: Brain Response to Classical and Renaissance Sculptures," *PLOS ONE* 2, no. 11 (2007): e1201, <u>https://doi.org/10.1371/journal.pone.0001201</u>.

follows: "Researchers state this suggests that both our capacity to detect beauty and enjoy the pleasurable sensations it elicits are strongly hardwired into our brain structure."⁸⁵⁰ This example shows how findings about domains viewed by people as "biological" are immediately translated into more deterministic, "strongly hardwired" versions, suggesting that those phenomena are universal and inflexible. More concerningly, sometimes this "hardwired" interpretation misses the original point of the research. In their paper called "Chickens Prefer Beautiful Humans," Ghirlanda et al. present the results of a surprising experiment, in which they found that trained chickens' aesthetic preferences for human faces did not differ from humans' evaluations of the same faces.⁸⁵¹ In their analysis, they argue that aesthetic preferences can just develop from general properties of nervous systems, and do not have to be face-specific adaptations. Since even chickens could be trained to discriminate between human faces, there is no reason to posit a specific human adaptation to faces. They do not argue however that humans and chickens share deeply embedded aesthetic preferences as part of their shared evolutionary history. However, this is exactly the argument made by incels.wiki:

"The findings provide support for the hypothesis that human preferences for sexually dimorphic faces are innate and hardwired in our 'lizard brain', that is, there is a deep-seated desire for such aesthetic features, and this desire even predates the evolution of modern humans, with the last common ancestor of humans and chickens thought to have been a reptilian creature that lived more than 310 million years ago. The result strongly suggests that the preference for extremely masculine and feminine faces is not a cultural construct, but it inevitably emerges in biological brains."⁸⁵²

It can be noted here that this erroneous extension of the result findings is buttressed by a web of extremely deterministic vocabulary and images: on the one hand there are "innate," "hardwired," and "deep-seated" instincts that "inevitably" emerge in "lizard brains" or "biological brains." On the other hand is the view that aesthetic preferences for feminine and masculine features would be a pure "cultural construct." Rather than the interactionist position, which would hold that aesthetic preferences are a combination of evolved propensity and specific socio-cultural influences, manospherians seem to oppose cultural constructionism so much that they embrace a hyper-deterministic interpretation of evolutionary science.

1.b. Brain Metaphors

Evolutionary psychology dwells on the evolution of psychological mechanisms. Sometimes, those mechanisms have a very ancient evolutionary history, and are thus shared with other species. They are for example those revolving around basic emotions such as fear and aggression, which mostly hinge on our brain's limbic system—containing structures like the amygdala which other mammals have in common.⁸⁵³ However, evolutionary psychologists also study behaviors that demand a high level of cognition specific to humans, and are located in more

⁸⁵⁰Incels.wiki,"TheScientificBlackpill,"https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific_Blackpill,archived December 25, 2023⁸⁵¹Stefano Ghirlanda, Liselotte Jansson, and Magnus Enquist, "Chickens Prefer Beautiful Humans," Human Nature13, no. 3 (2002):383–89, https://doi.org/10.1007/s12110-002-1021-6.⁸⁵²Incels.wiki,"TheScientificBlackpill,"https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific Blackpill, archived December 25, 2023

⁸⁵³ Allan Siegel and Hreday Sapru, *Essential Neuroscience*, 4th ed. (Philadelphia: Wolters Kluwer, 2019), 487-506.

recently evolved brain areas. This is, for example, the case of language, where the underlying brain structures are mostly found in the temporal and frontal lobes.⁸⁵⁴ Interestingly, manospherians' appropriation of evolutionary psychology dwells primarily on the more ancient parts of the brain. In those appropriations, behavior seems to be mostly controlled by the more ancient parts of the brain, where "deep" primal instincts and emotions lie. Quite paradoxically for a movement which prides itself on its rationality, Red Pillers often downplay the influence of rationality compared to emotions, which they claim are "relentless, constant, uncompromising, and extremely powerful" (TRP, 2018):

"[O]ur rational mind is like a mouse trying to ride an elephant. The mouse can influence the elephant's actions a little, and over a lifetime this little becomes a lot, but the mouse's control over the elephant at any single moment is very tenuous and cannot change what the elephant fundamentally wants" (TRP, 2018).

The primary determiner of behavior here appears to be emotion, which rationality would be unable to control, its only function being to provide after-the-fact justifications. This is reminiscent of the manosphere's "rationalization hamster" metaphor for female behavior. It is therefore not surprising that these kinds of analyses are mostly invoked when discussing women's behavior.⁸⁵⁵ Thus, the Red Pill post cited above goes on to advise reader about interacting with women:

"you must remember that you are speaking to her emotions that literally decide whether she gets killed in the jungle or not. And no matter how mean, bitchy, disinterested, angry, rude, insistent, or confident her conscious demeanor appears, it is ultimately a mouse riding an elephant" (TRP, 2018).

Several brain metaphors drawn from popular discourse, the media, or scientific literature feature in manosphere renditions of evolutionary psychology—in particular those of the "reptilian brain," the "hindbrain," and the "lizard brain." These three metaphors convey the image of behavior as unconsciously determined by the more ancient brain structures:

- "[T]his is the same old familiar competition anxiety a woman's hindbrain can't argue with" (TRP, 2013).
- "All of this is likely driven by the reptilian tendency in men to prioritize reproduction immediately after food and shelter. It's that cursed little lizard in our unconscious that ranks the opportunity to scatter seeds up there with breathable air, which our conscious mind continually rationalizes behind walls of denial" (MRA, 2019).⁸⁵⁷
- "Walking around in the store together is a great way to subconsciously activate domestic couple fantasies in her lizard brain" (PUA, 2007).⁸⁵⁸

⁸⁵⁴ Angela Friederici, "The Brain Basis of Language Processing: From Structure to Function," *Physiological Reviews* 91, no. 4 (2011): 1357–92, <u>https://doi.org/10.1152/physrev.00006.2011</u>.

⁸⁵⁵ This is demonstrated further in Chap. VI, A, 286-307.

⁸⁵⁶ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 118.

⁸⁵⁷ Paul Elam, Men. Women. Relationships: Surviving the Plague of Modern Masculinity (London: LPS Publishing, 2019), 30.

⁸⁵⁸ Mystery, *The Venusian Arts Handbook*, 199.

The notion of a "reptilian" or "lizard" brain comes from a now discredited theory from the late 1960s: Paul MacLean's theory of the triune brain.⁸⁵⁹ This theory held that our brains were separated in three layers, which reflected successive phases in human evolutionary history, namely the more ancient or "reptilian" brain, the intermediate or "paleomammalian" brain, and the more recent "neomammalian" complex, i.e., the neocortex. In his monograph on the subject, sociologist Sébastien Lemerle shows how MacLean's simplistic theory was never popular among neuroscientists and has long been abandoned as an explanatory framework for the brain.⁸⁶⁰ Unsurprisingly, no mentions of either reptilian or lizard brains are to be found in my life sciences textbook corpus. However, as shown by Lemerle's study, the "reptilian brain," although never scientifically reputable, has lived on as a popular metaphor, found in the media, the arts, or self-help literature.⁸⁶¹ In the manosphere as well, it persists and is used to convey the impression that behavior stems from the most evolutionarily ancient parts of the brain. As for the term "hindbrain," it is used in neuroscience as a synonym for "rhombencephalon," an evolutionary ancient part of the vertebrate nervous systems.⁸⁶²

Although ancient brain structures do play a crucial role in countless features of human behavior, I argue that the manosphere's use of these metaphors reflects its broader propensity to interpret evolutionary behavioral sciences in strongly deterministic terms. Indeed, those brain metaphors are employed to represent unconscious, inflexible, and most of the time, irresistible instincts. YouTuber CS MGTOW thus states that the "the amygdala kind of adjudicates what's conducive to the long-term biological survival of the species," before employing the even more deterministic phrase of "amygdala tyranny." Yet, if the amygdala is seen as lording over human behavior, CS MGTOW adds in typical manosphere fashion that "what the research shows is that males are less subject" to that tyranny.⁸⁶³ By crudely representing evolutionary psychology as the sole study of deep-seated instincts "hardwired" in our "reptilian brain," manospherians obfuscate the existence of higher cognitive functions in humans, which are no less the product of evolution than emotional mechanisms, and also underlie decision-making and behavior. Moreover, as shown in the next section, these ultra-deterministic terms are disproportionately applied to discussing women's behavior. The most deterministic term regarding instincts in the manosphere is that of "imperative," which turns the statistical tendencies revealed by evolutionary scientists into irresistible dictates of nature.

1.c Biological Imperatives

The term "imperative," used as a noun as in, for instance, "biological imperative" or "sexual imperative," conveys the impression that human biology accounts for rigid and irresistible behavior patterns, as exemplified by this MGTOW forum post: "I think emotions, instincts, desires, etc, are

 ⁸⁵⁹ Paul MacLean, *The Triune Brain in Evolution: Role in Paleocerebral Function* (New York: Plenum Press, 1990).
 ⁸⁶⁰ Sébastien Lemerle, *Le Cerveau Reptilien: Sur La Popularité d'une Erreur Scientifique* (Paris: CNRS éditions,

^{2021).}

⁸⁶¹ For his investigation, the French sociologist has notably attended conferences and seminars, one on emotional wellbeing and the other on conflict resolution, whose curricula were based on the reptilian brain concept, ibid.
⁸⁶² Siegel and Sapru, *Essential Neuroscience*, 23-24.

⁸⁶³ CS MGTOW, "The Evolutionary Psychology of Human Sex and Gender MGTOW," YouTube.com, November 23, 2018, <u>https://www.youtube.com/watch?v=rrBFkm-uAdI&t=7s</u>, consulted March 7, 2022.

basically imperatives which try to get to do things to survive and reproduce. They were developed by the trial and error of evolution" (MGTOW, 2015). Here again, cognition and rationality are just presented as secondary to "biologically" hardwired behavior: "The imperative 'Fuck hot bitches' comes first, and then a thinking process (like PUA) comes second in order to satisfy it" (MGTOW, 2015).

In the manosphere, these imperatives are thought to radically differ between men and women. The male imperative is the following: "Doesn't matter how short, tall, fat, ugly, poor, rich, or boring you may be, you have one option as a man. Die, or spread your genes to the next generation" (TRP, 2018). In similar fashion, Mystery's classic seduction guide opens with this gloomy Darwinian-like injunction: "Nature will unapologetically weed your genes out of existence if you don't take action and learn how to attract women now."⁸⁶⁴ The consequence of this is a supposedly irresistible and constant sex drive: "I as a man, biologically driven365 days a year to ejaculate and produce sperm as often as possible, and having the drive and desire to want it every waning moment [...]" (TRP, 2012). On the other hand, the "female imperative" is used synonymously with the term "hypergamy," which is a cornerstone of manosphere science, and is therefore discussed at length in Chapter VI.⁸⁶⁵ This female imperative (or "hypergamy") is thought to be a woman's drive to find a high-status, high-resources mate, or, as Rollo Tomassi puts it, "long-term provisional monogamy," to which he opposes the male imperative of "unlimited access to unlimited sexuality."⁸⁶⁶

Once again, as for "wiring" and "reptilian" metaphors, this nominal use of the term "imperative" is absent from the life sciences undergraduate textbook corpus.⁸⁶⁷ Indeed, the evolution of true behavioral "imperatives" would be quite unlikely. Life is complex, and so are survival and reproduction, particularly in a social species such as ours. Therefore, any inflexible and irresistible instinct would end having detrimental consequences if followed obdurately: while reproduction is paramount to maximizing fitness, it does not follow that males are always trying to copulate in any given setting.⁸⁶⁸ They also need to allocate resources to finding food, shelter, avoiding predators, etc. These competing selective pressures favored the evolution of context-dependent and flexible mechanisms. Surely the sex drive born of the "male imperative" to

⁸⁶⁴ Mystery, The Venusian Arts Handbook, viii.

⁸⁶⁵ See Chap. VI, B, 1, a, Hypergamy The Crown Jewel Manosphere Ideology, 308.

⁸⁶⁶ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 150; 43.

⁸⁶⁷ The term is only used as an adjective in one of the textbooks to discuss research itself but not behavior, e.g., "investigating interactions between multiple hormones is imperative," or "Evolutionary perspectives are imperative to modeling why humans deviate from the general mammalian pattern of singular maternal care," Lisa Welling and Todd Shackelford, eds., *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology* (New York: Oxford University Press, 2019), 438; 179.

⁸⁶⁸ More sophisticated Darwinian models coming from animal research recognize that reproduction has a cost: "The more effort an individual puts into reproduction, the lower its chances of survival, so the lower its expectation of future reproductive success. Reproductive costs include allocation of resources to reproduction which would otherwise have been spent on own growth and survival and the increased risks entailed in reproduction, such as exposure to predators," Nicholas Davies, John Krebs, and Stuart West, eds., *An Introduction to Behavioural Ecology*, 4th ed. (Oxford: Wiley-Blackwell, 2012), 16.

reproduce is thus modulated by mechanisms to avoid disastrous fitness consequences such as the genetic diseases caused by incest, or the dangers of openly attempting to mate with a woman who is already partnered.

When investigating the London Pickup-Artist community, sociologist Rachel O' Neill discovered that the men she interviewed recurrently equated their involvement in the community with the satisfaction of "evolutionary imperatives," a belief she believes to be central in their worldview and conception of self:

"[I]t is not entirely surprising that men engaged with seduction also cited evolutionary imperatives. Yet the *frequency* and *ease* with which these were invoked by many of those I interviewed was striking, as was the *confidence* and *conviction* with which they were presented. It quickly became evident that this was not simply an explanatory frame that could be reached for when convenient; rather, it functioned as a deeply held and embodied belief. Those who employed this repertoire were utterly convinced of their own evolutionarily ordained need for sex and felt compelled to explain why they and other men must conduct their intimate lives in accordance with such biological dictates."⁸⁶⁹

While this dissertation further explores the manosphere's vision of evolved sex differences at length, it can already be said that its prevailing view of dimorphic and evolved "imperatives" in both sexes is an abusively simplistic and ultra-deterministic extrapolation of evolutionary principles. This is consistent with the popularity of the tropes analyzed above, whereby manospherians present instincts as irresistible unconscious forces, hardwired in the most ancestral parts of the human brain. Tellingly, this ultra-deterministic account of the evolutionary underpinnings of human behavior is disproportionately applied to women, ultimately leading to their dehumanization.

B.2. Women as More Instinctual Creatures

As shown above, manospherians view the sexes as rather different. Women are seen as less capable of logical reasoning, and more susceptible to act based on unconscious impulses—whether they are called emotions, intuition, or instincts. To examine this bias, all occurrences of the ultradeterministic vocabulary on instincts from the Central Content and Other Related Material sections of corpus were tallied.⁸⁷⁰ For each occurrence, I determined whether the term was used to discuss men's or women's behaviors, or if it was used in a generic, gender-neutral way. For each term, to

⁸⁶⁹ O'Neill, Seduction: Men, Masculinity, and Mediated Intimacy, e-book location 58%.

⁸⁷⁰ Due to frequent bans, platform migrations, and archival issues, all content from the manosphere corpus's Random Sample section could not be saved in a format which could be easily parsed. This section was thus excluded from this analysis.

determine if the gender difference was significant, a chi-square test was run.⁸⁷¹ Results are presented in table 4.7 below.⁸⁷²

	About Men	About Women	Generic/Both	Significance
Hardwired	7	27	29	Yes (X^2 =11.8, p < .001)
Wired	9	11	15	No (X ² =0.2, p=0,65)
Imperative	24	165	38	Yes (X^2 =105.2, p < .001)

Table 4.7: Manosphere Use of Ultra-deterministic Vocabulary by Gender

These results confirm the analysis: women are more frequently presented as obeying unconscious and "hardwired" biological impulses or "imperatives."⁸⁷³ Is this also the case for the use of brain metaphors? The same procedure was applied for them, and results are presented in table 4.8 below:

 Table 4.8: Manosphere Use of Brain Metaphors by Gender

	About Men	About Women	Generic/Both	Significance
Lizard Brain	3	5	1	N/A
Reptilian Brain	5	1	4	N/A
Hindbrain	3	12	1	N/A

Those brain images are relatively less frequent than the ones above, making statistical analysis unreliable.⁸⁷⁴ However, a clear pattern emerges from those data. Overall, terms that suggest powerful unconscious and inflexible instincts seems to be disproportionately applied to women. This is visible in manosphere beliefs about women and their behavior.

2.a. The Uniformization of Female Behavior

Female behavior, when seen as primarily motivated by inflexible and irresistible instincts, is therefore logically depicted as extremely uniform. All women are thought to behave in the same way when confronted with the same situations. Thus, manospherians are prone to generalize about women's actions and personalities (note the use of "hard-wired" and the mention of evolutionary psychology in the following quotation):

"There is a core group of female characteristics that is most vexing to men:

- o Emotional weakness
- o Lack of introspection

⁸⁷¹ Nonparametric chi-square test run for each term, excluding the "generic/both" column, to assess the likelihood that the difference in gendered uses of the terms could be due to chance. This is however based on the assumption that male and female behavior are discussed with equal frequency in the manosphere discourse corpus.

⁸⁷² "Hardwired," "hard-wired," and "hard wired" were included. For "imperative," only nominal uses of the term were tallied.

⁸⁷³ For a detailed breakdown of the results by manosphere group, see Appendix 11, 506.

⁸⁷⁴ The chi-square test is underpowered when the contingency tables cell values are below five, as was the case for each term here.

- o Selfishness
- Lack of logic and reason

It is important to know that these are female characteristics hard-wired into the female brain. They will never, ever go away. Perhaps one of my readers will delve in the evolutionary psychology behind this. With that in mind, it's utterly pointless to waste our precious time on telling women to behave better" (TRP, 2011).⁸⁷⁵

In fact, a popular adage in the manosphere, particularly among Red Pill, MGTOW, and incel communities, is AWALT, meaning "All Women Are Like That." The acronym is defined in a manosphere glossary as "[t]he realisation that certain female characteristics and behaviour patterns are universal and unchangeable" (MGTOW, 2020). This is opposed to NAWALT ("Not All Women Are Like That"), which the same glossary defines as a "Generic response designed to deflect any criticism of female behaviour" (MGTOW, 2020). While this belief in total female uniformity in behavior and personality might seem outlandish, it is rather strictly enforced in the manosphere. Thus, when actions of women fit pre-existing images of "female nature," manospherians are wont to use the AWALT catchphrase. However, they dismiss or mock opposite arguments which try to show female diversity, as in this MGTOW glossary entry on NAWALT:

"The perfectly rehearsed deflection "*Not All Women Are Like That*!!!" very often heard from women whenever any man criticizes the very real actions and behavior of the female collective. Not to be confused with a valid argument, NAWALT is used to pull focus and conversation away from the actions and behavior of 99% (or "most") toward the 1% in an attempt to get you to think in terms of the lowest common denominator" (MGTOW, n.d.).⁸⁷⁶

Here, AWALT is nuanced slightly, but still thought to hold in 99% of cases. This is apparently justified by empirical observations of women's actual behavior. Rollo Tomassi makes the same case in *The Rational Male*. After saying that he used to believe in the existence of exceptions to the "female imperative" of hypergamy, he now calls this a "comfortable fiction." After studying sexual dynamics, he now argues that "observably and predictably," women's "behaviors and choices [...] prove the validity of female hypergamy even in the personalities of what we'd consider the most virtuous women." Even the "bright, intelligent, good-girl," he adds, acts as all other women do. He concludes by dismissing the possibility of fundamental behavioral and personality differences among women: "They're the same girl."⁸⁷⁷ There are a lot of discussions in the manosphere regarding the existence of women which would contradict the AWALT principle. The consensus, however, is that those are as likely to exist as mythical creatures. They are thus humorously called "unicorns." When a man comes in the manosphere saying he still believes in the possibility of meeting a "unicorn," i.e., a woman who would differ from the manosphere's monolithic view of female nature, he is promptly chastised and reminded of the AWALT principle.

⁸⁷⁶ MGTOW.com, "Glossary of Terms,"

⁸⁷⁵ The Private Man, "Femininity — You Have to Take the Good with the Bad," December 6, 2011, <u>https://web.archive.org/web/20210216163003/https://theprivateman.wordpress.com/2011/12/06/femininity-you-have-to-take-the-good-with-the-bad/</u>, archived February 16, 2021.

https://web.archive.org/web/20210104143807/https://www.mgtow.com/glossary/, archived January 4, 2021.

⁸⁷⁷ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 190.

This strong belief in female uniformity is linked to hypotheses from evolutionary biology, which predict greater variability in male mammals. One of those is based on sexual selection: since reproductive variance, and thus selective pressure, are greater for male mammals, males might exhibit more variability on those traits which are sexually selected.⁸⁷⁸ Another is linked to genetics. In mammals, males are the heterogametic sex (they have X and Y chromosomes) while females have two X chromosomes. Variation in traits linked to the X-chromosomes should therefore logically be averaged in females, but not in males: "As a result, male mammals are expected to show larger variability than females in all traits that are, at least to some extent, influenced by Xchromosomal alleles."⁸⁷⁹ On the other hand, female mammals are known to have fluctuating hormone levels across the estrous cycle, which can cause fluctuations in emotions, personality, and behavior. In that regard, greater variability should be expected in sex hormone-related traits, relatively to males who do not undergo such cyclical change.⁸⁸⁰ This fluctuation has in fact traditionally warranted exclusion of females from biomedical research samples.⁸⁸¹ Empirical evidence for these hypotheses is mixed. A meta-analysis of body size variability in 385 different species of mammals, birds, insects, and butterflies lent support to the idea that chromosomes have a causal influence. Indeed, in mammals and insects where males are heterogametic, male body size was more variable than female body size, while the opposite was true for birds and butterflies, where females are the heterogametic sex.⁸⁸² A meta-analysis of 293 studies of sex differences in mice compared variability between the sexes on suite of 9932 traits, ranging from social behavior to physiology. Although overall greater variability was found among males, this was a small effect: for thousands of traits, females were actually more variable. There were some traits in which one sex showed much more variability than the other (two standard deviations from the mean): 370 traits for males, and 271 traits for females. The data seems to defy any simple and uniform pattern of greater male variability in mammals.⁸⁸³ In another meta-analysis of 218 traits among 26,900 mice, researchers concluded that their "meta-analytic results also did not support a consistent pattern of either higher male variability or higher female variability."⁸⁸⁴ For example, they found greater variability in males for morphological traits, but females were more variable on immunological traits. These results suggest that trait variability is indeed sex-differentiated but does not follow any one simple and unidirectional pattern.

⁸⁷⁸ Andrew Pomiankowski and Anders Pape Møller, "A Resolution of the Lek Paradox," *Proceedings: Biological Sciences* 260, no. 1357 (1995): 21–29.

⁸⁷⁹ Klaus Reinhold and Leif Engqvist, "The Variability Is in the Sex Chromosomes," *Evolution* 67, no. 12 (2013): 3662–68, <u>https://doi.org/10.1111/evo.12224</u>, 3662.

⁸⁸⁰ To see a summary of those different hypotheses, see Susanne Zajitschek et al., "Sexual Dimorphism in Trait Variability and Its Eco-Evolutionary and Statistical Implications," *eLife* 9 (2020): e63170, <u>https://doi.org/10.7554/eLife.63170</u>.

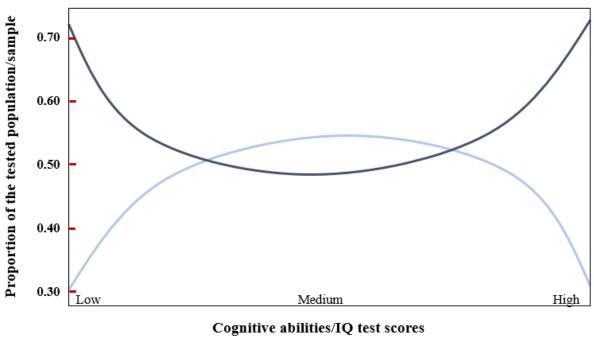
⁸⁸¹ For a theoretical and empirical critique of that tradition, see Brian Prendergast, Kenneth Onishi, and Irving Zucker, "Female Mice Liberated for Inclusion in Neuroscience and Biomedical Research," *Neuroscience & Biobehavioral Reviews* 40 (2014): 1–5, <u>https://doi.org/10.1016/j.neubiorev.2014.01.001</u>.

⁸⁸² Reinhold and Engqvist, "The Variability Is in the Sex Chromosomes."

⁸⁸³ Prendergast, Onishi, and Zucker, "Female Mice Liberated for Inclusion in Neuroscience and Biomedical Research."

⁸⁸⁴ Zajitschek et al., "Sexual Dimorphism in Trait Variability and Its Eco-Evolutionary and Statistical Implications,"6.

In humans, greater male variability has been found for some morphological traits such as adult height or birth weight,⁸⁸⁵ but this concept has mostly been relevant in research—and controversies—around personality, creativity, and intelligence.⁸⁸⁶ Indeed, tests of cognitive abilities like IQ tests often show different distribution in scores, with comparable means between men and women, but more variability in men, i.e., more extremely high and low values. Results tend to be distributed in a pattern I schematically represent below in figure 4.4.⁸⁸⁷





Women's proportion of total
 Men's proportion of total

⁸⁸⁵ Anne-Catherine Lehre et al., "Greater Intrasex Phenotype Variability in Males than in Females Is a Fundamental Aspect of the Gender Differences in Humans," *Developmental Psychobiology* 51, no. 2 (2009): 198–206, <u>https://doi.org/10.1002/dev.20358</u>.

⁸⁸⁶ For discussions of the validity of the greater male hypothesis regarding personality, see Lauren Harrison, Daniel Noble, and Michael Jennions, "A Meta-Analysis of Sex Differences in Animal Personality: No Evidence for the Hypothesis," Greater Male Variability Biological Reviews 97, no. 2 (2022): 679–707, https://doi.org/10.1111/brv.12818; Marco Del Giudice and Steven Gangestad, "No Evidence Against the Greater Male Variability Hypothesis: A Commentary on Harrison et al.'s (2022) Meta-Analysis of Animal Personality," Evolutionary Psychological Science 9, no. 3 (2023): 293-300, https://doi.org/10.1007/s40806-023-00358-z; for assessment of the greater male variability hypothesis on creativity, see Christa Taylor et al., "Gender Differences and Variability in Creative Ability: A Systematic Review and Meta-Analysis of the Greater Male Variability Hypothesis in Creativity," Journal of Personality and Social Psychology 126, no. 6 (2023): 1161-79, https://doi.org/10.1037/pspp0000484.

⁸⁸⁷ See such distributions of results in Steve Strand, Ian Deary, and Pauline Smith, "Sex Differences in Cognitive Abilities Test Scores: A UK National Picture," *British Journal of Educational Psychology* 76, no. 3 (2006): 463–80, <u>https://doi.org/10.1348/000709905X50906</u>, 473; David Lohman and Joni Lakin, "Consistencies in Sex Differences on the Cognitive Abilities Test across Countries, Grades, Test Forms, and Cohorts," *British Journal of Educational Psychology* 79, no. 2 (2009): 389–407, <u>https://doi.org/10.1348/000709908X354609</u>, 399; Wendy Johnson, Andrew Carothers, and Ian Deary, "Sex Differences in Variability in General Intelligence: A New Look at the Old Question," *Perspectives on Psychological Science* 3, no. 6 (2008): 518–31, <u>https://doi.org/10.1111/j.1745-6924.2008.00096.x</u>, 525.

In 2005, Harvard president Larry Summers created controversy in a speech on diversifying the male-dominated fields of science and engineering. He attributed part of this male overrepresentation to difference in variability: he argued that studying STEMs at the highest level required extraordinary cognitive abilities (three to four standard deviations above average), therefore, he claimed, part of the gender gap could be explained by the greater proportion of extraordinarily smart men.⁸⁸⁸ Summers made it clear that this was just a hypothesis, and also mentioned other factors, such as gendered socialization. He also added that he "would like nothing better than to be proved wrong" on this "unfortunate truth" of inherent sex differences in IQ distribution. His remarks created a storm of controversy, in no small part because they echoed earlier sexist doctrines on women's congenital inability to partake in higher education or science. Despite the political uproar, which presumably contributed to his resignation from Harvard, Summers's argument is seen as a plausible hypothesis which is addressed in research on educational and achievement gender gaps in STEMs.⁸⁸⁹

This controversy seems well-known to manospherians, which regularly mention this variability difference in intelligence and even provide explanations for it:

- "[M]en occupy a wider variation on parameters like intelligence; from incredibly dumb to incredibly smart, while women occupy a comfy medium. There is less variation in performance and abilities among women than there is among men. It turns out that, on average, the intelligence of men and women is the same" (MRA, 2012).⁸⁹⁰
- "[T]his is because the distribution of iq between men has a larger range which means that there are going to be more extremely smart men than there are women, but more extremely dumb men than there are women. The reason this happens is because men are more prone to genetic mutations which gives them different traits than can make them sexually successful or not" (incel, 2019).

Predictably, and as in other controversies around the hot-button issue of psychological sex differences such as the Damore Google memo scandal, manospherians choose to side with "nature" and Larry Summers.⁸⁹¹ They think that the outrage caused by his "innocent comments on gender

⁸⁸⁸ Larry Summers, "Remarks at NBER Conference on Diversifying the Science & Engineering Workforce,"Cambridge,Massachusetts,January2005,https://web.archive.org/web/20240205125851/https://www.harvard.edu/president/news-speeches-

summers/2005/remarks-at-nber-conference-on-diversifying-the-science-engineering-workforce/, archived February 5, 2024.

⁸⁸⁹ For Johnson et al., however, this cannot be the whole story. Indeed, they argue that at the highest levels of measured intelligence, the ratio of men to women is 2:1, whereas male-to-female ratios for faculty positions in elite universities in physical sciences, mathematics, and engineering range between 7:1 to 14:1, pointing to the likely influence of other factors, such as sex differences in self-confidence or covert sex discrimination, Johnson, Carothers, and Deary, "Sex Differences in Variability in General Intelligence," 529.

⁸⁹⁰ Stephen Jarosek, "Lessons from Nature: Brain in a Vat," A Voice For Men, January 27, 2012, <u>https://web.archive.org/web/20230530045838/https://avoiceformen.com/women/lessons-from-nature-brain-in-a-vat/</u>, archived May 30, 2023.

⁸⁹¹ As explained above in Introduction, 16.

variance,"⁸⁹² reveal that "[s]cience has probably been suppressed to some degree by feminism" (MRA, 2014). His case is seen as an unjust feminist witch-hunt, in which he was castigated for "perfectly scientific observations," (MRA, 2014) and "*merely speaking* the Truth."⁸⁹³ In fact, the concept of greater male variability enjoys wide popularity in the manosphere and extends to many other domains. In an article entitled "Men Are Exceptional," Australian MRA Robert Brockway uses the male variability argument along Summer's lines, but seemingly extends it to all areas of life:

"Since men vary more in characteristics, it follows that they will be overrepresented among the highest achievers in many areas. [...] As a result, when we look at most areas of achievement, we should see the highest levels dominated by men, with the rest of the men in the field and most women among those who perform in the field competently but without great distinction. If the highest achievers in a field are mostly men, then we should expect the highest paid members of the field to be mostly men too."⁸⁹⁴

He goes on to celebrate the superior achievements of men in politics, business, chess, and the arts. Male variability thus becomes an overarching explaining factor for any difference in careers or achievements, prompting Brockway to dismiss traditional feminist explanations centered around the historical discrimination of women:

"Some argue that female scientists have been marginalised and their accomplishments attributed to men. That may be true in some cases, but the reverse is true also. Marie Curie is often remembered for conducting groundbreaking research in to radioactivity. Most know her name, but few know that she collaborated with two other scientists for this work—her husband, Pierre Curie, and Henri Becquerel. Marie was actually the junior of the three scientists. Despite this, she is often believed by the wider community to have made significant discoveries on her own, with the efforts of her husband and Becquerel forgotten."⁸⁹⁵

In an article entitled "Are Men More Intelligent than Women?" British MRA blogger Angry Harry makes the same argument. After explaining the link between the heterogametic nature of male chromosomes and variability, he concludes that "both the highest and the lowest intelligence levels of men are more extreme than are those of women."⁸⁹⁶ So far, this is nothing that cannot be found in scientific publications. Yet, he adds that "the upshot of all this is that at the high-flier levels, women haven't got a hope of competing with men either in terms of their number or in terms of their achievements." The conclusion reached is similar to Brockway's:

⁸⁹² Robert Brockway, "Men Are Exceptional," A Voice For Men, December 7, 2014, <u>https://web.archive.org/web/20240205140251/https://avoiceformen.com/featured/men-are-exceptional-2/</u>, archived February 5, 2024.

⁸⁹³ Anonymous, "Peer Reviewed Research: The Holy Grail of Truth?," *The Masculine Principle*, March 11, 2015, https://web.archive.org/web/20210105094916/http://masculineprinciple.blogspot.com/, archived January 5, 2021.

⁸⁹⁴ Robert Brockway, "Men Are Exceptional," A Voice For Men, December 7, 2014, <u>https://web.archive.org/web/20240205140251/https://avoiceformen.com/featured/men-are-exceptional-2/</u>, archived February 5, 2024.

⁸⁹⁵ Ibid.

⁸⁹⁶ Angry Harry, "Are Men More Intelligent than Women?," June 5, 2000, <u>https://web.archive.org/web/20201112010854/http://www.angryharry.com/esMenareMoreIntelligentthanWomen.htm</u>, archived November 12, 2020.

"Thus, there is not so much of a glass ceiling created by sex-discriminatory men holding back the realisation of statistical parity between men and women in the higher echelons of the world, the women's relative lack of success in these lofty places is far more due to the choices that they make and their less-variable genetic makeup."⁸⁹⁷

This is a prime example of manosphere appropriation of science. A simple scientific observation (greater male variability in IQ scores) is exaggerated and extended until it reaches a level of generic truth ("since men vary more in characteristics"; "in the higher echelons of the world"). In fact, as shown by the meta-analyses on mice, when measuring for thousands of traits, results on intra-sexual variability on those traits inevitably become much more nuanced and bidirectional. However, the assumption here is that males are more variable on just about any trait, which can be used to justify domination of any field by men. At once, the feminist framework is invalidated and its explanations dismissed: "this is mostly why women, STATISTICALLY SPEAKING, will never be able to compete successfully with men intellectually and nor, therefore, in any task or job which requires intellectual endeavour."⁸⁹⁸ Thus has a specific empirical observation turned into a general and unbreakable rule of nature and society, which conveniently upholds male superiority and turns feminism into an evidence-denying anti-science movement.

Moreover, this neatly fits into the manosphere trope of female uniformity, exemplified by the AWALT acronym. In fact, a Red Piller argues that while AWALT is true, "the truth is that NAMAA (not all men are alike). Men are numerous and varied, as are their desires and interests" (TRP, 2018). In the manosphere, this uniformity is illustrated by common mentions of the idea that "women are herd like" (TRP, 2014). In contrast to women's sheepishly conformist attitudes, men are thought to be independent freethinkers, unfazed by social consensus: "Women are 'herd creatures' and thus women find 'truth' or right and wrong through the consensus of the herd. It is what the herd believes is correct that women believe is 'truth,'"⁸⁹⁹ even if it is 1+1=3, the author of the *Masculine Principle* writes. On the other hand, he goes on, "[i]t is men who insist that 1+1=2, I don't care how much you cows moo at me."900 A similar manosphere metaphor is that of the beehive, which is also sometimes used to allude to women's supposed uniformity. Although discourse analysis does not allow to conclusively determine underlying psychological dynamics, it seems that the manosphere vision of women is an example of the outgroup homogeneity bias. This is the tendency to mistakenly perceive members of an outgroup (here, women) as more similar than members of one's in-group (here, men). This ubiquitous psychological bias, which has been documented in many contexts, might lay the foundation for the manosphere's uniform vision of female nature, but it is certainly also buttressed and exacerbated by their enthusiasm for evolutionary biological accounts of sex differences.

⁸⁹⁷ Ibid.

⁸⁹⁸ Ibid.

⁸⁹⁹ Anonymous, "Social Strategy: Why Men Shouldn't Argue With Women," *The Masculine Principle*, March 11, 2015,

https://web.archive.org/web/20210105100950/http://masculineprinciple.blogspot.com/search/label/Chapter%203%2 0-%20The%20Gender%20War, archived January 5, 2021.

⁹⁰⁰ Anonymous, "The Garden of Eden, Empty Vessels and Relative Truth," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105095757/http://masculineprinciple.blogspot.com/2015/03/empty-vessels-and-relative-truth.html</u>, archived January 5, 2021.

There are consequences to the manosphere's extreme vision of a uniform and hardwired female nature, as shown by the incels.wiki entry on AWALT, which argues that "if a girl claims to be 'not like other girls,' this has to be taken with a grain of salt."⁹⁰¹ Women's individuality is denied, as well as their capacity for rational decision-making, which can in turn justify a complete disregard of their motives and agency.

2.b. "Never Pay Attention to What they Say": The Denial of Female Agency

As discussed above, manospherians tend to present human behavior in a very deterministic way, where decision-making is solely determined by instinct: "Most of us here think that the average person decides with their rational mind, when in reality ancient biological drives decide on their behalf and the rational mind only rubber-stamps the emotional decisions" (MGTOW, 2014). Moreover, this type of framing is mostly used to discuss women's behavior:

- "They can't help it. Women are naturally attracted to, and attach to, dominant men. So be one" (MGTOW, 2006).
- "Women's lives are governed by constantly fluctuating hormones" (MGTOW, 2017).
- "A woman has no control or choice over feeling this way; like any other, she is simply a creature acting in accord with her biology" (TRP, 2014).⁹⁰²

Since women are thought to all behave in the same very predictable way (AWALT), knowledge of biology and evolutionary psychology is seen as a tool to gain mastery in interactions and relationships with them: "once you understand women's fundamental wiring, women will lose the power to manipulate you" (TRP, 2018). Manospherians sometimes present themselves as students of female nature, who apply the findings of evolutionary psychology to get what they want in their interactions with women. In doing so, they highlight the importance of observing women's actions, rather than listening to their words. As is the case in the sciences dealing with animals who cannot communicate their motives or intentions to humans, women's behavior is solely observed through the prism of evolutionary psychology are unconscious, making the very determiners of our actions unknown to us.⁹⁰³ This somewhat justifies the principle of looking at actions rather than words, as do all psychologists studying the unconscious. Thus, Red Pill blogger the Private Man urges his reader to apply this principle:

"Women reject men all the time for reasons that seem remarkably ridiculous to us guys. But when evolutionary psychology is taken into consideration, the reasons for those rejections become much, much clearer. As well, when the social expectations are stripped away and those pesky words

⁹⁰¹ Incels.wiki, "AWALT," <u>https://web.archive.org/web/20240208155735/https://incels.wiki/w/AWALT</u>, archived February 8, 2024.

⁹⁰² Edward Adams, "The Equality Movement is Allowing Women to Tyrannize Men," Return of Kings, March 7, 2014, <u>https://web.archive.org/web/20180126104609/https://www.returnofkings.com/30492/the-equality-movement-is-allowing-women-to-tyrannize-men</u>, archived January 26, 2018.

⁹⁰³ Moreover, evolutionary theorists have argued that even the motives that we consciously believe in might in fact be self-deceptive. Indeed, evolution of the propension to deceive oneself might have been adaptive if it allowed to better deceive others. Robert Trivers, *Deceit and Self-Deception: Fooling Yourself the Better to Fool Others* (London: Allen Lane, 2011).

ignored, the actions of women reveal all. All red pill men must examine and plan/react accordingly to those actions."904

He concludes by saying that "[b]iology always trumps social expectations," and advises his readers to "[i]gnore the words, respect the actions. The words represent the social expectation. The actions represent the biological imperative."⁹⁰⁵ This is a line of reasoning which could be justified in research. For instance, experimental psychologists often deceive research subjects who are told to perform bogus tasks or answer useless questions while they are being observed on something completely different. Sometimes, psychological research designs allow to assess if people's stated preferences and motives match their actual decisions and behavior. For example, in a 2008 dating study, Eastwick and Finkel found that people underestimated the importance of physical attractiveness when asked about their partner preferences: their actual behavior in the subsequent speed-dating experiment proved to be driven by aesthetics much more than they cared to admit.⁹⁰⁶ Commenting on this experiment, incels.wiki elaborates:

"Studies like this suggest why it may not be useful to ask women what is most important to them, as in many scientific studies (mainly those relying on rating traits of hypothetical partners, or self reported preferences), they have not been able to give reliable or factual answers on this subject. As in most cases, nature is best learnt through objective observation i.e. revealed preferences vs. stated preferences."⁹⁰⁷

This reveals a clear gender bias which is absent from the scientific literature: no psychologist would argue that this principle should only apply to women. On the other hand, even though the original experiment concerned both genders, the takeaway for incels is a well-established manosphere principle: women are not to be believed when they talk about their motives or preferences. To manospherians, these are just layers of post-facto justifications provided by their rationalization hamster. Since women are all the same (AWALT), knowledge of evolutionary biology is the best tool to understand them, while their words can be ignored or dismissed. This is a common argument among incels, as exemplified by the popularity of a Reddit post entitled: "Never pay attention to what they say, only what they do" (incel, 2018).

More generally, the idea of disregarding the content of women's discourse is widespread, as illustrated by much of the advice found regarding interactions with women. For example, Red Pillers and Pickup-Artists believe that women often unconsciously test men through what they call "shit tests." A shit test is defined as a remark or concern expressed by a woman, whose purpose is to gauge a man's reaction.⁹⁰⁸ Seduction coaches and Red Pill writers provide the same advice to

⁹⁰⁴ Pill," The Private "He's About То Take The Red 28, 2011, Man, June https://web.archive.org/web/20200814064343/https:/theprivateman.wordpress.com/2011/06/28/hes-about-to-takethe-red-pill/, archived August 14, 2020.

⁹⁰⁵ Ibid.

⁹⁰⁶ Paul Eastwick and Eli Finkel, "Sex Differences in Mate Preferences Revisited: Do People Know What They Initially Desire in a Romantic Partner?," *Journal of Personality and Social Psychology* 94, no. 2 (2008): 245–64, <u>https://doi.org/10.1037/0022-3514.94.2.245</u>.

⁹⁰⁷Incels.wiki,"TheScientificBlackpill,"https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific_Blackpill,archivedDecember25,2023.

⁹⁰⁸ The Red Pill concept of "shit test" is explored further in IV, C, 221.

their readers: a shit test should never be taken seriously. Rather than answering the concern expressed, a man should show his indifference in order to "pass" the test: "you need to just be silly or not answer. Shit tests are easy to pass" (PUA, 2012). Here again, women's actual words can systematically be dismissed by assuming better knowledge of their underlying "true" and instinctual motives. Similarly, there are many guides in the manosphere that advise men on how to communicate with women. A recurrent feature of those is to decipher some hidden meaning behind women's words. Here again, through psychological speculations on women's "true" motives and nature, their actual words are considered irrelevant.

As evolutionary psychology enthusiasts, manosphere activists perceive themselves as better suited to understand female behavior than women themselves. While a sole focus on behavior might make sense for behavioral scientists, this principle has disturbing consequences when extended to everyday life or to the ideological domain, as shown by the following examples on sexual violence and rape, where women's agency and words are systematically dismissed. Indeed, manosphere users regularly comment on the abundance of sexual submission fantasies in popular romance novels such as *Fifty Shades of Grey*, taking this as evidence of deep-seated and universal female desires.⁹⁰⁹ Red Pill writer Ian Ironwood, who happens to work in the porn industry, concurs:

"Romance novels, the popular ones, all have high Alpha leads with dominant, generous personalities. Men with controlling natures have a particular allure – domination runs extremely high on the list of common female fantasies. And the plot lines feature plenty of rape and near-rape – far more than porn can ever claim.

Let me assure you, if a movie came across my desk with a "positive outcome rape" scene,⁹¹⁰ it *wouldn't get sold*. But hundreds of romance novels sell every hour on Kindle and Nook, replete with control and male domination. You want "rape culture"? Check out the Romance section, Ladies. Video porn is *wholesome* by comparison."⁹¹¹

According to dating coach Heartiste, these submission and rape fantasies in fact belong to the universal female "hindbrain" programming:

"Rape fantasy reflects a deep, inborn, uncompromising sexual desire by women to be rendered helpless, almost childlike, by a more powerful man. It is the submissive scrawling of their hindbrains, a message in a novel sailing forth from the female limbic labyrinth."⁹¹²

A Red Pill writer elaborates in an article entitled "How To Train Bitches":

"The only way the masses of neon-haired, socially-maladjusted land whales can even begin (vainly) to fight against this deep-rooted lizard-brain urge is to try and recruit the higher brain functions to

⁹⁰⁹ E.L. James, *Fifty Shades of Grey* (New York: Vintage Books, 2012). This originally self-published British erotic romance novel became one of the world bestselling books in the mid-2010s.

⁹¹⁰ Ironwood, *The Manosphere*, "It should be noted here that the same scenarios used so often as to be stereotypical in romance novels are actually forbidden in video porn by most reputable porn companies, what is known as 'positive outcome rape.' That is, when the heroine is raped by the hero, and she ends up liking it," e-book location 49%.

⁹¹¹ Ibid., e-book location 87%.

⁹¹² Heartiste, On Game, 201.

momentarily subvert it. They must indoctrinate the higher brain, insist tenaciously that women are an oppressed class, and inspire women to defy their firmware with conscious zeal" (TRP, 2018).

This passage features all the elements reviewed so far, beginning with many references to the brain. First, the female desire for submission is a "deep-rooted lizard-brain urge." As such, this is part of women's nature or "firmware."⁹¹³ Yet, feminists try to fight it by using rationality and higher brain functions, but these efforts at "defying" their nature are vain.⁹¹⁴ Ultimately, women's rationality fails to overcome their "powerful built-in instinct to submit to the commands of dominant males" (TRP, 2018). Interestingly, the motivations of feminists are not examined: why they would mobilize against male domination and theorize about it ("insist tenaciously that women are an oppressed class") seems irrelevant. Another Red Pill writer musing on the same topic offers a deliberately provocative explanation:

"I also speculate – as the psychoanalytical icing on the cake of the rape culture hysteria – that sexually undesirable feminists are motivated by hindbrain fury at the very idea of male sexual desire, of which rape is one particularly barbaric manifestation. Feminists hate the rapist skulking in the dark alley, because they suspect that he would allow them to pass by unscathed."⁹¹⁵

These examples show the rhetorical power of dismissing motivations altogether: women might be mobilizing against male domination, but this is just because they secretly crave it. In fact, those who are most vocal against it may really crave it the most. Once again, the invocation of brain metaphors ("hindbrain fury") dresses these speculations in neurological garb. In her critique of canonical PUA text *The Mystery Method*,⁹¹⁶ feminist scholar Amanda Denes highlights the dangers of the manosphere's dismissive attitude towards women's words.⁹¹⁷ She shows how this seduction guide confuses biology and sexual consent, as Mystery encourages his readers to escalate sexual interactions with women, even if they resist: "If you're undressing her and she says, 'We should stop,' just agree with her... and then keep going. 'I know, baby,' you reply as you continue to undress her.⁹¹⁸ He justifies this disregard for women's verbal resistance by appealing to women's nature and implicit desire for sexuality, which could just be turned on by anyone using the right methods. Denes therefore argues that women are viewed as controllable bodies rather than autonomous people throughout *The Mystery Method*:

"The implications of such a method are the perpetuation of several false beliefs regarding female sexuality. First, the text promotes the false idea that women's sexuality is both uniform and controllable, and thus that with the appropriate techniques women can be persuaded to engage in

⁹¹³ Merriam-Webster Online Dictionary, "Firmware," "computer programs contained permanently in a hardware device (such as a read-only memory)," <u>https://web.archive.org/web/20240208140426/https://www.merriam-webster.com/dictionary/firmware</u>, archived February 8, 2024.

⁹¹⁴ In manosphere imagery the mention of "neon-haired, socially-maladjusted land whales" would immediately summon stereotypes of feminist women, usually depicted as sexually unattractive and overweight.

⁹¹⁵ Frost, "'Rape Culture' was manufactured to wage an unjust war against men," Return of Kings, December 24, 2013, <u>https://web.archive.org/web/2020111191928/https://www.returnofkings.com/22081/rape-culture-was-manufactured-to-wage-an-unjust-war-against-men</u>, archived November 11, 2020.

⁹¹⁶ Mystery, The Venusian Arts Handbook.

 ⁹¹⁷ Amanda Denes, "Biology as Consent: Problematizing the Scientific Approach to Seducing Women's Bodies," *Women's Studies International Forum* 34, no. 5 (2011): 411–19, <u>https://doi.org/10.1016/j.wsif.2011.05.002</u>.
 ⁹¹⁸ Cited in ibid., 417.

sexual activity. This idea puts the heterosexual male in control of the interaction and removes women's agency and diversity in sexual pursuits. A second problematic idea put forth in the text is the belief that all resistance is token resistance. Presenting such incorrect concepts as facts to large audiences may increase women's risk of nonconsensual or forced sexual activity."⁹¹⁹

Her analysis concurs with much of what has been analyzed above. In the manosphere, men claim such knowledge of female biology that they often disregard women's words, agency, and autonomy. Denying someone's capacity for rational thought and responsible decision-making can in turn justify all kinds of subservience and domination: isn't it why children are supposed to obey their parents, or animals their masters? As made clear by Denes, it is hard to read such pronouncements without concern for the conclusions drawn by the readers of these prescriptive manosphere texts. In fact, there is evidence than this translates into real-life attitudes among manospherians. For her ethnographic immersion in the London Pickup-Artist community, Rachel O'Neill conducted dozens of interviews. She worries that her interviewees "Stefan and Rahul position themselves as *licensed* to contravene women's stated desires because they know what women 'really' want," before concluding that "the majority of those [she] interviewed buy into this system of expertise."⁹²⁰ Unsurprisingly, beliefs in the rank-and-file community members mirror those found in that community's key texts.

Sexual consent is supposed to occur between equal and autonomous people, an equality which is often strained in manosphere texts on women and sex, as in this Red Pill article: "If we consider the nature of heterosexual intercourse, it quickly becomes obvious why women, even in our 'progressive' era," remain slaves deep down."⁹²¹ The preoccupying imagery of slavery echoes a broader trend in which women are dehumanized through the use of biology.

2.c. "They are Beasts Themselves": The Dehumanization of Women

We have already seen how women are pictured as uniform through "herd" or "hive" imagery. This animalistic portrayal of female behavior sometimes leads down a dangerous path of dehumanization and violence. In its milder forms, it is mostly a paternalistic attitude; women just obey their instincts, so they should not be held accountable for their actions, as is the case for non-human animals:

• "I was trying to figure out if I should remain angry. I then realized they were PROGRAMMED by Evolution to behave in a certain way and they were largely unaware of their own programming.

One doesn't get angry at a snake for it being unable to walk...does one?" (MGTOW, 2020).

• "I think women are different [...] This is stuff they can't even help. It's so deep in them and they don't even understand it. They don't know themselves why they do things, you know,

⁹¹⁹ Denes, "Biology as Consent," 418.

⁹²⁰ O'Neill, *Seduction: Men, Masculinity, and Mediated Intimacy*, 107. The researcher changed the names of the interviewees to protect their privacy.

⁹²¹ Edward Adams, "The Equality Movement is Allowing Women to Tyrannize Men," Return of Kings, March 7, 2014, <u>https://web.archive.org/web/20180126104609/https://www.returnofkings.com/30492/the-equality-movement-is-allowing-women-to-tyrannize-men</u>, archived January 26, 2018.

much like a dog will do a certain thing, and then it's an instinctual thing, right?" (MGTOW, 2017).⁹²²

In those two examples, even though female autonomy and responsibility are completely denied on the basis of instinct, the tone is meant to be benevolent. The first MGTOW says discovering evolutionary psychology reduced his anger towards women, and the one who compares them to dogs goes at length in the interview in order not to be portrayed as misogynistic: "OK, this is going to sound a bit negative. And again, I'm trying not to be negative towards anyone. It's just the way they're built;" "I don't want to get the idea that this is in any sense anti anything."⁹²³ Before going further, it must be noted that the examples analyzed below only represent the most extreme fringes of the manosphere. A lot of manospherians, particularly in the rather egalitarian Men's Rights movement, would doubtlessly disavow those ideas.⁹²⁴ However, these are the most extreme manifestations of the more widespread tropes and beliefs presented above, where denial of women's individuality and agency is a breeding ground for all sorts of violent dehumanization.

In the incel community in particular, women are routinely dehumanized. Indeed, the most popular term to refer to women is that of "femoid" or "foid," which is a contraction of "female" and "humanoid" or "android." Sociologist Winnie Chang shows that incels openly admit the dehumanizing purpose of this term: "Femoid' is defined on /r/Braincels as a 'derogatory dehumanising term for women' that is used 'to imply they aren't truly human."⁹²⁵ In its report on the incel phenomenon for the European Commission, the Radicalisation Awareness Network also notes that "dehumanisation of women is commonplace across the incel ecosystem," reminding that in addition to "femoid," incels also refer to women and girls as "holes" or "toilets."⁹²⁶ This dehumanization is however not limited to incels: a team of Big Data researchers have found similar prevalence of dehumanizing jargon among MGTOW communities.⁹²⁷

As argued by philosopher David Livingstone Smith, dehumanization has historically been the handmaid of mass violence and genocide: it is much more likely that such atrocities would be

⁹²² Ronin Man, "The Predatory Female: READ AT YOUR OWN RISK," YouTube.com, January 26, 2017, <u>https://web.archive.org/web/20210121095635/https://www.youtube.com/watch?v=HPeM9bFWIXE&ab channel=R oninMan</u>, archived January 21, 2021.

⁹²³ Ibid.

⁹²⁴ For example, rule n°10 of the r/mensrights subreddit states that "[s]erious misogyny or misandry will be removed - this doesn't include posts about general traits of women/men, but attacks on either gender as a whole," <u>https://web.archive.org/web/20240430204154/https://www.reddit.com/r/MensRights/</u>, archived April 30, 2024.

⁹²⁵ Winnie Chang, "The Monstrous-Feminine in the Incel Imagination: Investigating the Representation of Women as 'Femoids' on /r/Braincels," *Feminist Media Studies* 22, no. 2 (2020): 254–70, https://doi.org/10.1080/14680777.2020.1804976, 6.

⁹²⁶ Radicalisation Awareness Network, "Incels: A First Scan of the Phenomenon (in the EU) and Its Relevance and Challenges for P/CVE" (European Commission, 2021), 6. In Italian incel communities, women are called "np," which is explicitly defined as a dehumanizing term on incels.wiki as "short for *non-persons*, it refers to women in the sense that they are not human," Incels.wiki, "Italian Incelosphere," https://web.archive.org/web/20240711164508/https://incels.wiki/w/Italian incelosphere, archived July 11, 2024.

⁹²⁷ Tracie Farrell et al., "On the Use of Jargon and Word Embeddings to Explore Subculture within the Reddit's Manosphere," in *12th ACM Conference on Web Science*, WebSci '20 (New York: Association for Computing Machinery, 2020), 221–30, <u>https://doi.org/10.1145/3394231.3397912</u>.

committed on populations who are considered as "subhuman" by the perpetrators.⁹²⁸ Chang concurs: "Incels' understanding of 'women' is indelibly linked to their conception of them as 'femoids,' a term that dehumanises women into a subhuman Other on whom violence can be justifiably enacted."⁹²⁹ While causality is hard to establish, it is therefore unsurprising to find the most extreme dehumanization of women among the only manosphere community to have inspired several deathly attacks. In Santa Barbara killer Elliot Rodger's premortem autobiography, this dehumanization could not be made much clearer (note the use of "wired" and the reference to evolution):

"Why do women behave like vicious, stupid, cruel animals who take delight in my suffering and starvation? Why do they have a perverted sexual attraction for the most brutish of men instead of gentlemen of intelligence? I concluded that women are flawed. There is something mentally wrong with the way their brains are wired, as if they haven't evolved from animal-like thinking. They are incapable of reason or thinking rationally. They are like animals, completely controlled by their primal, depraved emotions and impulses. That is why they are attracted to barbaric, wild, beast-like men. They are beasts themselves. Beasts should not be able to have any rights in a civilized society."⁹³⁰

After Rodger emailed this autobiographical text to his acquaintances, he then drove to a sorority house and went on a killing spree before shooting himself.⁹³¹ Although this is a rare and extreme case, no doubt driven by the killer's peculiar biography and psychology, it echoes common themes and dynamics of the incel community.

In the manosphere, evolutionary psychology and related fields are used to highlight the extent and importance of human instincts, which are conceived as strong and inflexible, with little room for environmental input or interpersonal differences. In the ideological struggles around the blank slate, manospherians have firmly embraced the side of nature, to a degree that often goes beyond the scientific state of the art. This is embedded in a wide web of metaphors, concepts, and associations. From "lizard brain" and "hardwired" metaphors which depict behavior as inflexible, to claims about male variability and female uniformity ("AWALT"), manospherians invoke seemingly scientific terminology to depict women's supposedly universal nature. The application of this psychological frame of analysis results in another double standard absent from the scientific literature: women's words are ignored, for only their actions reveal their true unconscious and instinctual motives. However, as men who pride themselves on their rationality, manospherians do not extend this principle to themselves. This denial of female agency is a powerful tool to dismiss feminism at once and can justify several misogynistic attitudes ranging from somewhat benevolent paternalism to complete dehumanization and violence. More than a gross misunderstanding of basic evolutionary principles, or the widespread use of pseudoscience, the manosphere's view of

⁹³⁰ Elliot Rodger, My Twisted World, May 23, 2014,

⁹²⁸ David Livingstone Smith, *Making Monsters: The Uncanny Power of Dehumanization* (Cambridge, London: Harvard University Press, 2021).

⁹²⁹ Chang, "The Monstrous-Feminine in the Incel Imagination," 6.

https://web.archive.org/web/20210104142706/https://assets.documentcloud.org/documents/1173619/rodgermanifesto.pdf, archived January 4, 2021, 117.

⁹³¹ See Chap. I, B, 66.

instincts is an intricate yet coherent web of exaggerations, double standards, and metaphors. But there is more to it: manospherians also generate their own "homemade" evolutionary hypotheses (or "just-so stories,") a phenomenon whose scope is unique to these groups and communities.

C. MERE JUST-SO STORIES? ADAPTATIONIST HYPOTHESIZING IN THE MANOSPHERE

The phrase "just-so story" comes from the title of a 1902 children's book by British writer Rudyard Kipling.⁹³² In the context of evolutionary science, its use comes from the sociobiology controversy of the 1970s, when US paleontologist Stephen Jay Gould, an ardent critic of sociobiology, used this phrase to lambast what he saw as sociobiologists' overt reliance on fanciful hypotheses. In a 1978 critique entitled "Sociobiology: The Art of Storytelling," he wrote: "When evolutionists study individual adaptations, when they try to explain form and behaviour by reconstructing history and assessing current utility, they also tell just-so stories—and the agent is natural selection."933 This can be explained by the different disciplinary traditions of two different branches of evolutionary science. While paleontologists like Gould rely mostly on the fossil record, or nowadays on genetic evidence, which are material products of evolutionary history, behavioral scientists have to rely on hypotheses concerning the potential adaptive functions of behavior.⁹³⁴ Nowadays, this hypothetical process has proved so fruitful that it has spawned many fields, such as evolutionary medicine or psychology, causing an ardent defender of this method to rejoice about the demise of what he calls Gould's "slur": "Evolutionary psychologists and other adaptationist researchers have rightly come to ignore the just-so story slur that Gould attempted to apply to entire fields of study."935 And yet, the "just-so story" phrase is still relevant today.

C.1. Differentiating Just-So Stories from Evolutionary Hypotheses

While the term is not applied to entire fields anymore, except by the most pugnacious critics, it is still useful to differentiate between unsubstantiated speculations and hypotheses supported by evidence, as explained by Mark Olson and Alfonso Arroyo-Santos:

"[D]ifference between a just-so story and a well-accepted adaptationist explanation is the amount of direct evidence available. Like all attempts to infer things about the deep past, adaptationist explanations are most trusted when they have a lot of evidence from a diversity of sources. That more evidence is better is obvious."⁹³⁶

⁹³² Rudyard Kipling, Just So Stories (London: Macmillan, 1902).

⁹³³ Stephen Jay Gould, "Sociobiology: The Art of Storytelling," New Scientist 16 (1978): 530–33, 530.

⁹³⁴ For a magistral exploration of the different methodological and epistemological traditions on both sides of the sociobiology controversy, see Ullica Segerstråle, *Defenders of the Truth: The Sociobiology Debate* (Oxford: Oxford University Press, 2000).

⁹³⁵ John Alcock, "Just So Stories," in *Encyclopedia of Evolutionary Psychological Science*, ed. Todd Shackelford and Viviana Weekes-Shackelford (Cham: Springer International Publishing, 2018), <u>https://doi.org/10.1007/978-3-319-16999-6_1378-1</u>.

⁹³⁶ Mark Olson and Alfonso Arroyo-Santos, "How to Study Adaptation (and Why to Do It That Way)," *Quarterly Review of Biology* 90, no. 2 (2015): 167–91, <u>https://doi.org/10.1086/681438</u>, 168.

In evolutionary behavioral scientific literature, different hypotheses compete, and some are dismissed when contradictory evidence is provided, while the ones whose predictions consistently resist falsification get elaborated and refined. As pointed out by behavioral ecologist John Alcock, "no journal accepts untested hypotheses," which implies that "silly hypotheses," or just-so stories, are indeed rare in scientific literature.⁹³⁷ I argue that even a hypothesis which has been widely dismissed by researchers should not be labeled as a just-so story: as long as the researchers who proposed it at the time provided empirical evidence, which was accepted in a peer-reviewed publication, even subsequent disproval does not change the nature of the hypothesis. Otherwise, it would be fair to assume that the passing of time will prove most of the current content of evolutionary behavioral sciences to have been just-so stories, as the scientific process of refining and weeding out of hypotheses continues. This would be quite an unjust reflection on the scientists who have rigorously produced adaptationist hypotheses and empirical tests. The definition of "just-so story" adopted in this dissertation is therefore the following: a hypothetical adaptationist explanation for behavior whose predictions have not been rigorously tested so as to warrant publication in a scientific outlet. It is henceforth abbreviated as JSS.

Anyone could formulate a JSS about any organism's trait or behavior. The principle is not difficult to grasp. Given the success of popular evolutionary science books by writers like Richard Dawkins or Steven Pinker, millions of readers have been exposed to the basics of evolutionary reasoning and hypothesizing. Thus, laypeople could use adaptationist reasoning to account for the behavior they observe around them, or for any difference among populations or between men and women. In fact, this is exactly what manospherians do on a massive scale. This is in itself a remarkable phenomenon: online communities are employing evolutionary scientific concepts and reasoning to make sense of the world, echoing Pickup-Artist coach Nick Krauser's insistence that science is not about "wearing a lab coat," or "citations in a journal."⁹³⁸ To understand this unique phenomenon and how it fits the broader picture of manosphere science, the next section systematically reviews the just-so stories found in the manosphere corpus.

C.2. The Just-so Stories of the Manosphere: A Systematic Review 2.a. How to Identify a Just-So Story? Methodological Challenges

Let us go back to my definition of a JSS: a hypothetical adaptationist explanation for behavior whose predictions have not been rigorously tested so as to warrant publication in a scientific outlet. While I believe this definition to be epistemologically sound, it makes identification technically impossible. Indeed, one cannot guarantee that a given hypothesis found in the manosphere has not in fact been published once in a scientific journal. Undergraduate textbooks in evolutionary psychology, behavioral endocrinology, and behavioral ecology provide a wide repertoire of hypotheses, but they cannot possibly cover the whole production of evolutionary hypotheses in their respective fields. This challenge should not however preclude analysis of manosphere just-so stories. They are an important feature of manosphere science,

⁹³⁷ Alcock, "Just So Stories."

⁹³⁸ See above, IV, A, 180.

showcasing the appropriation of adaptationist reasoning by lay communities, as well as their undeniable creativity. In order to weed out authentic JSSs from legitimate hypotheses for analysis, I consequently followed a three-step selection process.

Firstly, I reviewed the manosphere corpus in search of evolutionary explanations for human behavior. All those which were, to my knowledge, potentially absent from the evolutionary scientific literature were retrieved. For the explanation to be considered as a true JSS, the manospherian needed to hypothesize about the potential evolutionary history (fitness benefits, evolutionary process) behind a particular human behavioral or cultural trait. Statements such as "Evolution made it that way," or "that's just because of evolution," which did not provide any further explanations, were not counted. Lastly, when several manospherians proposed substantially similar just-so stories, these were counted as being the same. Indeed, the goal of this systematic review was to grasp the content and diversity of those adaptationist stories, and not to measure their prevalence.⁹³⁹

Secondly, all those potential manosphere JSSs were reviewed by two evolutionary scientists, with wide knowledge of the field.⁹⁴⁰ They looked at each individual JSS, and signaled those which reminded them of evolutionary hypotheses from peer-reviewed publications. This allowed to dismiss 18 JSSs from the tally. Lastly, analysis of this preliminary dataset of 99 potential manosphere JSSs was presented at the 2024 Evolution and Human Behavior European Association (EHBEA) conference in Montpellier, France.⁹⁴¹ The presentation acknowledged the difficulty of discriminating between Internet-made just-so stories and legitimate evolutionary hypotheses, and called on the audience for help. The evolutionary behavioral scientists in attendance were then presented with a QR code linking towards the dataset, and asked if they could kindly review this data after the conference, in order to eliminate hypotheses they recognized from the literature. No additional hypotheses were dismissed as a result of this step.⁹⁴² After this three-step selection process, which is summarized in figure 4.5 below, there remained 99 presumably manosphere-made just-so stories, which are analyzed in the next section.⁹⁴³

⁹³⁹ The most popular just-so stories of manosphere science, which get routinely repeated and invoked, are studied at length further in this dissertation. See Chap. IV, C, 221 for shit tests; Chap. IV, C, 218 for approach anxiety; and Chap. V, A, 230 for male disposability When a similar JSS was proposed by members of different communities, it was "attributed" to the community where it is more widespread.

⁹⁴⁰ Dr Sarah Johns, who has been teaching and researching evolutionary behavioral sciences for more than two decades and was the academic head of Biological Anthropology at the University of Kent; and Macken Murphy, PhD researcher at the University of Melbourne's Evolution Lab, and host of the *Species* podcast which widely covers topics in nonhuman animal behavior as well as human evolutionary sciences. Thanks to both for their thorough reviews.

⁹⁴¹ Louis Bachaud, "Darwinians Online: Reflecting on Evolutionary Human Sciences through Analysis of Laypeople's Evolutionary Hypotheses," EHBEA 2024, Montpellier, April 19, 2024.

⁹⁴² Unfortunately, I did not plan for a dataset spreadsheet capable of recording online visits. This means I do not know whether academics consulted the list and did not recognize any hypothesis from the literature, or whether they did not consult it at all.

⁹⁴³ For exhaustive list and contents of these manosphere just-so stories, see Appendix 28, 556.

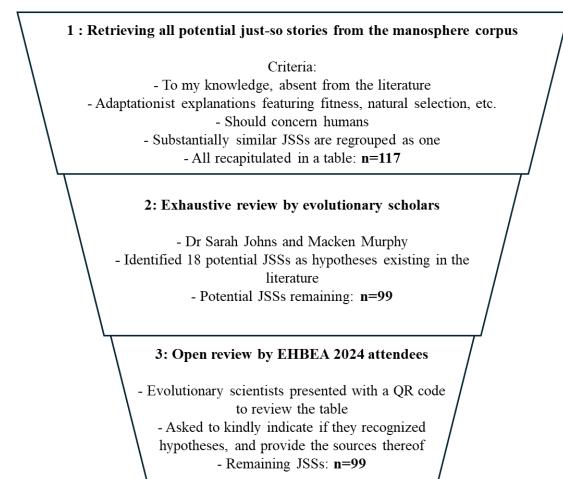


Figure 4.5: Three-step Selection Process for Identifying Manosphere Just-So Stories

After identifying and retrieving these JSSs from the manosphere corpus, several variables were identified for analysis.

2.b. Distinctive Features

An inherent feature of manosphere JSSs is that they are often formulated by laypeople in relatively casual conversational contexts, such as Reddit or forum discussions. Moreover, they usually lack the appropriate scientific vocabulary. As a result, the evolutionary process behind a given JSS can be quite blurry, as in the following from a MGTOW YouTube interview discussing marriage dynamics after having children:

"And I think this is more subtle, maybe it's less sudden, but I think once she has kids, you sort of go down further down in her list of priorities just because she cares about survival, right, survival of human race. So she doesn't care about you as much, especially as the kids grow older, I think your part is a little bit done."⁹⁴⁴

⁹⁴⁴ Ronin Man, "The Predatory Female: READ AT YOUR OWN RISK," YouTube.com, January 26, 2017, <u>https://web.archive.org/web/20210121095635/https://www.youtube.com/watch?v=HPeM9bFWIXE&ab_channel=R_oninMan</u>, archived January 21, 2021.

The context and content of the discussion makes clear that there is some sort of Darwinian reasoning involved here. Yet, if such a JSS is going to be analyzed and compared to others, it should be clarified. Therefore, each JSS in the corpus was decomposed as follows. Firstly, the trait or behavior supposed to have evolved was identified. Secondly, the fitness benefits underlying this speculative adaptation were made clear. Thirdly, I put a name on the evolutionary process behind the JSS. The one above is thus summarized in table 4.9:

Behavior/Trait	Fitness Benefits/Evolutionary History	Evolutionary Processes
Women tend to	The man's part in reproduction being	Group selection ⁹⁴⁵
lose interest in their	done, investing in her children becomes a	
long-term mate	woman's priority. This would have	
after having	favored the survival of the species and	
children with him.	thus been subjected to natural selection.	

Table 4.9: Example of Decomposing the Content of a Manosphere Just-So Story

Manosphere writers and pundits sometimes recognize that they are just offering speculations to their readers. In his book *The Rational Male*, Red Pill writer Rollo Tomassi advises his readers not to masturbate before going on a date. Over evolutionary history, he argues, men with fewer mating opportunities would have been prone to masturbate more, and thus be chronically depleted of testosterone. He calls those "pheromonal beta" males. According to Tomassi, women evolved the unconscious ability to pick up on cues to avoid these men and select instead sexually assertive "alpha males" with higher testosterone, which made for better mating partners. He concludes by saying: "[a]nd now for the disclaimer; I'm not a endocrinologist, biochemist or physician. I'll admit this is a work in conjecture, but it's plausible conjecture."⁹⁴⁶ Here, the author honestly recognizes that he is just offering a JSS—which I consider to be a rather implausible one.⁹⁴⁷

However, the more frequent scenario in the manosphere is for adaptationist speculations to be couched in very assertive language. Thus, after remarking that "in reality women burn to copulate more frequently because they derive more pleasure from it," MRA Roy Den Hollander adds: "Evolution required women to enjoy sex more; otherwise, no female would risk the pain, burden and sacrifice of childbirth and rearing just to get laid if the pleasure she felt equaled that experience by a man."⁹⁴⁸ Here, there are no discursive marks of hypothesis, and the reader has no way to differentiate this JSS from a legitimate and empirically-supported scientific hypothesis. While experts recognize that the use of adaptationist reasoning is not enough to warrant credibility,

⁹⁴⁵ For more details on group selection, see Chap. V, A, 235.

⁹⁴⁶ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 136.

⁹⁴⁷ The link between masturbation and testosterone levels in men remains very uncertain. If anything, experimental results point to a rise in testosterone levels after masturbation-induced orgasm. For review of evidence, see Tillmann Krüger et al., "Neuroendocrine and Cardiovascular Response to Sexual Arousal and Orgasm in Men," *Psychoneuroendocrinology* 23, no. 4 (1998): 401–11, <u>https://doi.org/10.1016/S0306-4530(98)00007-9</u>; Anna Mascherek et al., "Is Ejaculation Frequency in Men Related to General and Mental Health? Looking Back and Looking Forward," *Frontiers in Psychology* 12 (2021), <u>https://doi.org/10.3389/fpsyg.2021.693121</u>.

⁹⁴⁸ Roy Den Hollander, *Stupid Frigging Fool PART II*, <u>https://web.archive.org/web/20220330132627/http://been-scammed.com/main/SFF/7.b.StupidFriggingFoolPt2.pdf</u>, archived March 30, 2022, 18.

this is not necessarily true of ordinary manospherians for whom such speculations might sound appealing, especially given the popularity of evolutionary psychology in the manosphere. Not only do manospherians formulate just-so stories, but they often do so without even acknowledging their speculative nature. For instance, in his classic PUA seduction guide, Mystery discusses "approach anxiety," i.e., the anxiety men feel when talking to a woman they find attractive. After proposing his JSSs on the evolution of this trait, he concludes by stating: "For all these reasons and more, men are naturally selected to experience approach anxiety."⁹⁴⁹ Such a level of assertiveness regarding natural selection is rarely found in evolutionary psychological writing, even for the most empirically robust hypotheses. Consequently, a systematic review of the manosphere corpus entails assessing whether or not a given JSS features discursive marks of hypothesis.⁹⁵⁰

Finally, JSSs in the manosphere are not always founded on baseless speculations. While manospherians rarely derive predictions from their hypotheses and never design empirical tests for those predictions, they often use anecdotes, press articles, or research findings to support their hypotheses. Obviously, the more robust empirical evidence is proposed for a JSS, the more it resembles what would be found in the scientific literature. However, it is relatively easy to find supportive evidence for any hypothesis, but only empirical tests can subject its predictions to falsification—a crucial difference. A systematic review of the corpus should indicate, for each JSS, what sort of evidence is being provided by the author (press articles, studies, etc.). Lastly, given the manosphere's fascination for evolved sex differences, it is important to quantify what proportion of the manosphere's "homemade" hypotheses, or JSSs, pertain to sex differences. The next section presents this systematic review's descriptive results.

2.c. Review Results

For each JSS, I coded five different qualitative variables: firstly, the community from which the JSS originated; secondly, the presence or absence of discursive marks of hypothesis as described above; thirdly, the type of evidence provided to support the JSS; fourthly, whether it pertained to evolved sex differences or not; lastly, the underlying evolutionary process (e.g., sexual selection, natural selection, group selection), although it was often unclear.⁹⁵¹ These variables are reviewed one by one, starting with manosphere community in table 4.10 below:

Manosphere Community	Number of Just-So Stories
Men's Rights Activists (MRAs)	16
Pickup-Artists (PUAs)	17
The Red Pill (TRP)	24
Men Going Their Own Way (MGTOW)	15
Incels	27

 Table 4.10: Number of Just-So Stories by Manosphere Community

⁹⁴⁹ Mystery, *The Venusian Arts Handbook*, 13. Pickup-Artist just-so stories on the evolution of approach anxiety are discussed below, Chap. IV, C, 218.

⁹⁵⁰ These marks of hypotheses can be adverbs such as "maybe" or "potentially," modal verbs such as "could," and "may," or a noun like "hypothesis" itself.

⁹⁵¹ The entire dataset of 99 manosphere just-so stories with these five variables is reproduced in Appendix 28, 556.

What this table shows is that enthusiasm for Darwinian evolution knows no boundaries between manosphere communities, as all of them provide relatively comparable amounts of adaptationist just-so storytelling.⁹⁵² Do these communities differ in terms of signaling their JSSs as speculative? Answers to this question are presented below:

Manosphere Community	% of JSSs Featuring a Discursive Mark of Hypothesis		
Men's Rights Activists (MRAs)	12.5% (2/16)		
Pickup-Artists (PUAs)	23.5% (4/17)		
The Red Pill (TRP)	20.8% (5/24)		
Men Going Their Own Way (MGTOW)	13.3% (2/15)		
Incels	85.2% (23/27)		
Total	36.4% (36/99)		

Table 4.11: Discursive Marks of Hypothesis in Manosphere Just-So Stories

Overall, only 36% of manosphere just-so stories bore any mark of hypothesis. Most of the time, adaptationist speculations are couched in assertive language, far from common practices in scientific literature. This means that laypeople surfing the Internet often have no way to differentiate those speculations from established scholarship. Incels stand out as a striking exception, with discursive marks of hypothesis featuring in 85.2% of their JSSs.⁹⁵³ This discrepancy is due to the specific source from which most incel JSSs are extracted, i.e., incels.wiki. On this encyclopedic platform, which tries to mimic Wikipedia, speculations are signaled as such and are even sometimes confined to a specific discussion section.⁹⁵⁴ Although these are just-so stories, manospherians sometimes provide evidence drawn from other sources, as shown in table 4.12 below:

Source of Supporting Evidence	% of JSSs		
None/Anecdotes ⁹⁵⁵	70.7% (70)		
Scientific Papers	23.2% (23)		
Secondary Scientific Sources ⁹⁵⁶	7% (7)		
Press Articles	2% (2)		
Books	1% (1)		

 Table 4.12: Sources of Supporting Evidence for Manosphere Just-So Stories

⁹⁵² So far, this chapter has been generalizing about evolutionary sciences in the entire manosphere. In chapter V, I explore between-group differences, nuances, and disagreements in appropriations of evolutionary science.

 $^{^{953}}$ 2x2 nonparametric chi-square test run for counts of incels (23-4) compared to the other four groups together (13-59), X²=38.24, p < .001.

⁹⁵⁴ For exploration of the discursive strategy of incels.wiki, see Meg Roser, Charlotte Chalker, and Tim Squirrell, "Spitting out the Blackpill: Evaluating How Incels Present Themselves in Their Own Words on the Incel Wiki" (London: Institute for Strategic Dialogue, 2023).

⁹⁵⁵ When anecdotes were put forward to support just-so stories, they were counted as "no evidence" if no source nor precise references were provided.

⁹⁵⁶ Such as popularization articles by researchers in the press, or researcher blogs.

In a wide majority of cases (70.7%), manosphere JSSs are not accompanied by any supporting evidence whatsoever. Here again, incels are the exception to the norm, representing 20 of the 23 occurrences in which scientific papers were cited to provide supporting evidence. Then, we look at the percentage of JSSs on evolved sex differences. In total, 84.8% of these pertained to the evolution of the sexes. To have a baseline for comparison, I compiled a similar score for the evolutionary hypotheses found in David Buss's *Evolutionary Psychology: The New Science of the Mind*.⁹⁵⁷ Out of the 53 hypotheses I coded for, 74% pertained to sex differences, a high proportion which reflects the research interests of this influential evolutionary psychologist specialized in human mating strategies.⁹⁵⁸ In that regard, the manosphere's narrow focus on evolved sex differences can be said to mirror that of some evolutionary behavioral scientists studying sex and mating.

In terms of evolutionary processes underlying the JSSs, coding was a difficult endeavor, as they are sometimes expressed in unclear terms.⁹⁵⁹ Yet, an interesting preliminary finding emerged: sexual selection was the most common evolutionary process invoked in manosphere JSSs, representing 53.5% of the total, as opposed to 28% only in the David Buss textbook.⁹⁶⁰ Based on these data, we can draw a typical profile of a manosphere JSS: a manospherian speculates on the evolution of a sex difference by sexual selection, without signaling this with any discursive mark of hypothesis, nor providing any supporting evidence. This can be illustrated with a JSS from PUA dating coach Savoy, who claims that a female preference for men with relaxed shoulders evolved through sexual selection:

"[C]onfident men are disproportionately likely to spend more time with their shoulders relaxed. Because they are confident, they can do this. They don't have to be on edge all the time, always vigilant for threats. They are secure in their position and their skills. (They'd better be, or their confidence will be their downfall...) Over time, women who like men with relaxed shoulders tend to end up with a greater share of confident men. And if confidence is correlated with success, then this means that they end up with a greater share of successful men. That means their children will be more successful. Over time, their children will overwhelm the children of women who mate with men with tense shoulders."⁹⁶¹

Coding for a few qualitative variables allowed to generalize about this dataset of diverse JSSs from five different communities. In the following section, I conduct case studies to explore the content of these laymen's hypotheses.

⁹⁵⁷ Buss, Evolutionary Psychology.

⁹⁵⁸ Details for the coding methodology and detailed data can be found in Appendix 29, 583.

⁹⁵⁹ Out of the 99 JSSs, 12 had unclear underlying evolutionary processes (e.g., is this cultural evolution or actual genetic evolution?). For exhaustive details, see Appendix 28, 556. When I submit the study of this JSS dataset to a journal, I will make sure to include another researcher's independent coding for this variable in order to compute inter-rater reliability and make the analysis more robust.

⁹⁶⁰ Given the blurriness of some manosphere texts, 13 of the 99 JSSs featured several different evolutionary processes, which makes comparison with the EP textbook tentative, as it tends to inflate the total number of processes for the manosphere.

⁹⁶¹ Savoy, *Magic Bullets*, 34. This JSS was chosen as an illustration because it unambiguously refers to a sexual selection process.

C.3. From Male Standpoint Hypotheses to Sexist Pseudoscience 3.a. A Case of Bottom-Up Hypothesizing: Pickup-Artists and Approach Anxiety

In his evolutionary psychology textbook, David Buss describes the "bottom-up" approach to evolutionary hypothesizing, which starts with everyday observations. "Once the observation is made about the existence of a phenomenon," he explains, "we can then proceed in a bottom-up fashion and generate a hypothesis about its function."⁹⁶² In that regard, it could be argued that the creativity of evolutionary scientists is limited by the fact that they are a homogeneous social group, with the same job, likely to be living in the urban setting of college cities, etc. Their range of interests and observations being limited, this might be reflected in the hypotheses they decide to elaborate and investigate. Manosphere just-so stories, on the other hand, stem from the everyday observations of groups with different lifestyles and interests. This is manifest in Pickup-Artists' fascination for what they call "approach anxiety," and the way they speculate about it.

PUAs and their disciples design and experiment tips and techniques to seduce heterosexual women. The first step in this process is usually called "approaching," that is, going up to initiate conversation with a woman. However, most aspiring PUAs report extreme nervousness and anxiety during the approach. For many, this crushing anxiety is paralyzing as evidenced in this testimony:

"When I was sixteen, I had never cold approached a girl in my life, I decided to go to the mall to ask a girl for directions to start to face my social anxiety. But even this was too much for me at the time. I spent several hours wandering around the mall, thinking of getting rejected or laughed at. I hesitated dozens of times before making my way back home" (PUA, 2017).

This "approach anxiety" is one of the most discussed topics in PUA forums and guides. Year after year, newcomers to the community ask their more experienced peers about ways to circumvent this crushing nervosity. And among the countless answers and pieces of advice on the matter, evolutionary psychology is quite prevalent. In fact, one can find several just-so stories on the matter. Studying JSSs about approach anxiety is particularly revealing, because it shows how manospherians articulate evolutionary hypothesizing with concrete everyday life recommendations—something that is almost inexistent in mainstream literature. It also illustrates how a JSS can be collectively circulated, elaborated, and challenged in a given community, as happened to Mystery's original one. Indeed, to my knowledge, the earliest JSS on approach anxiety comes from Mystery's canonical PUA guide. He argues that approach anxiety is a specific psychological adaptation in men:

"Logically, rejection causes us no harm. But emotionally, rejection can be a punishing experience. To understand this, we must look at the ancient environment for which we were designed.

In a tribal group, there will be some small number of available women of breeding age. When a man approaches one, he risks rejection, and if that happens, all the other women will know, which will diminish his value in their eyes — maybe to the point where none of the women will mate with him. This is called *preselection* — women look for social validation of their choices. A suitor who is *preselected* will be more attractive, whereas a man who has been rejected will be less so.

⁹⁶² Buss, *Evolutionary Psychology*, e-textbook version, 99.

Another factor regarding approach anxiety is the possibility that she may already be taken, in which case there is a component of real, physical danger to any male who approaches her.

For all these reasons and more, men are naturally selected to experience approach anxiety."963

Apart from the absence of marks of hypothesis, and of course of empirical evidence, the adaptationist reasoning itself could come from an evolutionary psychologist. This is an example of the bottom-up approach in evolutionary hypothesizing: Mystery goes from the experience of the many aspiring PUAs he has trained over the years, and speculates on the evolution of their shared psychological reaction. Although he does not use the term, he adds that this adaptation is in fact an evolutionary mismatch—an adaptation which is dysfunctional in the contemporary human environment: "Logically, of course, modern society fixes these problems. If I am rejected, I can simply go to another part of the bar, or leave the bar entirely. I will probably never see any of those people again. But my emotions don't know that. My emotions are trying to do what's best for me."964 Here, as he is trying to encourage his readers to approach women, the concept of an evolutionary mismatch proves particularly useful. It tells them that the anxiety they feel is just a product of their biology, a legacy from past selective pressures, but has no relationship with their current situation. It can therefore be overridden through practice and repetition. This motivational aspect of Mystery's JSS is present in all subsequent iterations found in the PUA community. Significantly, men are presented as perfectly capable of "overriding" their psychological "wiring," which is in stark contrast with the examples on female nature seen above.

Mystery's version of the hypothesis is sex differentiated. Indeed, he argues that "[m]en take a larger risk than women when first approaching. In ancient times, this posed a legitimate safety concern and thus men still experience *approach anxiety*."⁹⁶⁵ The implication is that women would not have evolved this psychological mechanism found in men. Here is another iteration of the PUA approach anxiety JSS, which is based on a more generic mechanism:

"Back in prehistoric times a person being socially rejected and cast out on their own by their clan meant that you'd probably die alone in the wild. Those of us alive today are all descended from the people who managed not to be outcasts, or the outcasts who were able to find a clan that liked them enough to take them in. Those with a stronger fear of rejection were less likely to behave in such a way that would cause their clan to cast them out, and if that's true then that explains why the fear of rejection is so prevalent" (PUA, 2015).

Another PUA Redditor even adds: "I think that women have much stronger rejection anxiety than men do, which is why society has evolved such that men always have to approach" (Reddit, 2016)—directly contradicting the original Mystery JSS. In the Red Pill community as well, men discuss seduction, and they also propose their own versions of the approach anxiety JSS. A Red Piller for example believes that the fear of rejection felt when approaching a woman comes from unconscious association with one's mother:

"My theory that I'd love to make a post on at some point is that a child's greatest fear is abandonment/rejection from the parents since death is essentially guaranteed from this in the jungle.

⁹⁶³ Mystery, *The Venusian Arts Handbook*, 13, italics in original.

⁹⁶⁴ Ibid.

⁹⁶⁵ Ibid., 20.

When a random woman rejects a male to the point where he becomes depressed, anxious, etc it's because that male is because he subconsciously views that woman as his mother in a sense. That fear is a child survival mechanism projecting onto said woman" (TRP, 2018).

In evolutionary psychology terms, this manospherian believes that approach anxiety is a by-product of another psychological adaptation.⁹⁶⁶ Other manospherians refute the idea that approach anxiety is a specifically evolved mechanism: to them, it can just be attributed to the general mechanism of fear: "AA [Approach Anxiety] is just based on fear. Wether it's the unknown, rejection or some other self-esteem mutilating factor. It is just fear" (PUA, 2017). Another PUA Redditor concurs and says that "Mystery's theory is way to specific and complicated and acts like AA is some kind of unique mechanism," while to him, "it seems far more likely [...] that trying hitting on a girl is a situation that tends to bring out common anxieties like a fear of (any kind of) rejection" (PUA, 2015).

In another PUA Reddit post, the whole adaptationist framework for understanding approach anxiety is questioned. After scrutinizing existing JSSs, and questioning the fitness benefits therein, this PUA was unconvinced by all the explanations grounded in ancestral tribal environments:

"I don't think people cold approached back then. In tribe settings of maybe 50-150 people, everyone most likely knows each other either through family ties or family history (your great-grandparents knew theirs). So this brings up two points:

- 1. You won't get kicked out of the tribe that easily. Think of the times you upset your parents/family. Most likely you weren't banned from seeing them.
- 2. Relationships/marriage were most likely arranged by the family or forced onto the woman. There was no need to cold approach and build attraction" (PUA, 2017).

He therefore concludes that "AA [approach anxiety] comes from modern social conditioning. It's not a natural thing" (PUA, 2017). Another Redditor also makes fun of Mystery's "baseless theory": "It's kind of like if he said: the reason job interviews make people nervous is that in caveman times if you tried to take someone else's role/job in the tribe and did a worse job than them, you'd be killed by your community" (PUA, 2015).

These arguments showcase the fertility of manosphere discussions and elaborations on evolutionary psychology. Based on their own experiences, the PUA and TRP communities have tried to come up with explanations for the existence of the seemingly ubiquitous psychological phenomenon of approach anxiety. Starting with Mystery's original JSS, alternate hypotheses have been proposed, refined, and challenged online. Some believe this is a specifically evolved psychological adaptation specific to men only, or to both men and women—and propose various selective pressures/fitness benefits to account for it. Alternatively, some argue that approach anxiety is just a manifestation of the more generic emotional mechanism of fear. Maybe even more sophisticated is the hypothesis according to which approach anxiety is a by-product of other

⁹⁶⁶ In evolutionary biology, a by-product, or "spandrel," is a trait which did not evolve because of its function, but because it appeared concurrently with the evolution of an adaptation. Male nipples, which do not fulfill any apparent function, might be an example of such by-products, Jean-Baptiste Leca, "Evolutionary By-Products," in *Encyclopedia of Evolutionary Psychological Science*, ed. Todd Shackelford and Viviana Weekes-Shackelford (Cham: Springer International Publishing, 2020), 1–12, <u>https://doi.org/10.1007/978-3-319-16999-6_2850-1</u>.

childhood adaptations, with rejection by a woman triggering cues linked to rejection by one's mother. Lastly, some question the whole adaptationist framework itself, by suggesting that this could just be a culturally evolved phenomenon, while others rightly denounce this as just-so storytelling.

This profusion of competing explanations is reminiscent of the scientific literature itself. Unbeknownst to evolutionary psychologists, a whole variety of hypotheses for approach anxiety exist and compete in Internet communities of non-scientists. While it could be argued that this is just "a theory pick up artists invented based on zero evidence" (PUA, 2017), there is much more to this process. PUAs employ concepts and reasoning from evolutionary psychology to understand how they feel, and derive everyday life advice from their homemade "bottom-up" hypotheses. For all of those, the advice is invariably the same: ignore your instincts and squash the anxiety, as it evolved in an environment which was radically different from modern society and has lost its contemporary relevance—or in evolutionary terms, it has become maladaptive and no longer procures fitness benefits.

This online activity certainly falls far short of the standards of science, with a glaring absence of empirical tests. However, it might prove a fruitful field of investigation for evolutionary psychologists, as those hypotheses concern something that they have, to my knowledge, not researched yet. In fact, in their online discussions, PUAs have already identified one of the key questions to solve about this phenomenon: Is approach anxiety just attributable to the generic mechanism of fear, or does it exhibit some specific features suggesting that is indeed an adaptation, as might be the case for example with fear of spiders and snakes?⁹⁶⁷ An empirical research program on approach anxiety could therefore investigate questions such as: Is approach anxiety found cross-culturally? Is there a gender difference in approach anxiety? Does it appear to manifest in different brain areas than other types of fears? Do men who carelessly approach women in small-scale societies (such as hunter-gatherers) suffer reputational costs? Do they suffer violence at the hands of husbands or relatives? etc.

3.b. Shit Tests: An Example of Sexist Just-So Storytelling

Among all the just-so stories identified in the manosphere discourse corpus, "shit testing" stands out as a cornerstone of the Red Pill worldview. "Shit tests" are typically mentioned in a context of heterosexual seduction: "When it comes right down to it shit tests are typically women's way of flirting" (TRP, 2014). They can be all sorts of statements or behaviors, supposed to be unconsciously designed to test a man's worth as a mate, as shown in the following excerpt from a Reddit Red Pill manifesto:

"What is a shit test?

Female attractiveness is clearly obvious to even the most casual of observers. Beauty, femininity, and approachability, the three pillars of female SMV [Sexual Market Value], are all on display in any girl you can see, hear, and speak with.

⁹⁶⁷ For evidence that fear of spiders and snakes in humans appears to be a specific adaptation, see Buss, *Evolutionary Psychology*, e-textbook version, 184-189.

Male attractiveness, being basically a rubric for 'how useful would this guy be during a riot or zombie apocalypse?', is less evident from casual interaction. While muscularity can be seen, wits, nerve, resourcefulness, persistence, and other behavioural qualities cannot.

Men can passively observe attractiveness, but girls must actively probe for it.

Enter the **shit test**, wherein a girl gives a man a hard time ('some shit') to see how well he copes with it.

This takes a number of different forms, and can be at pretty much any level of intensity, but if a girl suddenly does something that **seems intended to bother you, and is totally unprovoked**, you can be pretty sure you're being shit-tested" (TRP, 2018).

This JSS embodies several typical aspects of the manosphere, which cast doubt as to whether it could be salvaged and turned into a legitimate evolutionary hypothesis to research, or whether it should be better treated as a Darwinian story to conveniently justify misogyny. This is a typical manosphere JSS: based on sexual selection, it is never presented by its advocates as speculative nor substantiated by anything other than anecdotes. Contrary to the variety of approach anxiety JSSs, there is a remarkable consensus among Red Pillers about the hypothetical evolutionary process behind shit tests—which are even sometimes called "fitness tests," making the Darwinian underpinning explicit. Shit tests are unanimously recognized as a key part of women's mate selection, allowing them to gauge how confident and dominant a man is, qualities that supposedly would make him a worthy mate in times of strife and uncertainty:

"Women's shit testing is a psychologically evolved, hard-wired survival mechanism. Women will shit test men as autonomously and subconsciously as a men will stare at a woman's big boobs. They cannot help it, and often enough, just like men staring at a nice rack or a great ass, even when they're aware of doing it they'll still do it. Men want to verify sexual availability to the same degree women want to verify a masculine dominance/confidence."⁹⁶⁸

According to Red Pill ideologues, shit tests are omnipresent in heterosexual seduction and relationships. Whenever a woman is anxious, this is supposedly her way of reassuring herself, as argued in this Red Pill's guide to shit tests: "When it crosses some internal threshold, the discomfort becomes too acute to bear, and a girl will perform a shit test" (TRP, 2018). Whether the man passes the test or not, the situation is clarified and the anxiety reduced, as the guide goes on explaining: "A shit test nearly always reduces attraction anxiety, either by reducing anxiety if you pass, or attraction if you fail. Thus, it is a coping mechanism" (TRP, 2018). As a consequence, the discursive content of shit tests is seen as irrelevant. After all, those are just unconsciously hardwired fitness tests, Red Pillers argue, and the only thing which thus matters is the man's reaction to them. Therefore, all Red Pill guides agree on the same thing: shit tests should not be taken seriously. These guides offer a series of techniques to "pass" such tests, such as ignoring, deflecting, or joking: "Study these techniques, but never forget that a shit test can be passed by literally any response which shows that you are not rattled" (TRP, 2018). Let us examine a few examples drawn from a guide entitled "Everything you need to know about shit tests," which advises men on how to navigate shit tests in a seduction setting.

• The woman asks: "Do you have a girlfriend?":

⁹⁶⁸ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 275.

"Translation: Are you a beta? (Can you get laid?) – The correct answer is always yes (it increases your preselection.) Women love poaching men from other women, they essentially find whatever is 'in demand' to be attractive, that's what we refer to as 'preselection.' Ways to pass this test: 'she told me not to tell anyone' – 'We're not Facebook official' – 'I don't cuddle her after sex, so no?"" (TRP, 2014).

• The woman says: "I have a boyfriend!":

"Translation: I have Schrödinger's boyfriend, demonstrate to me you're high value and I'll fuck you regardless. It is hilarious when they say this. *What boyfriend, your imaginary one?* – Then laugh in her face. – *Sounds like you're shit out of luck, I'm going to have to fuck your friend instead, feel free to watch*" (TRP, 2014).

Evidently, Red Pillers advise men not to take what women say seriously. When confronted with very simple factual statements such as "I have a boyfriend," they are taught to assume it is a lie. When asked if they have a girlfriend—a simple factual inquiry—, men are advised to always say yes regardless of the truth. As shown earlier in the chapter, manospherians position themselves as experts on women's behavior, as scholars of the true unconscious motives behind women's words, which then conveniently allows them to interpret these words at will. Through evolutionary just-so storytelling, these men can thus turn statements which presumably indicate a woman's lack of sexual interest (e.g., "I have a boyfriend") into an invitation to "try harder." For Red Pill ideologues, shit tests are always meant to be dismissed, answered negatively, because this is exactly what women unconsciously want, as argued by Rollo Tomassi in *The Rational Male*: "Women want to be told 'No', and constantly test a man's resolve to say this to her (a.k.a. shit testing) in order to affirm that she's made the right choice."⁹⁶⁹ This is of course an extremely convenient rationale for men to ignore women's concerns and constantly deceive them, echoing our analyses about the more than problematic approach to sexual consent fostered by manosphere discourse.⁹⁷⁰

Beyond the obvious ethical problem with the Red Pill "shit test" concept and its associated advice, it seems quite removed from legitimate evolutionary hypotheses. Firstly, because it hinges on a very crude view of sexual selection, in which males only focus on the aesthetics of a potential mate, and females on the character thereof. Surely, the fitness advantages of choosing a dependable and trustworthy mate are massive for both sexes, and it does not seem very likely that only women would pay attention to men's character in a mating context. Nothing in sexual selection theory dictates that only women would evaluate potential partners by inferring on future behavior through observing current actions. Secondly, the idea of a "test" is also quite questionable. Indeed, it implies that some statements or actions are specifically aimed at eliciting a response from a partner, and that some are not. More likely is the idea that people (and not only women) continuously evaluate other people's trustworthiness and suitability as mates based on the sum of their words and actions.

⁹⁶⁹ Ibid., 87.

⁹⁷⁰ See Chap. IV, B, 203.

This raises the question of demarcation, which is crucial for the understanding and studying of any phenomenon: what is and what is not a shit test exactly? When reading Red Pill texts, it seems that the delimitation of what can be a shit test is infinitely flexible. Oftentimes, the original seduction context is forgotten, and shit tests mean any type of interaction with perceived power plays, negotiations, or someone being evaluated by someone else:

"[G]oing out on a date with a woman is a collection of shit tests 'to see if you're worth having sex with.' Being in a police interrogation room is a collection of shit tests. Being heckled by members of the audience as a comedian is a collection of shit tests. And it goes on and on and on. Shit tests are an inescapable and recurring element of life, so you better get good at handling them" (TRP, 2014).

Red Pill godfather Rollo Tomassi goes even further, by applying the shit test JSS to ideology rather than behavior. According to him, ideas about redefining the male sex role and advocating for men to get in touch with the more traditionally feminine side of their personality are nothing more than a shit test writ large:

"It's the man who remains in touch with his masculine side, the guy who, despite all of pop-culture denigrating and ridiculing his gender and the very aspects that make it a necessary, positive strength of human society, will endure and steadfastly resist the influences that want to turn it into something it was never intended; it's this guy and his confidence that women all over the world find irresistible. He embodies the masculine arousal that their feminine has been seeking and they can't explain it. This is the ultimate meta-shit test in sexual selection [...]"⁹⁷¹

Thus, any feminist criticizing the toxic aspects of masculinity can be dismissed. Indeed, her discourse is just construed as a shit test, a sexual selection device contrived to weed out the weak men who agree with her, from those who see it as a fitness test and therefore say "no." In the dating world, this just-so story is authoritatively used to say that women want the opposite of what they claim to want. When applied to politics, the same JSS can be weaponized to discard any feminist grievance or demand as a mere "shit test." Inherent to the Red Pill philosophy is a vision of biology where the sexes are antagonistically pursuing different reproductive agendas. As a result, human mating is often portrayed as an arena for dominance, deception, and conflict. While evolutionary psychology indeed deals with those aspects of human mating, it also emphasizes the convergence of men and women's ultimate reproductive interests.⁹⁷² As such, both sexes often tend to look for similar things in a mate, chief among which are dependability, kindness, and honesty, something that the Red Pill's antagonistic vision of Darwinism obfuscates.⁹⁷³

If a serious (i.e., nonsexist and empirical) adaptationist research program on "shit tests" was to be imagined, it would look nothing like the Red Pill JSS. It would investigate the cues that people consciously and unconsciously compute to evaluate a mate's future character and decide on their suitability. Closer to the "test" idea, it might examine when and how people act to elicit a specific

⁹⁷¹ Rollo Tomassi, The Rational Male (Reno: Counterflow Media LLC, 2013), 169.

⁹⁷² I critique the Red Pill's vision of antagonistic Darwinism at length in the next chapter, Chap. V, E, 268.

⁹⁷³ For example, David Buss's classic study of mate preferences across 37 cultures found that "Kind and Understanding" was ranked as the most important trait in a partner by both men and women from all over the world, David Buss et al., "International Preferences in Selecting Mates: A Study of 37 Cultures," *Journal of Cross-Cultural Psychology* 21, no. 1 (1990): 5–47, <u>https://doi.org/10.1177/0022022190211001</u>.

response from a potential partner, for instance to seek reassurance about their interest or commitment. Indeed, a lot of the "shit tests" described by Red Pillers do seem to stem from a genuine sense of anxiety or concern. Yet, their default answer is that the only way to assuage a woman's seduction or relationship anxiety is through dishonesty, aloofness, and dominance, to unconsciously "reassure" her about one's fitness. While this might be true in some cases, this needs to be empirically demonstrated and will vary depending on context, personality, relationship dynamics, etc. Even putting ethical concerns aside, there is a lot of evidence that an honest and dependable character is a highly valued trait in a mate, which implies that a lot of the time, the best way to reassure one's current or prospective partner might just be to genuinely address their concerns rather than dismissing them in jest as advocated by Red Pill game gurus.

3.c. Takeaways

These adaptationist just-so stories are a key feature of the manosphere, and an unprecedented example of evolutionary hypothesizing done by online communities of laypeople. Using more or less sound reasoning and theory, manospherians try to make sense of gender dynamics and society with their own take on Darwinism. In doing so, they never conduct any empirical tests to falsify their hypotheses, nor do they systematically signal what comes from the manosphere and from scientific literature. This is a challenge for analysts and critics of manosphere science. Indeed, without being specifically knowledgeable about the state-of-the-art in the evolutionary sciences, it is impossible to disentangle established research from findings from laypeople's speculation. The present dissertation will hopefully serve to help those willing to understand this phenomenon.

Undoubtedly, these JSSs illustrate manospherians' creativity and enthusiasm for Darwinism. Adaptationist hypothesizing is almost unboundedly flexible, which was the original concern behind paleontologist Stephen Jay Gould's coining of the "just-so story" critique in the 1970s. Without any empirical tests or rigorous attempts at falsification, adaptationist speculations are no more than entertaining stories.⁹⁷⁴

Manosphere just-so stories could provide inspiration for evolutionary scholars. Indeed, they are produced from the bottom-up by laypeople who observe phenomena that researchers might miss due to their own standpoints, concerns, and interests. However, manospherians' standpoints are heavily colored by antifeminist politics or plain misogyny—as revealed by the case of shit tests. Browsing through the dataset of 99 manosphere JSSs shows that those hypotheses often support a negative view of women, and a will to paint old misogynistic tropes with Darwinian colors.⁹⁷⁵

⁹⁷⁴ Thankfully, evolutionary scientific journals insist on higher and higher empirical standards. In the 2000s-2010s, psychology and other quantitative disciplines such as biology and ecology were shaken by the replication crisis, with mounting evidence that many published results could not be replicated, Open Science Collaboration, "Estimating the Reproducibility of Psychological Science," Science 349, no. 6251 (2015): aac4716, https://doi.org/10.1126/science.aac4716. This led to a move towards more rigor and transparency and a more "open" science, where methods and data would be made completely public, enabling other researchers to double-check and/or reproduce published findings.

⁹⁷⁵ For the complete JSS dataset, see Appendix 28, 556.

Looking at JSSs from Men's Rights Activists alone, one finds a collection of unsubstantiated empirical claims which leave little doubt as to the feelings of these men towards women:

- Women are incapable of sexual fidelity (JSS #10).⁹⁷⁶
- Men are less likely than women to abuse positions of power (JSS #12).
- $\circ~$ Women are less intelligent than men, with their brains getting progressively atrophied (JSS #7). 977

Surely, behind these JSSs hides a particular vision of sex differences, which owes more to misogyny than to evolutionary biology. For example, one JSS is drawn directly from the ideas of misogynistic philosopher Arthur Schopenhauer:

 $\circ~$ Women act and look like children: they have high-pitched voices, not much body hair, and throw tantrums (JSS #3). 978

This dataset of manosphere JSSs thus calls for greater critical inquiry into the manosphere's vision of sex differences, which is the purpose of the next two chapters.

Conclusion

One of the evolutionary scholars who answered my survey's open-ended question argued that when sexist appropriations of EP occur, "it is typically by folks who are not well versed in evolutionary psychology."⁹⁷⁹ This is a comforting narrative. Yet detailed investigation reveals a more complex picture.

Often highly scientifically educated and literate, manospherians are fond of evolutionary approaches to human behavior. So much so in fact that they engage in remarkably creative evolutionary hypothesizing, or "storytelling" of their own. As this chapter highlighted however, their use of these approaches differs somewhat from that of the scientific literature in two major ways. Firstly, the view that instincts are "hardwired" and almost irresistible influences on behavior seems prevalent, with little regard for interpersonal variability or environmental flexibility. Secondly, there is evidence that this view is disproportionately applied to women. In fact, sex differences are a ubiquitous element of manosphere discourse and ideology. Yet, one could argue that these are just crudely exaggerated features of evolutionary psychology itself. It is after all a discipline which dwells on human universals, with a strong emphasis on evolved sex differences (as shown by the analysis of the evolutionary hypotheses found in the most popular EP textbook—74% of which pertained to sex differences). Is it therefore justified to talk of a distinct "manosphere science?"

My analysis of manosphere just-so stories seems to suggest that, indeed, manospherians appropriate evolutionary psychology to an extent that makes it notably distinct from the mainstream scientific field. By producing their own hypotheses, and seamlessly mixing them with peer-reviewed scientific research, often without any signalling of this fact, they create their own

⁹⁷⁶ The manosphere's take on infidelity is critically assessed in Chap. VI, A, 286.

⁹⁷⁷ Manosphere claims on female intellectual inferiority are discussed in VI, A, 303.

⁹⁷⁸ This idea and its origins in Schopenhauer's writings is addressed in VI, A, 303.

⁹⁷⁹ For details on the survey method, see Chap. III, C, 162.

body of knowledge and beliefs about sex differences and intergender dynamics. This body of knowledge cannot be separated from the broader ideological context of the manosphere. Indeed, it is interspersed with exaggerations, normative value judgments, double standards, manosphere beliefs and tropes about women and feminism, as well as actual pseudoscientific claims and traditional misogyny. The next chapter is a deep dive into the content and specificities of this "manosphere science," looking at the diversity of appropriations of Darwinian evolution between communities.

CHAPTER V: THE AVATARS OF MANOSPHERE SCIENCE

How Darwinian Evolution Is Customized by Each Group According to Its Aims and Ideology



Incels Wiki @incelswiki · Nov 7, 2020

A good example of the potential practical elements of evo-psych theories, beyond the abuse of this field by PUAs peddling dumbed down/distorted versions of it

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Introduction

The experience of bullying is a characteristic feature of incels' life trajectories.⁹⁸⁰ In 2020, commenting on a study about the potential evolution of bullying and its fitness advantages, the incels.wiki Twitter page argued that the adaptationist approach would allow to tailor better antibullying policies, by shedding light on the "clear evolutionary and social benefits of bullying" for the perpetrators.⁹⁸¹ Then, as reproduced above, the thread was concluded by a nod towards evolutionary psychology and its applications, and an attack on Pickup-Artists, who were accused of transmitting a "dumbed down" and "distorted" version of the field.⁹⁸² Remarkably, here a manosphere community is jockeying against another for the position of "best" or "correct" popularizer and interpreter of evolutionary psychology.

Discussing manosphere appropriations of science in general would miss the diversity of these processes between communities. Indeed, as revealed by our analysis of the manosphere's just-so stories (in Chapter IV), evolutionary science can be found within each group, but with different focuses and applications. This chapter is therefore a group-by-group review and critique of manosphere science, which is not a unified whole: manosphere communities only partially overlap, and even sometimes strongly disagree. This section analyzes each manosphere branch's specific position towards evolution, scientific knowledge, and human nature. Each of these positions is deeply embedded in the community's ideology and agenda. A reformist movement such as the Men's Rights Movement does not endorse the same view of evolution as the commercially motivated self-help coaches of the PUA community. Nor do these communities subscribe to the fatalistic genetic determinism of blackpilled incels. Even when agreeing with basic facts, as the Red Pill and MGTOW community mostly do, the perspective on those facts can differ, with the two groups advocating for completely different lifestyles and reactions to the same "truths" about female sexuality and gender dynamics.

Beyond the diversity of cases and communities, some common patterns of manosphere science emerge, in particular an obsessive and exaggerated focus on evolved sex differences, as well as the imbrication of evolutionary reasoning with antifeminist or misogynistic beliefs and attitudes.⁹⁸³

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⁹⁸⁰ With two surveys finding extremely high occurrence of having experienced bullying: 86% (n=151), and 96% (n=370), respectively in William Costello et al., "Levels of Well-Being Among Men Who Are Incel (Involuntarily Celibate)"; Costello et al. "The Social Networking of Involuntary Celibates."

⁹⁸¹ Incel Wiki, Twitter, November 7, 2020, <u>https://archive.is/xDnmj</u>, archived July 8, 2024. The study discussed in the tweet is the following, Anthony Volk et al., "Adolescent Bullying, Dating, and Mating: Testing an Evolutionary Hypothesis," *Evolutionary Psychology* 13, no. 4 (2015), 1-11, <u>https://doi.org/10.1177/1474704915613909</u>.

⁹⁸² Incel Wiki, Twitter, November 7, 2020, <u>https://archive.is/hDcbm</u>, archived July 8, 2024.

⁹⁸³ These common dynamics are further investigated in Chapter VI: Manosphere Science, 274.

A. MEN'S RIGHTS ACTIVISTS: THE EVOLUTION OF MALE DISPOSABILITY

A.1. From Nurture to Nature

The Men's Rights movement is a perfect illustration of the growing popularity of biology and evolution-based explanations for human behavior in the manosphere over the last decades. As explained in Chapter II, the movement started with an exclusively constructionist view of gender differences, and broadly rejected sociobiology in the 1970s and 1980s. Conversely, in 2015, a MRA commenting on AVFM.com complained that the movement had "for so long been under the thrall of the genocentrists and broad interpreters of evo-psych [...]," adding that "[l]ess than a decade ago you couldn't tell an MRA that the prohibition against hitting females was learned, or that protecting them wasn't an innate behavior. (Even Warren Farrell believes this)" (MRA, 2015). Evolutionary reasoning has indeed become quite prevalent in the movement, as exemplified by the trajectory of Warren Farrell's idea of male disposability.

In his 1993 book *The Myth of Male Power*, Farrell's central argument is that society treats men as disposable commodities: they fight the wars, work the dangerous jobs, etc. Multiplying examples from popular culture and the media, he also conversely argues that women are often put on pedestals, and that their lives are viewed as precious and in need of protection (as in "women and children first"). To this day, this remains the cornerstone of MRA ideology. However, the nature of the explanation has shifted over the years. In 1993, Farrell was quite unclear about the role of biology in this dynamic and did not use adaptationist language throughout his book. He did link male disposability to reproduction, as he believed that this gender dynamic was based on the exploitation of men's hope of reproducing. The closer he came to adaptationism was perhaps in this passage, where he used the verb "selected":

"Throughout history, the only constant about female beauty and female sex was that they were more valued than male beauty and male sex. [...] We have selected women who consciously or unconsciously learned that their beauty and their sex were worth a man's labor, money, life. No, many men's lives. Beauty power and sex power are parts of the female collective unconscious."⁹⁸⁴

It would not take much to transform this into an evolutionary hypothesis: adding "evolutionary" before history, changing the active "we have selected" form to a passive "women were (naturally) selected," and rephrasing the ontologically ambiguous "female collective unconscious" into a more explicitly evolutionary psychological term would suffice. In fact, Farrell says these ideas were influenced by those of evolutionary anthropologist Lionel Tiger.⁹⁸⁵ However, throughout the book, male disposability is the central theme, and evolutionary terminology and reasoning remain scarce—Farrell's analysis is firmly set at the sociocultural level. In our interview, evolutionary psychology professor Michael Mills recalled reading Farrell's *Myth of Male Power*, and telling Warren Farrell that his ideas on gender dynamics would benefit from a greater

⁹⁸⁴ Warren Farrell, *The Myth of Male Power: Why Men Are the Disposable Sex* (London: Fourth Estate, 1994), 57.

⁹⁸⁵ Ibid., footnote n°42, 273. For more on Lionel Tiger and its influence on the manosphere, see Chap. VII, D, 369.

integration of evolutionary science.⁹⁸⁶ When I interviewed Farrell, he couched his theory of male disposability in non-evolutionary terms. After I remarked "That's a cultural dynamic that you're describing here," he answered "Yeah, it's a cultural dynamic and or, you know, or it's a biological dynamic. Who knows?"⁹⁸⁷ Yet, while Farrell remains noncommittal about the genetic underpinning of this dynamic, male disposability has long been the object of its own adaptationist just-so story, particularly popular among MRAs and MGTOW.

A.2. The Male Disposability Just-So Story

One could find many variations and examples of the male disposability just-so story. In general, it is premised on the fact that female mammals' role in reproduction is larger than males'. Thus, the reasoning goes, a propensity for men to view themselves as disposable and to self-sacrifice for the welfare of women would have been naturally selected, as it would have allowed to protect the most reproductively valuable sex, and thus encouraged the spread of the species. From this principle, manospherians believe that men have an innate tendency to value women's needs above their own, and conversely, that women are congenially incapable of putting themselves in men's shoes and of seeing them as something else than disposable. Below are three MRA iterations of this JSS:

"Evolution wanted the species to survive, which required someone to protect women since they bore the next generation. The only choice was men, but no rational male would jump in front of a saber tooth tiger to protect a duplicitous female unless driven by compassion. Evolution, therefore, hardwired sympathy into the brain of every heterosexual man, making him a sucker for a female's fake tears and phony hard-luck stories."⁹⁸⁸

"To protect children and the future generation, an innate preference is given to children and women, who are mothers giving birth in the view of evolution. Both these innate tendencies are mostly unconscious and protected against becoming conscious. [...] From a purely evolutionary perspective, it did make sense through most of human history to privilege human females and children to some degree. Historically, and even pre-historically, human life was short and brutish, pregnancy was very dangerous and a lot of children never made it to adulthood."⁹⁸⁹

"The feminine is intrinsically and individually valuable simply because females are the limiting factor in reproduction of any species. When it comes to producing babies, every woman counts, whereas biologically one very happy man could probably do the work of hundreds in that regard. So the level of instinctive importance we humans place on the safety and provision of women and their children, it's one of the main reasons why we've been able to be so successful that we've come

⁹⁸⁶ Michael Mills, June 2023, interview with the author. For more details, see Chap. III, C, 161. For more details on interactions between evolutionary scholars and the manosphere, see Chap. VII, D, 369.

⁹⁸⁷ Warren Farrell, May 2023, interview with the author. For more details, see Chap. III, C, 161.

⁹⁸⁸ Roy Den Hollander, *Stupid Frigging Fool PART II*, <u>https://web.archive.org/web/20220330132627/http://been-scammed.com/main/SFF/7.b.StupidFriggingFoolPt2.pdf</u>, archived March 30, 2022, 18.

⁹⁸⁹ Jan Deichmohle, "Female Choice and Feminism – Part 2," A Voice For Men, November 27, 2015, <u>https://web.archive.org/web/20231205182744/https://avoiceformen.com/featured/female-choice-and-feminism-part-</u> <u>2/</u>, archived December 5, 2023.

to really dominate this planet. [...] It was in humanity's best interest for women to be essentially self-interested and for men to be essentially self-sacrificing."⁹⁹⁰

It is quite clear how this JSS fits in MRAs' and MGTOW's insistence that society is "gynocentric," that is favorable to women and discriminatory against men. Indeed, most of these authors can invoke this broad principle of "male disposability/female pedestalization" to comment on just about any fact from history, or to criticize feminist achievements in law and society. In fact, to many, feminism is just a manifestation of this innate tendency to specifically cater to women's needs, as explained by FeMRA Karen Straughan: "Feminism has done nothing but exploit this dynamic of the expectation on men to put everybody else before themselves, especially women, women's safety and support [...]"⁹⁹¹ This hypothesized tendency to prioritize females is supposedly so universal that it underlies MRAs and MGTOW's understanding of society, and allows them to reinterpret all of history with the curious claim that "all cultures privileged women."992 Remarkably, Warren Farrell's original concept has been dressed in biological garb, until this JSS became a canonical aspect of MRA/MGTOW ideology. It can also be found, albeit less commonly, in other manosphere communities, for example incels: "Men evolved their outgroup preference (i.e., for foids) to motivate them to protect foids in their tribe/extended family from the men of other tribes" (incel, 2022).993 On r/TheRedPill, however, a man questioned this just-so story. Privileging women's survival was not necessarily the most conducive to group survival over evolutionary history, he argued:

"it's actually exactly the opposite: if you don't have enough men to protect the tribe, others will conquer you, hunter-gatherers were in perpetual warfare and food was scarce, population growth was way below the reproduction rates, excess men can always kidnap women of other tribes, it's an ancient custom documented in many cultures. tribe is strong not by the number of its vaginas but by the number of its warriors, excess female infants were often killed because they were wasteful" (TRP, 2020).

This is a rare occurrence of the male disposability JSS's being questioned, as it has become close to gospel in wide parts of the manosphere. As in the case of approach anxiety, laypeople speculate and disagree on the evolutionary history and fitness benefits of certain traits and behavior. However, there is one glaring issue with the male disposability narrative: it is not congruent with evolutionary theory.

A.3. A Critique of the Male Disposability Hypothesis

The male disposability JSS is based on the fact that women are "the limiting factor" in reproduction. And, given the energy investment of a female mammal in gestation and lactation,

⁹⁹⁰ Karen Straughan, "Feminism and the disposable male," YouTube.com, November 5, 2011, <u>https://web.archive.org/web/20210106131628/https://www.youtube.com/watch?v=vp8tToFv-</u>bA&t=1s&ab channel=karenstraughan, archived January 6, 2021.

⁹⁹¹ Ibid.

⁹⁹² Jan Deichmohle, "Female Choice and Feminism – Part 2," A Voice For Men, November 27, 2015, <u>https://web.archive.org/web/20231205182744/https://avoiceformen.com/featured/female-choice-and-feminism-part-</u> <u>2/</u>, archived December 5, 2023. The manosphere's philosophy of history is explored in Chap. VI, B, 323.

⁹⁹³ "Foid" means "woman" in the incel jargon, see Appendix 30, Glossary of Manosphere Terms, 586. The dehumanizing aspect of this term is discussed above in Chap. IV, B, 208.

and the scarcity of eggs relative to sperm, this is indeed the case. A male mammal can potentially fertilize eggs at a much faster rate than females could ever produce them. This fundamental difference in reproductive apparatus and gametes is at the heart of our understanding of mammal behavior. What Robert Trivers's influential parental investment theory suggested was based on this asymmetry: "Where one sex invests considerably more than the other, members of the latter will compete among themselves to mate with members of the former," he wrote.⁹⁹⁴ This principle has guided investigation of sexual selection and behavior in all classes of animals. In fish for example, it can be the males who invest more in offspring, and therefore the females for whom intrasexual selection is more intense.⁹⁹⁵

Somewhat deceivingly, the manosphere's male disposability JSS starts from the same premise, but it leads to a different conclusion, which is a *non sequitur*. MRAs argue that preference for females, i.e., the sex with the highest investment in offspring, would have been naturally selected for the good of the species. Yet, natural selection operates at the level of genes. Therefore "the adaptive value of traits should not be viewed as being 'for the good of the population', but 'for the good of the individual' or, more precisely, 'for the good of the gene' that controls that trait," as explained in behavioral ecology textbooks.⁹⁹⁶ Manospherians' crude hypotheses all hinge on the premise of group selection, that is the idea that traits that favored the entire species were naturally selected. However, this view of natural selection has been largely discredited in the evolutionary sciences.⁹⁹⁷ It is widely accepted that selection operates at the level of genes. While this might just sound abstract, a few examples from the evolutionary scientific literature will showcase the faulty reasoning behind the manosphere's hypothesis.

Let us consider the question of sex ratios. In most species, that ratio is often very close to 1:1—there is an equal number of males and females. However, such a large number of males is evidently not "justified" by the reproductive interests of the whole species. After all, a single male could fertilize the eggs of dozens if not hundreds of females. In fact, by applying the manospherians' reasoning, we would expect species to have evolved not self-sacrificing males, but extremely female biased sex-ratios. Only by applying a gene-centered view of natural selection were evolutionary theorists able to solve this puzzle, which Darwin had struggled to answer: why are there so many males? The answer was forwarded in 1930 by British scientist Ronald Fisher. He explained that a biased sex ratio (let us suppose, with twice as many females as males) would automatically raise the average expected reproductive success of the less numerous sex—here, males. Consequently, parents who only had sons would see their number of descendants rise, and the "gene which causes parents to bias the sex ratio of their offspring towards males would rapidly spread," until parity is reached.⁹⁹⁸ In most cases, the 1:1 sex ratio appears to be the only

⁹⁹⁴ Robert Trivers, "Parental Investment and Sexual Selection," in *Sexual Selection and the Descent of Man*, by Bernard Campbell (Chicago: Aldine, 1972), 136–79, 176.

⁹⁹⁵ This is for example the case in broad-nosed pipefish (*Syngnathus typhle*) where males become pregnant, Nicholas Davies, John Krebs, and Stuart West, eds., *An Introduction to Behavioural Ecology*, 4th ed. (Oxford: Wiley-Blackwell, 2012), 202-203.

⁹⁹⁶ Ibid., 285.

⁹⁹⁷ Davies, Krebs, and West, An Introduction to Behavioural Ecology, 12; Buss, Evolutionary Psychology, e-textbook version, 43-44.

⁹⁹⁸ Davies, Krebs, and West, An Introduction to Behavioural Ecology, 285.

evolutionary stable one. Experiments have shown that when modifying the sex ratio in an animal population, the rarer sex was indeed favored by selection and the sex ratio quickly returned to a 1:1 equilibrium.⁹⁹⁹ To put it differently, natural selection does not really result in an optimal allocation of reproductive potentials "for the good of the species;" it is simply driven by the differential replication rates of competing alleles.

Maybe an even simpler and stronger rebuttal of the manosphere's male disposability JSS comes from comparison with other mammal species. Indeed, greater female investment in offspring is ubiquitous in mammal species. If the manospherians' group selectionist reasoning were true, then we would expect most male mammals to have been selected for self-sacrificing behavior favoring females and the young. Nothing could be further from reality. In fact, male mammals rarely contribute to offspring care at all (male care is found in around 5% of mammal species).¹⁰⁰⁰ Given the low costs of reproduction for male mammals, when they could "get away" with it, they were selected to maximize their reproductive success by looking for different mates, without providing benefits nor assistance to females and offspring. Male humans certainly showcase a rare level of paternal investment in offspring, and thus of assistance to mothers. However, this cannot simply be ascribed to the simple reproductive difference mentioned by manospherians—a difference which is common to all mammals. Therefore, a whole branch of behavioral ecology studies the specific factors whose configuration can lead to the evolution of parental care, such as predation, dispersion of resources in the environment, and the costs and benefits of social living.¹⁰⁰¹

There is another damning flaw in the male disposability/female pedestalization manosphere JSS. How could this theory account for the patterns of specifically male-to-female gendered violence observed throughout cultures, such as rape, honor killings, or domestic violence? If men all had strong generic mechanisms to self-sacrifice for women's welfare, those behaviors would be hard to explain. This is something that some manospherians do remark upon. For example, after mentioning male disposability/female pedestalization, Karen Straughan adds: "I will concede that this drive to keep women safe from all harm has often resulted in extreme limits being placed on women's mobility, their agency, their power of decision to direct their own lives all through history [...]"¹⁰⁰² For the most part however, manospherians rarely address this flaw in the theory, as they present men as naturally prone to adoration and worship of women, e.g., "Everywhere in nature, the male is the reproductive servant of the female" (MGTOW, 2002); "all men and women are genetically pre-programmed to treat women as valuable treasures that are to be protected and fought over" (MGTOW, 2020).

This is in sharp contrast with mainstream evolutionary psychology, which sees the diverging reproductive interests of the sexes as the root of male-to-female violence and coercion,

⁹⁹⁹ Alexandra Basolo, "The Dynamics of Fisherian Sex-Ratio Evolution: Theoretical and Experimental Investigations," *The American Naturalist* 144, no. 3 (1994): 473–90.

¹⁰⁰⁰ Davies, Krebs, and West, *An Introduction to Behavioural Ecology*, 182. ¹⁰⁰¹ Ibid., 254-256.

¹⁰⁰² Karen Straughan, "Feminism and the disposable male," YouTube.com, November 5, 2011, <u>https://web.archive.org/web/20210106131628/https://www.youtube.com/watch?v=vp8tToFv-</u>bA&t=1s&ab channel=karenstraughan, archived January 6, 2021.

and not of some sort of female privilege.¹⁰⁰³ Here is the first example of a trend which will repeatedly feature in our analyses of manosphere science: evolutionary psychology is ubiquitous when it fits manosphere narratives and can be used for negative portrayals of women, however, when its findings are negative towards men, they are noticeably absent from manosphere discourse.¹⁰⁰⁴ Yet evolutionary psychology does not paint a particularly rosy picture of male nature. For instance, one of its leading scholars, David Buss, has even written a whole book entitled *When Men Behave Badly: The Hidden Roots of Sexual Deception, Harassment, and Assault*.¹⁰⁰⁵ Yet, even when mainstream evolutionary scientists do not concur with their worldview, manospherians devise their own evolutionary just-so stories, showing the popularity of the evolutionary approach to human behavior in those communities. In the case of male disposability, the JSS employs crude group selectionist reasoning incompatible with modern Darwinism, a misunderstanding of natural selection which is now addressed.

A.4. Group Selection in the Manosphere

It is tempting to believe that a trait could be naturally selected if it led to the welfare of an entire species. Indeed, a propensity for universal love and altruism could increase the fitness of all organisms collectively. However, in that context, genes that would favor exploitation or "free riding" of that propensity would spread in the population like wildfire. This simple theoretical simulation showcases the flaw in group selection: it is not entire species which are selected, but genes. And the genes that replicate more are selected regardless of their good to the species as a whole.¹⁰⁰⁶ For the past fifty years, this gene-centered view of evolution has proved its success in explaining available observations in a way that group selection could not. For example, the Mexican free-tailed female bats manage to recognize their pups among thousands of others when they return to the cave to feed them. "If selection operated for the 'good of the species," David Buss writes, "it wouldn't matter which pup the mother bat fed, nor would there be any selection pressure to recognize and feed her own."¹⁰⁰⁷ In fact, the species would be better off if these females all just fed the pups who needed food the most at a given time. That is not how natural selection occurs, however. If mothers evolved the impressive ability to recognize their own pups among a myriad of similar-looking ones, it is because the genes that favored this behavior replicated more than others. The reason here is quite simple: a mother's genes have higher chances of being present in her own offspring than in random pups in the cave. By fostering targeted maternal behavior, the

¹⁰⁰³ Buss, *Evolutionary Psychology*, Chapter 11: "Conflict Between the Sexes," e-textbook version, 612-672. See also David Buss and Neil Malamuth, eds., *Sex, Power, Conflict: Evolutionary and Feminist Perspectives* (New York: Oxford University Press, 1996).

¹⁰⁰⁴ For more examples of this tendency, see Chap. VI, A, 286.

¹⁰⁰⁵ David Buss, When Men Behave Badly: The Hidden Roots of Sexual Deception, Harassment, and Assault (New York: Little, Brown and Company, 2021). This book echoes a previous popular evolutionary science book from the 1990s which focused mostly on male violence in apes, Richard Wrangham and Dale Peterson, Demonic Males: Apes and the Origins of Human Violence (Boston: Mariner Books, 1997).

¹⁰⁰⁶ Hence the popularity of game theory in the evolutionary behavioral sciences, where organisms are modeled as enacting elaborate conditional strategies, co-evolved to counter other strategies until a state of equilibrium is reached in the population. See Davies, Krebs, and West, *An Introduction to Behavioural Ecology*, 116-119.

¹⁰⁰⁷ Buss, *Evolutionary Psychology*, e-textbook version, 387.

genes in the mother "helped" the copies of themselves in her offspring survive and replicate, explaining Richard Dawkins's "selfish gene" metaphor to describe natural selection.

A minority of evolutionary biologists maintain the relevance of group-level selection, which, they argue, can outweigh individual-level selection in certain circumstances.¹⁰⁰⁸ However, this needs to be demonstrated on a case-by-case basis, and seems mostly relevant in cases where different "superorganisms" like termite colonies compete against each other.¹⁰⁰⁹ This is a theoretically contentious area. For all intents and purposes, the naïve "for the good of the tribe/species" reasoning as found as in the manosphere's male disposability JSS can be considered as unsound.¹⁰¹⁰ In fact, in their investigation of common misunderstandings of evolutionary psychology in gender studies textbooks, Winegard et al. identify such "Species Selection" as one of the key misunderstandings.¹⁰¹¹ Group selection is therefore one of the misconceptions of evolutionary science included in my questionnaire survey, with some distractors seeded in the questionnaire to measure its prevalence, including one on male disposability.¹⁰¹² Table 5.1 below is a breakdown of the prevalence of group selectionist misconceptions among survey responses, along with the rate of respondents who picked the correct answer on the associated multiple-choice question (item success).

Distractor	Manosphere (n=148)	Item Success	Counterpart (n=151)	Item Success
GS1	38.5%	31.1%	33.8%	31.8%
GS2	7.4%	46.6%	21.2%	33.1%
GS3	8.8%	81.8%	13.2%	76.8%
MD	17.6%	46.6%	7.9%	33.1%

Table 5.1: Group Selectionist Answers on the Life Sciences Quiz

Overall, manospherians were not more likely to select group selectionist distractors than the counterpart group. However, they were significantly more likely to select the one on male disposability (MD), i.e., "Since men are male mammals, they have a lower reproductive value than

¹⁰⁰⁸ E.g., Omar Tonsi Eldakar and David Sloan Wilson, "Eight Criticisms Not to Make About Group Selection," *Evolution* 65, no. 6 (2011): 1523–26, <u>https://doi.org/10.1111/j.1558-5646.2011.01290.x</u>.

¹⁰⁰⁹ David Sloan Wilson and Edward Osborne Wilson, "Evolution 'for the Good of the Group," *American Scientist* 96 (2008): 380–89, <u>https://doi.org/10.1511/2008.74.1</u>.

¹⁰¹⁰ "[E]ven if group selection turns out to be more widespread in nature than we previously thought, it would still not be the case that adaptations evolve for the good of the species. Even dyed-in-the wool group selectionists are primarily focused on small, local groups – not whole species. It is therefore incorrect, for example, to think we have sex "to perpetuate the species". We have sex because we are the descendants of ancestors whose sex led to reproduction, and so we inherited their tendency for sexual motivation. An incidental side effect of this is that the species as a whole may sometimes benefit. Outcomes that are beneficial to groups can indeed occur, but they are not the proper biological function of adaptations, they are incidental side effects," Laith Al-Shawaf, Kareem Zreik, and David Buss, "Thirteen Misunderstandings About Natural Selection," in *Encyclopedia of Evolutionary Psychological Science*, ed. Todd Shackelford and Viviana Weekes-Shackelford (Cham: Springer International Publishing, 2021), 8162–74, https://doi.org/10.1007/978-3-319-19650-3_2158, 8165.

¹⁰¹¹ Winegard, Winegard, and Deaner, "Misrepresentations of Evolutionary Psychology in Sex and Gender Textbooks," 481.

¹⁰¹² For complete list of misconceptions and associated distractors in the questionnaire, see Appendix 14, 524.

women and are consequently perceived as more disposable across cultures."¹⁰¹³ This confirms that male disposability is a popular manosphere belief. However, as will be shown for several other misconceptions, and as already made evident by their high average scores on the 20-question science quiz (M = 14.07, SD = 3.30), most manospherians are able to select answers which are grounded in the scientific literature over more erroneous and speculative ones grounded in manosphere science. This showcases the importance of conducting a survey analysis to complement our discourse analysis, without which manospherians would have appeared as much more prone to endorse scientific misconceptions, such as crude group selection. These results still indicate that group selection is more popular in laypeople's understanding of evolution than justified by the scientific state-of-the-art (both for manospherians and US respondents). This was also shown by our review of manosphere JSSs, a portion of which were based on group selection (11%).¹⁰¹⁴

Group selection can therefore be said to be a relatively minor, yet relevant aspect of manosphere science, in particular given its role in the foundational male disposability JSS. This JSS has a particularly interesting trajectory: although it started as a non-evolutionary concept in Warren Farrell's writings, it was then co-opted and "biologized" over the years as evolutionary science gained prominence in the manosphere. Here, evolutionary psychology and its exploration of male-to-female gendered violence is discarded, in favor of a broad (and implausible) idea of female pedestalization. This idea is much more congruent with MRA and MGTOW ideology, where women are thought to enjoy widespread privileges in a gynocentric society. This is a prime example of evolutionary storytelling being appropriated to buttress manosphere worldviews, a central element of manosphere science which we already encountered in chapter IV (for instance in the case of male variability) and will be a recurring feature of the present chapter.

B. PICKUP-ARTISTS: EVOLUTIONARY PSYCHOLOGY AS A TOOL TO UNDERSTAND WOMEN

B.1. Evolved Mate Preferences and Seduction

While MRAs analyze and criticize society as a whole, and thus unsurprisingly use evolution to look for broad tendencies in intergender dynamics, PUAs have a narrower focus. As shown by their just-so stories on approach anxiety, theirs is primarily an applied focus: they reflect on the psychological dynamics underlying heterosexual seduction. In his *Magic Bullets* dating guide, seduction coach Nick Savoy therefore includes a whole guide about female psychology, opening with the following sentence: "If you're a man, the odds are that you know very little about female psychology. Actually, it's worse than that. The odds are that most of what you think you know is wrong."¹⁰¹⁵ Following a familiar argument, he explains how people, and in particular women, do not consciously know how their psychology works and should not be trusted when describing their

¹⁰¹³ 2x2 chi-square test run on the number of respondents who selected the male disposability distractor opposed to the number of those who selected any other option, among manospherians (26-122) and the counterpart group (12-139), X^2 =6.24, p=0.013.

¹⁰¹⁴ The entire JSS dataset is reproduced in Appendix 28, 556.

¹⁰¹⁵ Nick Savoy, *Magic Bullets*, Version 1.5 (Self-published, 2007), 23.

preferences. It is evolutionary biology, Savoy explains, which gives the real key to understanding women's desires:

"Magic Bullets starts from the premise that many human behavior patterns are innate. This is especially true for sexual decision-making, which is as important to evolutionary biology [...] as you can get. If we can understand women's fundamental impulses and motivations, then we can use these to our advantage in developing successful dating and relationship strategies."¹⁰¹⁶

Savoy rightly recognizes the major role of reproduction in Darwinian evolution, and his dating guide draws heavily on what evolutionary psychologists would call evolved mate preferences, one of the most prolific areas in evolutionary psychology research. Selective pressure on mate selection is quite obvious, especially in a species like humans, where offspring take a long time to rear: wrong choices, such as selecting an unhealthy, violent, or unreliable mate, could prove fatal to one's lineage. Contemporary humans are descended from a long line of ancestors who all successfully selected mates to produce offspring and to have those offspring reach reproductive age. Mate preferences in humans (whether based on aesthetic or personality traits) are thus seen by evolutionary psychologists as highly likely to be adaptations.¹⁰¹⁷ Here are those listed by Savoy:

"Evolutionary biology for women

Just as men generally prefer wider hips, women have near-universal preferences as well. We can divide them into three categories:

Foundations:

Health. Social Intuition. Humor.

Attributes:

Status. Wealth.

Congruence:

Pre-selected. Challenging. Confident.¹⁰¹⁸

He starts with what may be the most obvious one—health: "All animals are biologicallydriven to seek healthy mates. The human female is no exception. A healthy man can provide his family with food, shelter, and protection," Savoy writes. He adds: "His children are likelier to be healthy as well, allowing them to have healthy children of their own, and also to protect and provide for their parents in old age."¹⁰¹⁹ This is congruent with both common sense and evolutionary theory.

¹⁰¹⁶ Ibid., 24.

¹⁰¹⁷ See Buss, *Evolutionary Psychology*, "Part 3: Challenges of Sex and Mating," e-textbook version, 209-383.

¹⁰¹⁸ Savoy, Magic Bullets, 26.

¹⁰¹⁹ Ibid., 27.

In many regards, such uses of evolutionary theory are perfectly in line with scientific literature, leading to mundane pieces of advice, such as this one:

"Skin blemishes indicate ill health. It's actually fairly easy to cover up most obvious skin problems like acne. I recommend seeing a facialist if you can afford one. Failing that, go to a makeup store and ask a salesperson to help find some cover-up that works with your skin tone."¹⁰²⁰

Some evolutionary psychologists, such as David Buss, have spent decades studying, often cross-culturally, what drives people's sexual and romantic attraction, what predicts relationship success, dissatisfaction, or sexual infidelity, and the different mating strategies that humans adopt.¹⁰²¹ As a result, generic research publications in sexology such as the Archives of Sexual Behavior do feature a lot of evolutionary psychology research. As such, it is quite unsurprising that seduction coaches would turn towards evolutionary psychology to design their advice: not only is it a useful discipline to understand what humans do in terms of mating (i.e., at the proximate level), but evolutionary theory also explains why they do it (i.e., at the ultimate level). As shown in this Reddit PUA post, the high generality of evolutionary psychology makes it particularly amenable to deriving generic advice: "Looking at attraction from an evolutionary lens allows us to understand what universally attracts women and why. Then, we can reverse engineer those traits to become more attractive ourselves" (PUA, 2016). In fact, it seems that Pickup-Artists were the ones who popularized evolutionary psychology in the manosphere in the 2000s.¹⁰²² For a long time, the only research article on evolutionary psychology in the manosphere was a sympathetic account of Mystery's canonical Venusian Arts Handbook in the Evolutionary Psychology journal, which concluded that "there is in fact a substantial degree of psychological research to support many claims made by the [Seduction] Community."¹⁰²³ And indeed, it would be quite easy to find empirical support—and evolutionary hypotheses—for the collection of female mate preferences described by Savoy, although his book's peremptory assertions are never accompanied with sources and citations.

Yet, there is a lot of criticism addressed towards Pickup-Artists' use of research on mate preferences. Some see it as inherently manipulative, since they design techniques with the stated purpose of influencing women's decisions based on general psychological knowledge.¹⁰²⁴ However, I would argue that this type of critique is too stringent: since scientific research on what drives romantic and sexual attraction is made public, it is unrealistic to expect that people who read about this research will not reflect on potential applications in their search for sexual or romantic partners. Indeed, from women's and men's magazines, to gossip and everyday chats among friends, discussing what drives attraction and desire and how to make oneself attractive is a common, if not outright banal, feature of society. As the most rigorous production of society on these issues, it

¹⁰²⁰ Ibid., for evidence of importance of smooth skin in facial attractiveness, see David Buss, "Clear, unblemished skin signals an absence of parasites, absence of skin-damaging diseases during development, and possibly 'good genes' to withstand disease and heal without infection," Buss, *Evolutionary Psychology*, e-textbook version, 285.

¹⁰²¹ See David Buss, ed., *The Oxford Handbook of Human Mating* (New York: Oxford University Press USA, 2023). ¹⁰²² This hypothesis of mine is developed at length in Chap. VII, A, 349.

¹⁰²³ Oesch and Miklousic, "The Dating Mind," 905. This article is discussed in this dissertation's Introduction, 24.

¹⁰²⁴ Some scholars definitions of PUAs thus include "manipulation of women as a way for men to seduce women," Rothermel et al., "Of Victims, Mass Murder, and 'Real Men," 134.

would be in fact surprising if academic sex research was not employed by anyone in their romantic life.

This does not mean however that the advice PUAs derive from evolutionary psychology does not raise any ethical concerns. Most PUA seduction guides are presented as simple instruction manuals, with very little regard for the ethical implications of their methods.¹⁰²⁵ Sometimes, their advice does not seem particularly applicable, nor conducive to establishing honest relationships, for example, this piece of advice derived by Savoy from people's preference for healthy partners: "Never talk about being sick, about being tired, or bring to her attention anything unhealthy about you."¹⁰²⁶ While countless such criticisms could be formulated, this is not the purpose of the present research. This section investigates how evolutionary research is made to fit in each manosphere's community's worldview. As shown in the next section, Pickup-Artists' take on mate preferences is heavily influenced by the commercial and self-help aspects of the community.

B.2. Mate Preferences, Self-Help, and Commercialized Advice

PUAs are keen on listing evolved female mate preferences, yet what to include in those lists is subject to debate in the community. This is revealed by a discussion between Savoy and his followers on the forum he operates:

Forum User 1

"In all the material I've read/heard the attraction switches listed are always the following 8: health, wealth, humor, social intuition, pre-selection, status, confidence, challenge

But I always hear about 'Leader of men' and 'protector of loved ones. Why aren't these included? [...]

Also what about a man's ability to cook or build/fix things or simply good looks? Or are these ones just socially conditioned attraction switches/individual girl preferences rather than biological?" (PUA, 2010).

Savoy

"The 8 attraction switches are -- if you see a beautiful woman and don't know anything about her – your best bet for creating attraction. Of course there are other things that are attractive. Some just aren't as important as these 8. Like putting the toilet seat down. Other things are very attractive, but not equally so to most beautiful women. The classic example there is intelligence - some women love intelligent men; for others, it does nothing or is even a turnoff" (PUA, 2010).

Forum User 2

"I have to disagree savoy, pre selection Leader of men and protector of loved ones are three of the big four, along with confidence. Survival is the most primal human instinct, this specifically adresses it, and is what females are all about, based on evolutionary psychology. it directly relates to her survival, and having healthy children and there survival, at a basic level. Is it essential to have, no, but it is with any other attraction switch, every women wants it in different amounts, It is important to every women whether they conciously realize it or not" (PUA, 2011).

¹⁰²⁵ The most questionable implications being those around sexual consent, as detailed above in Chap. IV, B, 203. For the way in which Red Pill dating advice and ideology are explicitly self-described as "amoral," see Chap. V, E, 259. ¹⁰²⁶ Savoy, *Magic Bullets*, 27.

This discussion illustrates how mate preferences get reduced and simplified into lists, such as the "8 attraction switches" or "the big four"—concepts absent from evolutionary psychological research. Moreover, research on preferences mostly looks at correlational effects ("on average, women tend to prefer…"), which is quite opposed to the image of a hardwired "switch," i.e., a feature that would automatically warrant romantic attraction or rejection. More importantly, this raises the question of how exactly those mate preferences are selected by PUA coaches.

I argue that this selection fits the commercial self-help agenda of the Pickup-Artist community. PUA coaches have an incentive to deliver advice to their readers, to teach them techniques that are supposed to make them more desirable to women. Those techniques need to be relatively easy to apply, and available to every man. Therefore, they must pertain to elements that can easily be modified or simulated. Thus, Savoy's list of "attraction switches" does not feature any of the physical traits that evolutionary psychologists have identified as potential evolved mate preferences, such as facial masculinity and symmetry, body muscularity, or height.¹⁰²⁷ Since changing those is extremely hard, if not impossible, it is obvious that stressing the importance of physical and aesthetic traits in mate selection would not deliver a particularly hopeful message to aspiring PUAs, who might already be insecure about their looks due to lack of success with women. This would not be good business either, as PUA coaches and writers commercialize their advice, and must therefore tell men that anyone could succeed with the right methods. This is why the importance of looks is traditionally downplayed in the PUA community, as shown by those two posts on Reddit:

"[W]omen are emotional BEINGS thus if you make them FEEL a certain way you can get a lot of women. That is why looks don't matter because if you can make a women feel good emotions she can't help but be attracted to you. I'm going to give you conversation tools you can go out and use tonight or tomorrow when you are on your lunch break and you see a girl you want to talk to" (PUA, 2016).

"The biggest impact looks have on a person is there is a positive correlation between looks and confidence - typically better looking people are more confident and people who are below average are less confident. The biggest decider for game is definitely confidence, not looks" (PUA, 2019).

Here, the influence of immutable aesthetic traits is downplayed in favor of elements that are central to PUA teachings, such as conversational skills. And while traits like status, wealth, or genuine confidence are relatively hard to acquire, PUA coaches tell their readers that they can be simulated or engineered through techniques, as shown by Savoy:

"Status [...]

Relative status is far easier to obtain than absolute status. If you go to a restaurant frequently, get to know everyone who works there. Even if no one knows you outside the door, you can be a celebrity

¹⁰²⁷ For evidence of female preference for facial masculinity and symmetry, see Buss, *Evolutionary Psychology*, e-textbook version, 235-240, for muscularity and height, 233-235.

inside. Plan your social events to become well-known at a few venues rather than a stranger at many. Take advantage of this on dates."1028

"Wealth [...]

Don't worry if you're not rich. Just don't look like you are struggling. Don't talk about financial difficulties or borrowing money, and don't make a big deal out of expenses. Make sure your car is clean and in good repair – not doing so is a very obvious indicator of wealth or lifestyle difficulties. Use your money wisely. If you have \$110 in your wallet, wrap a \$100 bill around ten \$1s instead of having eleven \$10 bills. Spending an extra \$20 on a coat won't make much of a difference, but spending an extra \$20 on wine will.¹⁰²⁹

"Confidence [...]

Don't be arrogant. People who talk about how great they are all the time (even though they are genuinely very good at a specific thing) are generally thought by others to be deeply insecure. Insecurity reflects a lack of self-confidence. People will eventually clue into that, and you'll have difficulty actually keeping a girlfriend."1030

In 2015, evolutionary psychologist Geoffrey Miller paired with popular writer Tucker Max to write a dating advice book for heterosexual men named Mate: Become the Man Women Want.¹⁰³¹ The book's dust jacket claims to offer "[n]o 'seduction techniques'" and explicitly tries to distance itself from the advice offered by PUAs. One of the key differences between their book and PUA guides is the rejection of easy fixes and shortcuts. For instance, Miller claims that "[e]volution forced us to develop confidence levels that accurately tracked our competencies. It's hard to fake true confidence."¹⁰³² Miller and Max thus argue, "there are no shortcuts. Anyone who tries to sell you their 'Ten Tricks to Get Confident with Women' is selling bullshit."1033 Based on psychological research they conclude that "[t]he only effective strategy for gaining real confidence is to develop skills and demonstrate performance of those skills."¹⁰³⁴ This is the take-home message of their book: there is no use in trying to fake or simulate attractive traits through seduction tricks and techniques. If women evolved mate preferences for status, ambition, or confidence, it means these preferences were honed by eons of selective pressure and are probably attuned to deception. Miller and Max thus recommend against all forms of lying:

"Most women expect that most men are lying most of the time, and they hate it. In a world of liars, seducers, and charlatans, the man who stands up and tells the truth about the world, about himself,

¹⁰²⁸ Savoy, *Magic Bullets*, 31.

¹⁰²⁹ Ibid., 32.

¹⁰³⁰ Ibid., 34.

¹⁰³¹ Tucker Max and Geoffrey Miller, *Mate: Become the Man Women Want* (New York: Little, Brown and Company, 2015). Geoffrey Miller (born 1965) is a US professor of evolutionary psychology at the University of New Mexico. ¹⁰³² Ibid., 21.

¹⁰³³ Ibid., 22.

¹⁰³⁴ Ibid.

and about what he really wants is very rare and very attractive. There is a reason most women list honesty as one of their most-desired traits."¹⁰³⁵

Their remarks highlight a key feature of PUA literature: manosphere dating coaches offer an extremely simplistic reading of evolutionary psychological research on mate preferences, where honesty is not factored in. From lists of relatively well-established and supported female mate preferences, they derive advice that can be criticized on many levels. Firstly, this advice is sometimes deceptive, which of course warrants ethical condemnation. But, more importantly for our investigation, it seems empirically flawed. Indeed, such advice consistently downplays women's ability to see through superficiality and deception. Evolutionary psychologists, as illustrated by Miller, have a more complex conception of evolved mate preferences, which include mechanisms to detect "liars, seducers, and charlatans," and a preference for honesty—a trait which is conspicuously absent from PUA lists of mate preferences.

Several explanations could be provided for these specificities of PUA advice. This could first be grounded in the general male bias found in the manosphere. As shown in the previous chapter, women tend to be portrayed as obeying relatively monolithic impulses. In such a framework, where female agency and intelligence are routinely downplayed,¹⁰³⁶ it is no surprise that PUA coaches should overestimate the susceptibility of women to fall for their simplistic techniques. But PUA coaches are also entrepreneurs who make a living out of selling guides and seminars. As such, they have a strong incentive in presenting a simplistic vision of mating, to give a message of hope for all sexually and romantically frustrated men—i.e., potential customers. In this vision, everyone can learn to display the cues that attract women with some practice, and of course, the enlightened guidance of a master PUA. By contrast, Max and Miller's book has a much tougher sales pitch: there is attractiveness in being a generous, honest, and respected community member, a driven and ambitious worker, a person who has genuine confidence in their skills, but none of these things come quickly or easily.

I cannot be certain that PUAs consciously cherry-pick evolutionary research to fit their entrepreneurial agenda, a claim which discourse analysis alone would be unable to prove. However, it is clear that PUAs' interpretations of evolutionary psychology are heavily framed by their commercial and self-help objectives. PUAs are not committed to developing a thorough empirical understanding of the world, but rather to producing a commercial service.¹⁰³⁷ They thus ground their advice in a crude and superficial version of evolutionary psychology, which seems to owe more to canonical texts like *The Mystery Method* and to collaborative just-so stories than to state-of-the-art research on mate preferences and mating dynamics (which is rarely cited by PUAs).

¹⁰³⁵ Ibid., 10. It must be noted that Savoy also instructs his reader to "Never lie," Savoy, *Magic Bullets*, 102.

¹⁰³⁶ For discussions of manosphere beliefs on female intelligence, see Chap. VI, A, 303.

¹⁰³⁷ This is illustrated by the popularity of Neuro-Linguistic Programming (NLP) in the community, particularly in its precursor Ross Jeffries' writings at the start in the 1980s-1990s. NLP is a pseudoscientific and widely discredited approach to psychotherapy and communication, for which empirical support is lacking, see section VI, B, 319.

Perhaps the most blatant manifestation of this commercially oriented appropriation of science is the disregard for the importance of immutable traits in mate preferences. Indeed, from a self-help perspective, premised on having the reader take responsibility for their own life and improve it, it would not be profitable to emphasize the importance of height, neurotypicality, or facial aesthetics in heterosexual female mate preferences. This cherry-picking is the underlying reason for the longstanding opposition between PUAs and incels, undoubtedly the bitterest feud between manosphere branches.

C. INCELS: SEXUAL SELECTION AND THE BLACKPILL

We have shown that the PUAs' vision of female mate preferences is aimed at giving hope to their male readers: with practice, any man can learn to become attractive to the opposite sex. Conversely, incels' very identity is based on the feeling of being inescapably unable to achieve sexual and romantic success. Incels are therefore very hostile to the PUAs' hopeful message. In fact, one of the earlier venues from which the modern incel community emerged was a website called PUAHate.com, which hosted disgruntled men who felt they had been scammed by the seduction community.¹⁰³⁸ To this day, the hostility persists, with incels accusing PUAs of exploiting young men's sexual deprivation and loneliness: "Pickup artists do not want you to get to the truth, at least not before giving them thousands of your hard-earned money first," an incel blogger writes.¹⁰³⁹ The crux of the discord revolves around the importance of looks in female mate preferences. As we have seen, PUAs tend to downplay it, which is infuriating to incels:

"They [PUAs] will acknowledge that looks matter, but then say that you can make up for it in "game" or "confidence". They will agree with you and acknowledge the glaring unfixable problems, but then sell you a lie wrapped in a pretty package."¹⁰⁴⁰

Incels' entire blackpill worldview hinges on stressing the social and sexual importance of looks, which is to them inextricably linked with evolutionary theory. They thus accuse PUAs of abusing the field of evolutionary psychology, by "peddling dumbed down/distorted versions of it" (incel, 2020). They claim to have a better understanding of evolutionary psychology, one that is so deterministic as to be devoid of hope: the "blackpill." Here again, readings of evolutionary science are inextricably linked with the community's worldview, and the experiences of its members.¹⁰⁴¹

¹⁰³⁸ See footnote $n^{\circ}301$, 69.

 ¹⁰³⁹ Randy Thompson, "Pickup Artists are Frauds," Incel.blog, November 2, 2020, <u>https://web.archive.org/web/20210107142849/https://incel.blog/pickup-artists-are-frauds/</u>, archived January 7, 2021.
 ¹⁰⁴⁰ Ibid.

¹⁰⁴¹ Parts of this section on incels' use of science were expanded and published in Louis Bachaud, "'I'll Always Be a Subhuman, I Just Lost the Genetic Lottery': Subaltern Identity-Building in Online Incel Discourse and Ideology," *Nuevo Mundo Mundos Nuevos. Nouveaux Mondes Mondes Nouveaux - Novo Mundo Mundos Novos - New World New Worlds*, 2024, <u>https://doi.org/10.4000/nuevomundo.95206</u>.

C.1. The Blackpill: Female Preferences for Immutable Traits and Halo Effects

In online incel communities, analyses and explanations of loneliness and sexual rejection by women abound. The most common one, and the key premise of the blackpill, is the fact that physically unattractive people get discriminated against, which is called "lookism." In fact, looks are believed to be the main factor in determining men's dating success. Incels typically attribute rejection to their physical appearance, which they view as ugly and repulsive. They recall having been ostracized or bullied because of their looks since school:

"I was the ugliest kid in my high school and treated like absolute shit. I was a genuine 1/10 on the looks scale. I never went to prom, had a gf, or even has a girl crush on me in high me in high school.

I'm miserable because I'm ugly. Look around your high school and find the ugliest kid you see who has no friends. Now tell me if you think someone like that can be happy?" (incel, 2017).

In incel ideology, society is seen as strongly segmented between different strata, based on looks and sexual attractiveness. Incels make intensive use of a 1-10 aesthetics grading scale ("the looks scale" mentioned above). While this practice is not limited to incel communities and can be found on the Internet or in popular culture,¹⁰⁴² incels add their own suite of labels to that scale. Very attractive men are called "Chads" and very attractive women "Stacies" for example. These labels are archetypes, used by incels to describe most people and social interactions, inextricably tying people's identities to their sole physical appearances. Unsurprisingly, incels place themselves on the bottom rung of this hierarchy, with "truecel" being considered the purest form of inceldom:

Figure 5.1: Incel Looks-Based	Hierarchy or "Decile Scale"
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Source: Reproduced from Incels.wiki¹⁰⁴³

Decile	Males	Females
10	Gigachad	Gigastacy
9	Chad	Stacy
8	Chadlite	Stacylite
7	male High-tier normy	High-tier Becky

¹⁰⁴² An example is the "Hot or Not" popular website (hotornot.com) which boomed in the early 2000s, and where users would submit photographs of themselves to have their attractiveness rated on a scale of 1 to 10, <u>https://web.archive.org/web/20040901094115/http://www.hotornot.com/</u>, archived September 1, 2004. This looks scale sees widespread use throughout all manosphere communities.

¹⁰⁴³ Incels.wiki, "Decile," <u>https://web.archive.org/web/20221006131947/https://incels.wiki/w/Decile</u>, archived October 6, 2022.

6	Brad	Male mid-tier normy		Becky	Female mid-tier normy	
5	Tanner			Low-tier Becky		
4	Melvin	male Low-tier normy		Gertrude	Female Low-tier normy	
3	Incelish	Semicel	Failed normie	Femcelish	Femcel-lite	High-tier femcel
2	Incel (male inceldom)		Femcel (foid inceldom)			
1	Truecel (Omega male)		Truefemcel (Omega female)			

Since physical appearance is in part genetically determined, this has further implications for the blackpill. As explained on incels.wiki: "An expanded or alternate definition proposes that a man's dating and life outcomes generally rely on genetically determined traits."¹⁰⁴⁴ The blackpill emerged in opposition to self-help type discourse, which aims at convincing romantically and sexually unsuccessful men that they can change things through personal effort and self-improvement. Drawing on evidence of structural disadvantage in the dating world (based on face, physique, neurodivergence, or race), incels have a more fatalistic view of things: the blackpill holds that genetics determine one's romantic destiny, and incels believe they are the losers of that all-important lottery. And they find a lot of research to support this belief.

Incels.wiki's Scientific Blackpill page compiles hundreds of scientific studies, which, "[a]s per the blackpill," emphasize "the role of systemic and genetic factors and traits in men's dating issues (rather than personal ones)."¹⁰⁴⁵ This webpage exemplifies the stark difference between incels and PUAs: it devotes entire sections to research on traits which are absent from PUA guides, such as female preferences on height, masculine facial traits, voice pitch, or penis size, traits over which a man has little control, lending credence to the genetic fatalism of the blackpill. Conversely, in a clear instance of selective cherry-picking, the attractiveness of humor—a key component of any PUA guide—is not featured on the Scientific Blackpill page.¹⁰⁴⁶ In fact, the only cited study dealing with humor is an experiment which found that attractive people were perceived as being funnier.¹⁰⁴⁷ This allows incels to question the idea that "humor influenced sexual selection (particularly in men) as powerfully as it is often touted to in the mainstream discourse surrounding

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Incels.wiki,

[&]quot;Blackpill",

https://web.archive.org/web/20221108081819/https://incels.wiki/w/Blackpill#History and extended definition, archived November 8, 2022.

¹⁰⁴⁵Incels.wiki,"TheScientificBlackpill,"https://web.archive.org/web/20231225000334/https://incels.wiki/w/ScientificBlackpill,archivedDecember25,2023.

¹⁰⁴⁶ For evidentiary summary on humor as a female mate preference, see Buss, *Evolutionary Psychology*, e-textbook version, 246.

¹⁰⁴⁷ Mary Louise Cowan and Anthony Little, "The Effects of Relationship Context and Modality on Ratings of Funniness," *Personality and Individual Differences* 54, no. 4 (2013): 496–500, <u>https://doi.org/10.1016/j.paid.2012.10.020</u>.

relationships."¹⁰⁴⁸ Since incels insist on the primacy of looks, this study fits their worldview: being good-looking (a "Chad") makes one funnier in other people's eyes. This is a manifestation of what psychologists call the halo effect, which is defined as the "tendency (favorable or unfavorable) to evaluate an individual high on many other traits because of a belief, or evidence, that the individual is high on one particular trait."¹⁰⁴⁹ Reading through incels' life stories, they describe having experienced and suffered from such halo effects. As children with poor physical self-esteem, they grew up feeling rejected, and envious of the treatment of their better-looking classmates:

"The most popular kids were the best looking kids, they were not particularly interesting, confident, talented or virtuous...they simply were bigger, and had better bone structure... Everything that they did, no matter how inferior and unimpressionable, has always been met with approval, applause, and sympathy... It's like your jokes suddenly became funny due to the fact you were tall, or good looking. You were most likely expected to succeed in life due to the fact that you were taller, had the bigger frame. You were always greeted with smiles, approval, and warmth" (incel, 2017).

"I was an ugly child. I had horrible large crooked teeth, a massive overbite and bad acne and thin greasy hair. I also developed late. I had people who I had never met direct hate and anger at me just for my looks. I was rejected time and time again by other kids even as a friend. I never wanted to go to school because I was terrified of sitting alone. I was bullied by kids in a different school who I had never met. My teeth were so bad I got braces through public healthcare.

Im looking normal now. The difference in how people treat me is truly fucking amazing. You are right too. They dont know what its like. My parents wouldnt listen to me when I told them how depressed I was or understand why my anxiety was so bad. I tried really hard as a kid to work on my personality. To try and be smart or funny. It didnt fucking matter. Nothing mattered until I wasnt fucked up looking" (incel, 2018).

Each time, humor is pictured as something that incels cannot be recognized for, as their looks make them too repulsive. Even more infuriating to them is the fact that they are often told that humor could be a way out of inceldom. On the r/Braincel subreddit which was banned in 2019, incels used to debate with members of the broader Reddit community (i.e., "normies").¹⁰⁵⁰ Oftentimes, normies of both sexes tried to be cheerful and give hope to incels. Even if you are really ugly, they argued, being funny might still make you attractive:

- "A lot of people are far from beautiful and they succeed because they have a social redeeming quality. For example they're funny. Humor is one of the top things men and women look for in a SO" (2018).
- "If you're interesting, conversational, bold, funny, educated, and ambitious (translation: have a personality) then you'll have a very stud-like personality and that can compensate for being less attractive. Words and actions DO turn women on, fellas. Women aren't just visual creatures, they're also psychological creatures" (2018).

¹⁰⁴⁸Incels.wiki,"TheScientificBlackpill,https://web.archive.org/web/20231225000334/https://incels.wiki/w/ScientificBlackpill,archivedDecember25,2023.

 ¹⁰⁴⁹ Jon Roeckelein, "Halo Effect," *Elsevier's Dictionary of Psychological Theories* (Amsterdam: Elsevier, 2006), 263.
 ¹⁰⁵⁰ For incels' own definition of the term, see Appendix 30, Glossary of Manosphere Terms, 586.

- "Seriously, if you feel your not being seen you need to try and be more confident and try to do something to make yourself noticeable like being really funny or being genuinely caring, because otherwise people wont pay attention to you" (2018).
- "I'm a good looking women who makes a nice living. Your premise is just not true. The love of my life is extremely homely and yet turns me on like no other. Why? He's extremely intelligent, interesting af and very funny" (2018).

Nothing could anger incels as much as these pieces of advice coming from normies (or even worse, from dating coaches), as they do not fit incels' experiences. Having faced rejection and bullying from a young age, for what they saw as being out of their control (such as shyness, looks, autism, or race), they deny the influence of traits such as humor or kindness on social and romantic success. To them, halo effects mean that anything an incel does would be received negatively, while everything a Chad does is worthy of praise. A common trope among incel communities is to bemoan those double standards. For instance, an incel Redditor wrote that for the same behavior, a Chad is seen as "funny" when an incel is seen as "clownish"; "confident" when an incel is "arrogant"; "emotional" when an incel is a "nerd," etc. (incel, 2018). Another one joined in with this poem:

"None of this shit matters. If a Chad opens up, he's hot and desirable. If a Chad is stoic, he's hot and desirable. If an incel is opens up, he's ugly and repulsive. If an incel is stoic, he's ugly and repulsive" (incel, 2018).

Denouncing and bemoaning the halo effects from which unattractive people suffer and attractive people benefit is a recurring feature of incel discussions.¹⁰⁵¹ From this issue, they often slide towards affirming that only looks matter to one's sexual and romantic success. This is a *non sequitur*. It could both be true that a halo effect exists, making attractive people more likely to be considered funny or kind, and that humor or kindness would, all other things being equal, be predictors of social and romantic success. However, given the reigning fatalism of the blackpill, immutable traits have pride of place among incels, with a reading of biological determinism that is poles apart from the Pickup-Artists'.

C.2. Blackpill Genetic Determinism: Losing the Genetic Lottery

Blackpilled incels ascribe their celibacy to their looks, or to other heritable traits such as autism and, by extension, to their genes. As a result, they often mention their own genetic makeup with despair:

¹⁰⁵¹ A negative halo effect is sometimes called a "devil effect" in psychology, while incels have dubbed this the "failo effect": "The failo effect states that an ugly person will be assumed to have an unappealing temperament, be less outgoing/extroverted, be less intelligent, and have looser morals, plainly judged by his physical appearance," Incels.wiki, "Failo effect," <u>https://web.archive.org/web/20240708102450/https://incels.wiki/w/Failo effect</u>, archived July 8, 2024.

- "[I]ncel has been a concept since the beginning of life on earth we are just genetically inferior organisms who will not reproduce" (incel, 2018).
- "Every cell in your body has your subhumanity encoded in it, your children will be 50% subhuman and it's not really you. We are literally our genes" (incel, 2018).
- "Yes, i am a genetic dead-end and it's not my fault. i know" (incel, 2022).

As illustrated by those comments, this fatalistic take on genetics can also paradoxically be a source of comfort since it makes it possible to blame one's life situation on immutable factors.¹⁰⁵² Yet, since you can neither choose nor change your genetic makeup, this genetic determinism is unanimously seen as extremely unfair—as shown by the popularity of the "genetic lottery" trope. Incels tend to see life outcomes as having been determined before birth by the random process of genetic recombination, and they believe they are the losers of this lottery:

- "I lost the genetic lottery due to getting the Autism gene, which no-one in my family has either. It just goes to show how much of life is down to random chance and that there is always a chance of something going wrong no matter how likely people are to believe the opposite" (incel, 2021).
- "Life is a scam. It's genetic gambling" (incel, 2021).
- "I'll always be a subhuman, I just lost the genetic lottery" (incel, 2018).
- "So the blackpill states, that some members of the human society lose the genetic lottery at birth, and in effect will be denied the ability to reproduce and the ability to pass on their genes to the next generation. Not only are these individuals denied the ability to reproduce, they are completely cast off from the herd, treated like some type of an abomination of nature" (incel, 2017).

Incel spaces feature a uniquely deterministic view of genetics, as shown by a forum thread about an online *Daily Mail* article reporting on a University of Oxford genetics study.¹⁰⁵³ The geneticists analyzed hundreds of thousands of people's genomes and looked for correlations with age at first sexual intercourse (AFS) and age of first giving birth (AFB). The incel poster who created the forum thread exclaims, "OUR DEVELOPMENTAL MILESTONES ARE CONTROLLED BY GENETICS! WE INCELS KNEW IT ALREADY! THE BLACKPILL HAS BEEN PROVED" (incel, 2021).

How exactly can genetics be said to "control" one's age at first birth? The Oxford study identified 371 locations on the genome which had an effect on one's age at first sexual intercourse

¹⁰⁵² This is what scholars have called incels' insistence on an "external locus of control": "members are designated as involuntary celibates because [...] they are genetically unlucky, while at the same time their social life is nonexistent or very limited because the world is an unfair place. Systematically interpreting and experiencing the world through the lenses of a categorically external locus of control fosters a sense of powerlessness and exclusion. This, in turn, further undermines the notion of personal responsibility [...], Brzuszkiewicz, "Incel Radical Milieu and External Locus of Control," 13.

¹⁰⁵³ Jonathan Chadwick, "When you lose your virginity may be written in your GENES," *Mail Online*, July 1st, 2021, <u>https://web.archive.org/web/20220818135645/https://www.dailymail.co.uk/sciencetech/article-9745237/When-lose-virginity-written-genes.html</u>, archived August 18, 2022. The Conservative-leaning *Daily Mail* is one of the most popular tabloids in the United Kingdom.

(AFS).¹⁰⁵⁴ Using different statistical methods, the researchers were able to estimate that effect, which "could explain up to 5.8% of the variance for AFS."¹⁰⁵⁵ Studies on age at first sexual intercourse are of great interest to incels, who have yet to reach theirs. This article could be interpreted as a glimmer of hope for them. Indeed, if one's genome can predict only up to 5.8% of the variance in age of losing one's virginity, it means that genetics are far from being destiny as stated in the blackpill. However, the forum poster took the opposite view: "SOON IT WILL BE 100%. GENOMICS WILL PROVE THE BLACKPILL OF BIOLOGICAL DETERMINISM BEYOND ANY SHADOW OF DOUBT" (incel, 2021).

The identification by this genomics study of a link between genes and AFS is thus construed by incels as confirming their absolute genetic determinism ("100%"), even with the study stating otherwise. No geneticist would argue that genomes could infallibly predict such complex, socially mediated life outcomes. Incels, however, seem to believe that genetics could eventually have that predictive power:

"They haven't churned all the variables yet, including ones like autism, height, frame, facial sexual dimorphism and testosterone levels, mostly because they don't want to I reckon. If they dedicated themselves to discovering the truth with open mindedness, they'd find that genetics 100% determines sexual success" (incel, 2021).

Other incels' reactions to this article are characteristically fatalistic. To them, this is further proof that they cannot escape their genetic fate:

- "brutal it was all predetermined" (incel, 2021)
- "My genes have already determined that I will never lose my virginity" (incel, 2021).
- "What a fucking shock. Everything is written in your genes. There is a gene for longevity, gene for muscle gain, gene for autism etc. 'I was born and it was over' is the most accurate sentence ever said" (incel, 2021).

There is a clear abusive conflation here of genetic determinism and immutability. "Genetic determinism" is used among incels as a synonym for fatality and inevitability. However, strictly speaking, genetic determinism just implies that there is a statistical effect of genes on a given trait an effect which is not necessarily massive. Cases of absolute genetic determinism exist: for example, people who inherit two mutant copies of the CFTR gene with the p.Phe508del mutation from their parents will inevitably be affected by cystic fibrosis.¹⁰⁵⁶ But for most traits, genes interact with the environment in a myriad of ways, painting a much more nuanced picture than that of the inevitable genetic determinism bemoaned by incels.¹⁰⁵⁷ Incels' readings of genetics, just like their

¹⁰⁵⁴ The technical genetics term for those "locations" is Single-nucleotide Polymorphism (SNP), that is, "A variant due to a base substitution or the insertion or deletion of a single base," Mark Jobling et al., eds., *Human Evolutionary Genetics*, 2nd ed. (New York and London: Garland Science, 2014), 637. DNA has four types of bases: adenine, guanine, cytosine, and thymine.

 ¹⁰⁵⁵ Melinda Mills et al., "Identification of 371 Genetic Variants for Age at First Sex and Birth Linked to Externalising Behaviour," *Nature Human Behaviour* 5, no. 12 (2021): 1717–30, <u>https://doi.org/10.1038/s41562-021-01135-3</u>, 1719.
 ¹⁰⁵⁶ Claude Férec, "La mucoviscidose - Du gène à la thérapeutique," *médecine/sciences* 37, no. 6–7 (2021): 618–24, <u>https://doi.org/10.1051/medsci/2021085</u>.

¹⁰⁵⁷ See Chap. II, A, 108-112.

reading of female mate preferences, are heavily motivated by their blackpill beliefs. Thus, they interpret evidence of partial genetic determinism as absolute, and they selectively focus on female preferences for immutable traits, each time fueling their fatalism.

C.3. From Sexual Selection to Women as Eugenicists

For many evolutionary scientists since Darwin, female mate choice has been the driving force in mammalian sexual selection. Incels have assimilated this axiom, which shapes their vision of society, as revealed in a 2018 Reddit discussion on a feminist cartoon encouraging boys to behave in traditionally feminine ways ("sensitive," "gentle," "caring").¹⁰⁵⁸ As men who do not fit aesthetic and behavioral norms of virility, incels are sympathetic to this approach. However, they berate feminists for their inconsistency: attacking masculine cultural gender norms is one thing, incels argue, but as long as women reproduce with masculine men, masculine features will be sexually selected. As usual in nature/nurture debates, manospherians tend to adopt the more naturalistic position against a feminist sociocultural perspective. They do not believe that traditional masculinity would evolve "until women change their sexual selection or stop selecting" (incel, 2018). Even if men collectively started behaving in more feminine ways, an incel explains that sexual selection would favor the few men whose mating strategy would remain more traditionally masculine:

"In theory yes, if we all became exactly alike women would have a more difficult time discriminating. However, that isn't going to happen because female sexual selection shapes male behavior. If men become more feminized, the reward for being masculine increases." (incel, 2018).

This shows familiarity with evolutionary reasoning, as this kind of simulation of different competing strategies is a hallmark of evolutionary sciences, as shown by Fisher's explanation for the stability of sex ratios above. Strikingly, it illustrates the importance incels give to sexual selection, a process from which they are excluded. To them, feminism is hypocritical, because it cheers on sexual liberation and the greater autonomy enjoyed by women in mate choice, all the while condemning toxic masculinity. In their view, these toxic masculine behaviors are sexually selected: women might say they dislike them, but they end up mating with Chads anyways. Incels thus enjoin women to start "putting [their] money where [their] mouth is at" (incel, 2018):

"Choose the kind, shy guy at the party instead Chad. Take a chance with the quiet artist and see what his PERSONALITY is really about. Start showing CHADS that these type of men are the ones you like, not assholes who don't care about their feelings. Chads will either act accordingly or not get with women.

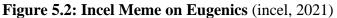
This is how you slowly feminise society. It'll take time, but sexual selection is a powerful attitude adjuster. Why the fuck do you think all those birds of paradise dance to fuck female birds" (incel, 2018).

Male birds of paradise, with their bright plumage and elaborate mating dances, are indeed a paradigmatic example of sexual selection. These traits do not provide direct survival benefits, but they are favored by females and confer a reproductive advantage, thus explaining how they spread

¹⁰⁵⁸ Elise Gravel, "Boys Can Be," <u>https://web.archive.org/web/20240329102344/http://elisegravel.com/wp-content/uploads/2018/01/Boys.png</u>, archived March 29, 2024.

in the male population. As shown by historian Kimberly Hamlin, late 19th-century feminists cheered on Darwin's *Descent of Man* for that exact reason.¹⁰⁵⁹ They saw females' prominent role in sexual selection as an indication of female agency and power. More than a century later, incels make a similar interpretation of sexual selection. However, instead of celebrating this female power, they deplore it: if incels blame their genes for their celibacy, they also vituperate against female mate choice which they see as hardwired to reject them. Thus, they often portray their experience of romantic rejection as their being removed from the gene pool through sexual selection, as shown by this popular incel Reddit meme on online dating:





The most upvoted reaction to this meme came from an incel who just tersely commented: "Socially Acceptable Passive Eugenics" (incel, 2021). This illustrates a trend among blackpilled incels, who see their sexual rejection as a form of female-driven eugenics, as shown by incels.wiki: "Since having favorable genetic traits is a requirement for reproductive success, exclusion of undesirables will inevitably manifest as a type of naturally occurring eugenics."¹⁰⁶⁰ This is likened to eugenics since incels and their "undesirable" genomes are selected out, but one that occurs "naturally" through female choice, without institutional planning and supervision. Dating apps in particular are thought to exacerbate this process, as they give women more choice in mate selection. However, an incel correctly points out that what incels are condemning as "eugenics" is just the definition of sexual selection: "it isn't any more 'eugenics' than whatever has existed previously, you're trying to blame something when the only thing there is to blame is evolution" (incel, 2021). This does not do much to placate other incels, who think sexual selection based on immutable aesthetic factors is as unfair as state-controlled eugenic policy based on racial criteria: "that's true, but that's still eugenics, and it's highly encouraged. if it's race, then it's bad, but appearance is acceptable" (incel, 2021).

¹⁰⁵⁹ Hamlin, From Eve to Evolution. For more on 19th-century Darwinian feminists, see Chap. II, A, 99.1060Incels.wiki,"GeneticPrisonTheory,"https://web.archive.org/web/20201001164519/https://incels.wiki/w/Genetic Prison Theory,archivedOctober 1,2020.

This leads some incels to wonder whether they will not disappear from the face of the earth. Indeed, since inceldom is thought to be based on genetics, and since they have no hope of reproducing, it follows that they would think sexual selection would naturally lead to removal of "incel genes" from the species:

"Our concurrent inceldom predicament aided by the current shift of sexual selection dynamics and hypergamy paradigm will inevitably lead an evolutionary mass extinctions events whipping out the incel genome due to lack of reproduction alone" (incel, 2022).

This mass extinction is seen as too extreme a scenario by others, although they recognize the existence of this ongoing trend: "They [incels] won't die out but the frequencies of those alleles should decrease because of pressure from sexual selection" (incel, 2022). Understandably for a group who believes to be collectively subjected to extinction, reactions combine despair, hate, or denial. Women are the naturally designated targets of that hate, as they are the supposed "eugenicists" behind that extinction:

"Yes foids are doing eugenics. Why? Because they show mating patterns that result in the change of genes, this is directly correlated to their mating choices, so here is your so called 'eugenics'. Is femoid choice 'improving' the genepool? Only time will tell. All I can say is that foids are eugeneticists, no question about it" (incel, 2021).

Probably the most popular theme among incels is to lament women's preference for Chads, which is seen as an inescapable law of nature: "the universal Darwinian truth is, foids would rather spend the rest of their lives, as well as their remaining eggs in their ovaries, with a genetically perfect male aka Chad" (incel, 2020). Chads are subjected to vitriol, but also looked on with envy: "Must be nice winning the genetic lottery and having sex handed to you on a silver platter" (incel, 2020). Additionally, the incels.wiki entry on feminism blames "Social Darwinist Feminism" for supporting this incel extinction:

"Some feminist anti-incels hold social Darwinist, eugenicist views and believe in the good genes hypothesis that women always choose the best genes and hence women's sexual liberation is a great benefit for humanity as men with poor genes won't reproduce as much. If increasing female sexual freedom results in sharp increases of male inceldom, they see this as a necessary and welcome development."¹⁰⁶¹

Although incels.wiki's portrayal of contemporary feminism seems rather puzzling, it echoes the ideas of past Darwinian feminists. In reformist feminist and socialist circles at the start of the 20th century, female mate choice was thought to be a powerful vector for improvement of the species. If women were emancipated from financial dependence on their husbands, feminist writers Eliza Burt Gamble and Charlotte Perkins Gilman argued, their dominant role in sexual selection would be restored, thus allowing women to select industrious and upstanding husbands,

¹⁰⁶¹ Incels.wiki, "Feminism," <u>https://web.archive.org/web/20210107144415/https://incels.wiki/w/Feminism</u>, archived January 7, 2021. Although they are often conflated, as is the case here, Social Darwinism and eugenics are in fact opposed in many regards. While the Social Darwinism of the 19th century was inherently conservative and individualistic, advocating against state intervention in order not to disturb the naturally competitive process of survival of the fittest, eugenics was a state-interventionist reform cause embraced by many progressives, Degler, *In Search of Human Nature*, 42. Those two ideologies are presented above in Chap. II, A, 100.

heritable traits which would thus spread and improve humankind.¹⁰⁶² While there is no indication that incels are aware of these past appropriations of Darwinian sexual selection by Progressive Era US feminists, the similarities are striking. Past Darwinian feminists and contemporary incels both saw the potential political implications of female mate choice—empowering for feminists, intolerable for incels. Caught up in the spirit of reformism and eugenics of the early 1900s, Darwinian feminists saw sexual selection as a way to breed out "unfit" traits from the population. Incels, on the other hand, see themselves as being on the receiving end of this process more than a century later. They argue that sexual liberation, female autonomy, and the rise in dating apps have increased freedom in female mate choice and selective pressure on men's attractiveness, and that they are being selected out of the species.

However, not all incels despair at this supposed supremacy of women in sexual selection. There are two broad types of opposition to this idea: some theoretically question its premises, while others call for male supremacist measures, in order to put the brakes on female mate selection. The first type of criticism is illustrated in a 2021 forum thread. The poster says he wants to challenge "the line of argumentation that attempts to ground female desire in the operation of evolutionary principles as it relates to offspring success," which is "ubiquitous on 'blackpill' sites" (incel, 2021). He goes on to question the very premise of sexual selection. To him, females do not make particularly judicious choices in mate selection:

"How many weaklings, how many fools, how many incompetent deadbeats, how many cowards, have we seen 'graced' with female companionship? And how many fit, dutiful, and intelligent men left in the ditch as the counterpositives? We may even call human sexual selection totally into question as a means of adaptation to the surrounding world" (incel, 2021).

Another poster approves and claims that "evolution is natural selection not sexual selection" (incel, 2022) Those dissenting incels therefore accuse the majority of blackpilled incels of fatalistically bowing to the power of female mate choice, and to the eugenic consequences thereof. By constantly referring to Darwinian sexual selection and its inescapable power, they claim that blackpill readings of evolution legitimize female behavior instead of challenging it:

"The entire enterprise of rationalizing mate selection as a product of evolutionary action is in fact a grandiose apologetic for female mistakes. By attempting to naturalize female desire, our evolutionist would like to contrive a firm and unshakeable basis for female-governed sexual selection and is acting as a flagrant servant to gynocracy" (incel, 2021).

"I am so pissed off of fake based incels foid worshipping cucks believing that Chad is superior to us putting pseudo-darwinists bullshits to justify their thoughs, example society is doing the right job ostracizing us and privileging Chads for its own good (despite clown world is getting to shit each years worse than the previous) clearly proving their total ignorance about eugenetics [...]" (incel, 2021).

"My opinion is that evolutionary sexuality is speculative, and probably wrong more often than right, but it does have some basis in reality and frankly it's just a convienent pseudo-science to help rationalize women's behavior" (incel, 2022).

¹⁰⁶² This idea also enjoyed support from Alfred Russel Wallace, the famous co-discoverer of natural selection, Hamlin, *From Eve to Evolution*, 134-149.

Such questioning of evolutionary biology itself is quite rare among incels, yet another type of reaction is more commonplace. Incels might accept blackpill narratives about the power of female choice in sexual selection, but it does not mean that they see it as inevitable. Violence is usually the response of choice: "Of course we're not 'entitled' to sex, but we want it," an incel writes on a forum, "And when we don't get it, based largely on genetic factors determined from conception, and when we're even hated for those factors our whole lives, why wouldn't some of us feel the need to resort to violence or misogyny?" (incel, 2018). Collective gendered violence thus becomes framed as a legitimate reaction to the exclusion and existential threat posed by female choice and sexual selection:

"If men stopped being cucks, we could easily enslave the female sex though. We could then implement our own hypergamy and eugenics, including cloning Stacies, breeding females to be as sexy as possible for our own pleasure and aborting male fetuses so that we would have more females for ourselves. It would be righteous, because we are stronger [...] The only thing that really matters in nature, is might. *Might makes right*. We, as men, should therefore use our might to remove female rights" (incel, 2020).

This collective male supremacist manifesto is met with enthusiasm by other incels, who insist on controlling female nature through violence and rape: "I won't bow to nature whether it's natural or not. Many animal species have males with high reproductive success despite female hypergamy being common in all animals. We are owed sex. Take it by force or be a good depressed little wageslaving abused cuck all your life" (incel, 2021).

This illustrates how evolutionary science can underlie male supremacist discourse. Paradoxically, in the case of incels, this starts from a premise of male inferiority. As representatives of the sex which is subjected to stronger sexual selection pressure by female mate choice, incels see their lot as particularly unfair. They view themselves as a subaltern group, with some even claiming to be the "most oppressed demographic of all time" (incel, 2022).¹⁰⁶³ Their whole identity is grounded in a narrative of victimhood, which is buttressed and reinforced by their interpretation of Darwinian sexual selection. Men's Rights Activists as well often portray themselves as the victims of feminism, or of "gynocentricism."¹⁰⁶⁴ And here again, their use of evolutionary biology is strongly premised on male inferiority, through the male disposability/female pedestalization just-so story. This runs against the traditional blueprint for antifeminist appropriations of biology, such as Clarke's 1873 *Sex in Education*.¹⁰⁶⁵ Those past appropriations construed women as biologically inferior, or at least congenially unsuited to traditionally male-dominated activities (such as science or politics), which justified their exclusion from those spheres and the defense of a patriarchal status quo. In the manosphere, such arguments are not unheard-of, but they are not dominant either.

¹⁰⁶³ For a study of how this subaltern identity is constructed and maintained, see Bachaud, "'I'll Always Be a Subhuman, I Just Lost the Genetic Lottery."

¹⁰⁶⁴ On that point, see Bethany Coston and Michael Kimmel, "White Men as the New Victims: Reverse Discrimination Cases and the Men's Rights Movement," *Nevada Law Journal* 13, no. 2 (2013): 368–85.

¹⁰⁶⁵ Edward Clarke, Sex in Education, or, a Fair Chance for the Girls (Boston: James Osgood and Company, 1873).

for sheer male biological superiority.¹⁰⁶⁶ In fact, as shown by our analysis of MRA and incel ideologies, females are seen as a driving force in human biology, wielding enormous influence in the species through their reproductive role (either through the lens of group selection for MRAs, or female choice and sexual selection for incels.) In that regard, although these groups view society and gender through biological lenses, they do not commit the naturalistic fallacy and conflate what is natural with what is good. Quite the opposite, they use biology to ground their victimhood claims, and deplore the existence of what they see as hardwired sex differences, thus lending credence to their diagnosis of contemporary society and to their ideological agenda. Among manosphere groups, MGTOW might be the best example of a refusal to obey "biological imperatives."

D. MGTOW: RESISTING INSTINCTS AND TRANSCENDING NATURE

D.1. Escaping the Allure of Sex and Women

MGTOW are heterosexual men who voluntarily decide to avoid sex, relationships, or even female company altogether. They thus berate other manosphere groups who are focused on sex and relationships, in particular Pickup-Artists. MGTOW despise PUAs for their avowed interest for female mate preferences. They argue that PUAs' "game" is just based on "studying 'what women want" and is consequently "solely about giving women what they want"¹⁰⁶⁷—a dire accusation coming from those male separatists, who have decided to ignore women's opinions and preferences altogether. In a 2019 open letter to other manosphere groups, a MGTOW redditor did not mince his words towards Pickup-Artists (note how, in spite of their differences, he sees the two communities as united by evolutionary psychology):

"It seems to me that it is the epitome of pussy pedestalization. To make the penetrating of a likely disease-ridden hole with your penis the goal of your life? Then proceed to sink hours and thousands of dollars in it. That to me is madness.

Yes, you guys use some evopsych as a base to game and manipulate women to bed them. The term evopsych in that sentence is just about the only common ground with MGTOW that PUA has" (MGTOW, 2019).

However, the letter goes on in a more conciliatory tone: "Having said all of that, I would like to extend an olive branch to you guys. It is understandable to be libidinous." As an advocate for a sexless lifestyle, this MGTOW recognizes that it is "very difficult to fight this ancient drive, especially in such a hypersexualized society such as ours, where the number of vaginas you have penetrated has great social capital" (MGTOW, 2019). Here, he evokes an evolutionary perspective on sex drive ("ancient drive"), all the while arguing that this instinct is fostered by contemporary Western cultures. Similarly, he tells incels: "much like the PUAs, you have become obsessed with pussy. Who can blame you? From the moment we are born we are bombarded with love and sex propaganda. We are led to believe it is the end all be all. Supreme happiness" (MGTOW, 2019).

¹⁰⁶⁶ Manosphere arguments about male biological superiority do exist however, see Chap. VI, A, 303.1067 Mgtow.com,"MGTOWGlossaryofTerms,"https://web.archive.org/web/20210104143807/https://www.mgtow.com/glossary/, archived January 4, 2021.

Proselytizing for his movement, he urges incels to renounce their futile hopes of escaping celibacy and to join the MGTOW ranks, arguing that heterosexual relationships are bound to disappoint them once the dopamine high from the intoxicating "honeymoon phase" is over. As for PUAs, he lays out the equation before them: "either you serve the master of evolution and insane pussy begging" or, "you find a new better path" (MGTOW, 2019).

This letter to other manospherians thus reveals one of the tensions running through the MGTOW community: these voluntary celibate men are heterosexual and seem for the most part to have functional sex drives, yet their personal and ideological trajectories have led them to renounce sex. As such, they picture themselves as engaged in a struggle against a powerful and relentless instinct produced by evolution:

"As a man, it's wired deep in your psyche to fuck every young, reasonably attractive female in sight. This is natural, and you shouldn't be ashamed of it. Look around in nature. Reproduction is the core mechanic of all advanced life. [...] Don't beat yourself up if you have a hard time dealing with these urges, or feel very confused about what to do with them" (MGTOW, 2020).

MGTOW see this sex drive as highly detrimental to men. It diverts all of their mental energies toward the pursuit of sex, and they become dependent on female approval as their self-worth become based on sexual success. Since the male sex drive is so powerful, MGTOW see themselves as an elite contingent of men who have managed to shed off these base urges and transcend their biology.

D.2. Transcending Biology

While the most famous PUA guide opens with this reminder of the supposed biological imperative, "Nature will unapologetically weed your genes out of existence if you don't take action and learn how to attract women now,"¹⁰⁶⁸ MGTOW question the relevance of this Darwinian injunction: shouldn't humans aspire to more than just fulfilling their animal urge to procreate? "Survival and mating are the success model for animals in the wild. That's the best they will ever do," a MGTOW article argues, "But marriage and children are not the highest pinnacle of success for Men. Some 60% of men who ever lived on Earth never had children, so what did they dedicate their lives to?"¹⁰⁶⁹ To answer this question, the article quotes many famous lifelong bachelors in history, such as the famous aviation pioneer Wilbur Wright: "*I don't have time for a wife and an airplane'*- Wilbur Wright (1867 – 1912)"¹⁰⁷⁰ MGTOW indeed show great reverence for past artists, scientists, and philosophers who they claim avoided marriage, and a list of these proto-MGTOW was present on the main MGTOW website:

¹⁰⁶⁸ Mystery, *The Venusian Arts Handbook*, viii. ¹⁰⁶⁹ Mgtow.com, "The History of MGTOW," https://web.archive.org/web/20210104143908/https://www.mgtow.com/history/, archived January 4, 2021.

¹⁰⁷⁰ Ibid., US inventors Wilbur Wright (1867-1912) and his brother Orville (1871-1948) were pioneers in the history of aviation, widely regarded as having invented the first successful airplane. They are also known for remaining single throughout their lives.

Figure 5.3: List of MGTOW Precursors Source: MGTOW.com website¹⁰⁷¹

Pierre Bayle • Robert Boyle • Johannes Brahms • Samuel Butler • Robert Burton • Ludwig van Beethoven • Johannes Brahms • Giacomo Casanova • Frederic Chopin • Nicolaus Copernicus • Eugène Delacroix • Rene Descartes • Gustave Flaubert • Galileo Galilei • Edward Gibbon • Vincent van Gogh • Oliver Goldsmith • Thomas Hobbes • Horace • David Hume • Washington Irving • Henry James • Franz Kafka • Immanuel Kant • Soren Kierkegaard • Charles Lamb • T. E. Lawrence • Meriwether Lewis • Philip Larkin • Gottfried Leibniz • John Locke • Michelangelo • Friedrich Nietzsche • Sir Isaac Newton • Blaise Pascal • Alexander Pope • Marcel Proust • Maurice Ravel • George Santayana • Jean Paul Sartre • Franz Schubert • Benedict de Spinoza • Arthur Schopenhauer • Herbert Spencer • Adam Smith • Stendhal • Jonathon Swift • Nikola Tesla • Henry David Thoreau • Henri De Toulouse-Lautrec • Leonardo da Vinci • Leonardo Di Caprio? • Voltaire • Ludwig Wittgenstein • Plato

You?

This illustrious roster is perceived as testimony of the fact that great men (and not women) are responsible for the advancement of humanity. By resisting their sexual instincts, these precursors have dedicated themselves to higher pursuits, an example which contemporary MGTOW try to emulate, as they argue that voluntary bachelorhood clears the mind:

"If the point is to be anti-animal and pro-reason, then I wonder what would happen when we finally figure out how to stop destroying ourselves by succumbing to our base animal natures, of which our sex drives are most likely the strongest, and the way women stop men from "thinking" and rather living by pure passion. Maybe if we overcome this lemming tendency that has plagued us for thousands of years, there is something else on the other side."¹⁰⁷²

Not only does "going MGTOW" supposedly allow men to think clearly, but it is also thought to be conducive to greater happiness. MGTOW recall how they used to experience a "constant longing" for validation through sex. This is seen as an unhealthy part of male psychology: "once you wake up and see that this has been happening in your own psyche throughout your entire adulthood, and you figure out how to break this biological programming to discover the worth in yourself, a hell of a lot will begin to change in your life," a seasoned MGTOW redditor tells younger men (MGTOW, 2020). While women are often portrayed as animalistic creatures, irresistibly driven by instinct, MGTOW see themselves as able to escape their "biological programming." This illustrates the double standard documented in the previous chapter. For example, reacting to a forum poster who argued that "evolutionary law destines women to seek the seeds of the most animalistic men," another poster asserts that MGTOW have on the contrary "beaten evolution" by taming their instincts:

"This reminds me of a post I saw on some Manosphere blog saying that MGTOW are evolutionary losers, or something like that; that may be true, but I think we (the ones who haven't reproduced, anyway) have beaten evolution in a way, not letting the drive to continue the species prevent us from trying to improve our own lives [...]" (MGTOW, 2014).

 ¹⁰⁷¹
 Mgtow.com,
 "The
 History
 of
 MGTOW,"

 <u>https://web.archive.org/web/20210104143908/https://www.mgtow.com/history/</u>, archived January 4, 2021.
 2021.

 ¹⁰⁷² Anonymous, "Testing, Testing... 1,2,3... Testing," *The Masculine Principle*, March 11, 2015,
 <u>https://web.archive.org/web/20210105100618/http://masculineprinciple.blogspot.com/2015/03/testing-testing-123-testing.html</u>, archived May 1, 2021.

The example of MGTOW showcases how perspectives on human nature can differ. While all manospherians would agree that sex drive is the product of evolution, Pickup-Artists aim at following this "imperative" and are thus closer to the naturalistic fallacy, incels deplore the existence of such a strong compulsion which stays unfulfilled, and MGTOW see it as something to transcend, in order to reach higher levels of serenity and individual success. Thus, while different groups can agree on reality, the conclusions they draw from it and their associated narratives and normative judgments can be diametrically opposed. Among all manosphere branches, The Red Pill is undoubtedly one of those who have built the most elaborate ideological edifice around evolutionary scientific concepts.

E. THE RED PILL: HOW TO BECOME AN ALPHA MALE

E.1. Competing Sexual Strategies: Antagonistic Darwinism

Red Pill writers claim to strip down what they see as the veneers of convention, illusion, and morality, which usually shroud people's views on society. And what hides behind these veneers is, they claim, evolutionary biology. Discussions of love and relationships, in particular, are often reduced to mating strategies and their ultimate genetic interests. And as in all the other manosphere ideologies reviewed so far, women have the biological upper hand, as their strategy of hypergamy-i.e., the drive to select for higher-status mates-is thought to be a ubiquitous and almighty force driving their every choice.¹⁰⁷³ This is believed to have a defining influence on society, framing the entire collective psyche around sex and relationships. Modern Western society is thus believed to revolve around this "female imperative" of hypergamy. Feminism is also assimilated to sexual strategy, as expressed in the Red Pill community's founding manifesto on Reddit: "Feminism is a sexual strategy. It puts women into the best position they can find, to select mates, to determine when they want to switch mates, to locate the best dna possible, and to garner the most resources they can individually achieve" (TRP, 2012). This is heavily framed by evolutionary scientific terminology ("strategy," "mate," "dna," "resources"). Waking up to the reality of hypergamy is the core component of "taking the red pill," and rejecting feminism is therefore part of it.

Red Pill ideology is thus construed as a counter-strategy to hypergamy, as stated in the subreddit's mission statement: "The Red Pill: discussing sexual strategy in a culture increasingly lacking a positive identity for men" (TRP, 2012). As a sexual strategy, it incorporates many elements from PUA game. Yet, the framing is more confrontational, as game is not only seen as a practical tool towards sexual success, but as a resistance against women's powerful and socially endorsed mating strategies, as explained in the community's founding manifesto:

"Mastering Game

Game is an important portion of a sexual strategy. A lot of you probably came here from /r/seduction and are probably wondering why we'd need a new subreddit if one dedicated to game already exists. The reason is simple: Game is a facet of The Red Pill's sexual strategy. Determining good game is

¹⁰⁷³ The special place hypergamy holds in manosphere visions of sex differences is reviewed, and critiqued, in Chap. VI, B, 1, a, Hypergamy: The Crown Jewel of Manosphere Ideology, 308.

impossible to do so without first understanding the context given by The Red Pill's framework. Something I keep seeing over on the seduction subreddit is a problem taking over most relationship and sex forums: the desire to feminize the discussion (basically making it sound politically correct if read by a female).

Yes, game got a bad reputation from girls who demonize manipulation. This is because game is an effective strategy against their own sexual strategy [...]

When women started becoming vocal about their opposition to game, that's when men decided it would be necessary to make game more politically correct. "Oh, we're not here to manipulate women to have sex with us- we're here to become better men!"

And thus, the female imperative took over game. When men think they must define their own sexual strategy in a way that best delivers results to the female sexual strategy, you know your own strategy will suffer! In a game of chess, do I politely not take out the oppositions' queen in hopes not to offend or win the game?" (TRP, 2012).

As a reaction to criticisms of PUA game in the 2000s-2010s, the Red Pill community thus emerged as an unapologetically male-oriented, self-proclaimed politically incorrect ideology. To teach men how to be successful in life, this ideology contends, they need to reject feminism and ideals of romantic love, and embrace a biologized worldview where gender dynamics can be reduced to conflicting mating strategies. As such, evolutionary psychology is the discipline of choice, as this founding manifesto goes on to express: "Because of the necessity to have good game, we must define what good game is. A large portion of Red Pill discussion revolves around evolutionary psychology. Understanding the facets of this psychology are key to developing a good sexual strategy" (TRP, 2012). The strategy advocated by the Red Pill is also reliant on concepts from the life sciences, and in particular animal behavior, as it revolves around the idea of becoming an "alpha male."

E.2. Alpha Males and Beta Males

"Within the Manosphere the terms Alpha, Beta, and other Greek designations are thrown around with casual regularity, but thanks to the developing sophistication of the 'Sphere these terms can often mean different things depending on context," Red Pill writer Ian Ironwood argues.¹⁰⁷⁴ He recognizes both the ubiquity of the alpha/beta male dichotomy in the Red Pill, and its vague contours. He goes on to list different influential manosphere definitions of the term. These hierarchically classify men in terms of their sexual success, starting with dating coach Roissy (aka "Heartiste"): "Roissy used the terms Alpha and Beta to designate Guys Who Get Laid and Guys Who Don't Get Laid, exclusively."¹⁰⁷⁵ Blogger Vox Day established an entire "Socio-Sexual Hierarchy," which had Alpha, Beta, Delta, Gamma, Omega, Lambda and Sigma males. Starting with "the Alpha," i.e., "the tall, good-looking guy who is the center of both male and female attention," this hierarchy also includes Deltas ("The normal guy. Deltas are the great majority of men") all the way down to Omegas ("The truly unfortunate. Omegas are the social losers who never were in the game").¹⁰⁷⁶ For each rung on the sociosexual hierarchy, Vox Day mentions their number of sexual partners. As among blackpilled incels, society is viewed through a hierarchical framework, where men and women are ranked in terms of their sexual success. And just as incels'

¹⁰⁷⁴ Ian Ironwood, *The Manosphere: A New Hope for Masculinity* (Red Pill Press, 2012), e-book location 29%.

¹⁰⁷⁵ Ibid.

¹⁰⁷⁶ Ibid., e-book location 30%.

conversations often reduce people to their labels of "Chads" and "normies," the labels of "alpha" and "beta" are ubiquitous in Red Pillers' discourse on social interactions. So much so, in fact, that the terms are not only used to describe people ("he's an alpha man,") but also actions ("Chivalry is as Beta as you get"),¹⁰⁷⁷ an extension of the term documented by Ian Ironwood:

"[J]ust to make things murkier, when **Athol Kay**, author of the popular and seminal **Married Man Sex Life** blog, co-opted the terminology *yet again* to describe patterns of male behavior within a long term relationship with a woman, he used alpha to mean 'behaviors that inspire sexual arousal' and beta to mean 'behaviors designed to build a sense of comfort and security."¹⁰⁷⁸

While more elaborate classifications, including "gamma," "omega," or "sigma" males, are often proposed in the manosphere, their popularity remains limited compared to that of the ubiquitous alpha/beta dichotomy. Even if definitions of alpha and beta in the manosphere vary in focus and emphasis, they usually are associated with three connected themes: personality, heterosexual desirability, and behavior in relationships. Table 5.2 below summarizes this fundamental Red Pill dichotomy:

	Alpha Man	Beta Man
	Independent, self-sufficient, fit,	Conformist, moralistic, romantic,
Personality	dominant, charismatic, adventurous,	industrious, egalitarian, abides by the
	and unapologetically masculine.	rules of society.
Heterosexual	Irresistibly sexually attractive to	Attractive as a dependable partner
Desirability	women.	although not sexually.
Behavior	vior Aloof, teasing, uncommitted, Submissive, needy, main resour	
in Relationships	unpredictable, dominant.	provider in the relationship.

Table 5.2: Characteristics of Alpha Men and Beta Men in Red Pill Ideology

While definitional contours might vary, Red Pillers all more or less subscribe to this alpha/beta dichotomy, which is embedded in a broader web of Red Pill concepts. Indeed, beta men are also thought to adhere to the blue pill: they believe that by being nice with women, they will end up finding a romantic life partner who will like them for who they are. Usually, this image of the typical "beta" also includes support for feminism. To Red Pillers, these men are just collaborating to their own exploitation. Blinded by ideals of romantic love, beta men keep looking for a soulmate, but end up in unfulfilling relationships, where they do most of the spending, for women who are congenially incapable of loving them and keep looking for better options.¹⁰⁷⁹ Taking the red pill is thus synonymous with what Rollo Tomassi calls "killing your inner beta,"¹⁰⁸⁰ and Red Pillers think of themselves as a community of alpha men, or at least aspiring ones.¹⁰⁸¹

¹⁰⁷⁷ Daniel Reeves, "Chivalry is a Beta Move, Right?," The Puerarchy, August 23, 2013, <u>https://web.archive.org/web/20130827022023/http://puerarchy.com/2013/08/23/chivalry-is-a-beta-move-right/</u>, archived August 27, 2013.

¹⁰⁷⁸ Ironwood, *The Manosphere*, e-book location 29%.

¹⁰⁷⁹ These manosphere views on romantic love are discussed further in Chap. VI, A, 293.

¹⁰⁸⁰ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 90-94.

¹⁰⁸¹ This is illustrated for example in the Reddit thread title: "The betas are our brothers" (TRP, 2014).

Therefore, "Red Pill game" is just another phrase for becoming an alpha man, which is thought to require a thorough change of mindset. This means there are fewer seduction "tips and techniques" in TRP than in PUA writings, as being a Red Piller is a more comprehensive lifestyle, with philosophical and political overtones. One of the key differences between the two communities is the antagonistic view of the sexes found in the Red Pill, where sex and relationships are construed as a Darwinian arena opposing male and female mating strategies (Alpha/Red Pill vs. Hypergamy), with evolutionary psychology being the discipline of choice to buttress this worldview, as shown by Tomassi: "From an evolutionary psychology perspective Alpha is just as unprincipled, just as efficiently ruthless and uncaring as it's female counterpart – feminine Hypergamy."¹⁰⁸²

E.3. The Dual Mating Strategy: The Red Pill's Darling Hypothesis

The evolutionary psychology behind the Red Pill mostly revolves around the "dual mating strategy" hypothesis.¹⁰⁸³ This hypothetical framework sees women's mate choices as shaped by two sets of selective pressures over evolutionary history. On the one hand, mating with physically attractive men would ensure getting "good genes" for their offspring.¹⁰⁸⁴ On the other hand, finding a long-term mate willing to assist in childrearing and provide resources also has massive fitness benefits. These competing pressures would have given rise to two mating strategies which cohabit in women: a short-term and a long-term mating strategy.¹⁰⁸⁵ The dual mating framework posits that women's sexuality could therefore be understood in terms of those overlapping strategies, the tradeoffs between them, and the different contexts in which they manifest. One of the main predictions of this hypothesis concerns women's ovulatory cycle. If the dual mating strategy hypothesis was true, female mate preferences and sexual behavior would shift around ovulation. When they are the most fertile, women would prioritize short-term mating with attractive men (i.e., "good genes"), and when they are less fertile, they would give more importance to long-term mating with dependable partners. Additionally, sexual infidelity, flirting, or fantasizing about other attractive men by women in committed monogamous relationships is also expected to rise around ovulation. For the past two decades, these predictions have been investigated with a wide array of observational and experimental methods.¹⁰⁸⁶

¹⁰⁸² Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 28.

¹⁰⁸³ Parts of this section were expanded and published in Louis Bachaud and Sarah Johns, "The Use and Misuse of Evolutionary Psychology in Online Manosphere Communities: The Case of Female Mating Strategies," *Evolutionary Human Sciences* 5 (2023), <u>https://doi.org/10.1017/ehs.2023.22</u>.

¹⁰⁸⁴ The phrase "good genes," which is quite popular in evolutionary science, seems somewhat problematic when applied to humans, as it appears to judge people's worth based on their genetics. This is not the intended meaning: "good genes" are just "good" in terms of Darwinian fitness. They are simply the "genes which will increase the survival and reproductive success of the offspring sired with a male possessing them," which is the meaning used in the present dissertation, Urszula Marcinkowska, "The Good Genes Hypothesis," in *Encyclopedia of Sexual Psychology and Behavior*, ed. Todd Shackelford (Cham: Springer International Publishing, 2023), 1–3, <u>https://doi.org/10.1007/978-3-031-08956-5_1081-1</u>, 1.

¹⁰⁸⁵ Yanna Weisberg and John Kim, "Dual-Mating Hypothesis," in *Encyclopedia of Evolutionary Psychological Science*, ed. Todd Shackelford and Viviana Weekes-Shackelford (Cham: Springer International Publishing, 2021), 2147–51, <u>https://doi.org/10.1007/978-3-319-16999-6_238-1</u>.

¹⁰⁸⁶ For a review of the supporting evidence, see Steven Gangestad and Martie Haselton, "Human Estrus: Implications for Relationship Science," *Current Opinion in Psychology* 1 (2015): 45–51, <u>https://doi.org/10.1016/j.copsyc.2014.12.007</u>; Kelly Gildersleeve, Martie Haselton, and Melissa Fales, "Do Women's

This hypothesis is quite popular in the manosphere, so much so that it is sometimes presented as a sort of epiphany for men: "It's 2019, we all know the secret females have been hiding for over a million years now. DUAL MATING STRATEGY. Fuck the alphas, suck resources and attention from all others" (MGTOW, 2019). In the typical manosphere fashion that we have labeled as "antagonistic Darwinism," this female mating strategy is here framed as harmful to men and collectively concealed by women. Moreover, the alpha/beta manosphere trope is inserted in this evolutionary psychological hypothesis—something that is absent from scientific literature. Indeed, the similarities are striking, as alpha men sound like the perfect representation of women's short-term mating preferences, while beta men would make for dependable long-term partners. There is a proverb in the manosphere called "Alpha Fux, Beta Bux," often abbreviated as AF/BB. This acronym designates the supposed tendency for women to stay in relationships with unattractive but stable and caring men who provide for them (betas), while cheating on them with more attractive ones (alphas). Hence the reaction of this incel after discovering the dual mating strategy hypothesis in evolutionary psychology: "Doesn't this read like some blackpill straight out of an incel forum? jfl [just fucking LOL] it's exactly alpha fucks, beta bucks" (incel, 2020). The overlap between evolutionary psychology and manosphere concepts is striking here, and it helps explain why Red Pill writer Rollo Tomassi is particularly fond of Martie Haselton's research, as she is one of the main proponents of the dual mating strategy hypothesis, which is seen by Red Pillers as scientific confirmation of their beliefs on women.¹⁰⁸⁷

Another post on the Red Pill subreddit showcases the importance of this hypothesis for the community, as the poster assumes that any Red Piller would be familiar with it: "If you aren't new here, then you would know about women's dual mating strategy - long term dating strategy and short term dating strategy" (TRP, 2020). In all similar occurrences found in the corpus, the hypothetical nature of the dual mating strategy hypothesis is never mentioned, as manospherians refer to it as an established fact of nature:

"There is an observed dualistic mating strategy observed in primates and anecdotally in humans. Women have two motives for using sex.

Primal: In an intimate reproductive urge to obtain genes from a partner. Passion and horniness. Transactional: in a survivalist exchange to obtain resources from a partner. Female Bonobos will trade sex for food, and women will marry rich men they are not sexually attracted to" (TRP, 2020).

This assertiveness is all the more problematic since the dual mating strategy hypothesis is far from being unchallenged.¹⁰⁸⁸ On the contrary, the strength of the empirical support for its predictions has been questioned, while a lot of experimental findings on ovulatory shifts have failed

Mate Preferences Change across the Ovulatory Cycle? A Meta-Analytic Review," *Psychological Bulletin* 140, no. 5 (2014): 1205–59, <u>https://doi.org/10.1037/a0035438</u>.

¹⁰⁸⁷ Tomassi's avowed indebtedness to Martie Haselton is mentioned above in Chap. II, 95-96.

¹⁰⁸⁸ See criticisms of the hypothesis, notably by David Buss, in Weisberg and Kim, "Dual-Mating Hypothesis."

to replicate.¹⁰⁸⁹ Another difference between scientific literature and manosphere renditions of it is the intentionalistic fallacy. This fallacy is a common misunderstanding of evolutionary psychology, which has been defined as "[t]he assertion that Eps [evolutionary psychologists] contend that humans intentionally attempt to enhance their [...] fitness and are explicitly aware of such intentions."¹⁰⁹⁰ In the case of the dual mating strategy hypothesis, committing the intentionalistic fallacy would be arguing that women are consciously looking for short-term or affair partners with "good genes." This would be confusing the ultimate reason for which the behavior evolved (i.e., good genes) with the proximate reasons for that behavior (i.e., esthetic preferences, sex drive, hormones, etc.). This is illustrated in this PUA Reddit post about the dual mating strategy: "In the wild females will bond with a mate who they see as being a good caregiver for their children, and secretly sneak off during ovulation to get pregnant with with the one they believe carries good genetics" (PUA, 2011). Evolutionary psychologists do not argue that women are attracted to men because they consciously "believe" that they carry "good genetics," nor that married women would consciously think of cheating on her husband around ovulation for that reason. What they argue is that, over evolutionary history, there might have been fitness benefits for women who engaged in more promiscuous behaviors with men whose genes enhanced offspring's survival and reproduction, particularly in the more fertile phase of their cycle. As a result, contemporary human female sexual psychology and physiology might include mechanisms which were selected to favor this mating strategy (hormones, cyclical sex drive, etc.). Red Pill godfather Rollo Tomassi in fact warns his readers against committing the intentionalistic fallacy, as he reminds them that women do not consciously act in their genes' best interests:

"I want to stress again that (most) women do not have some consciously constructed and recognized master plan to enact this cycle and deliberately trap men into it. Rather, the motivations for this behavior and the accompanying social rationales invented to justify it are an unconscious process. For the most part, women are unaware of this dynamic, but are nonetheless subject to its influence. *For a female of any species to facilitate a methodology for breeding with the best genetic partner she's able to attract AND to ensure her own and her offspring's survival with the best provisioning partner; this is an evolutionary jackpot.*"¹⁰⁹¹

This is however a rare example of such precaution, and it is hard to gauge its impact on readers. To better evaluate the prevalence of the intentionalistic fallacy among manospherians, three relevant distractors were seeded in the science quiz.¹⁰⁹² In table 5.3 below is a breakdown of

¹⁰⁸⁹ For a meta-analysis which fails to find supporting evidence for the predictions of the dual mating strategy hypothesis, see Wendy Wood et al., "Meta-Analysis of Menstrual Cycle Effects on Women's Mate Preferences," *Emotion Review* 6, no. 3 (2014): 229–49, <u>https://doi.org/10.1177/1754073914523073</u>. For up-to-date critique of the empirical evidence, see Julia Stern and Lars Penke, "Ovulatory Cycle Effects and Hormonal Influences on Women's Mating Psychology," in *The Oxford Handbook of Human Mating*, ed. David Buss (New York: Oxford University Press, 2022), 739–55, <u>https://doi.org/10.1093/oxfordhb/9780197536438.013.13</u>, 740-742.

¹⁰⁹⁰ Winegard, Winegard, and Deaner, "Misrepresentations of Evolutionary Psychology in Sex and Gender Textbooks," 481.

¹⁰⁹¹ Tomassi, *The Rational Male*, 18.

¹⁰⁹² For complete list of misconceptions and associated distractors in the questionnaire, see Appendix 14, 524.

the prevalence of the intentionalistic fallacy misconception among survey responses, along with the rate of respondents who picked the correct answer on the associated multiple-choice question.

Distractor	Manosphere (n=148)	Item Success	Counterpart (n=151)	Item Success
IF1	25%	31.1%	29.8%	31.8%
IF2	22.3%	35.8%	11.9%	13.9%
IF3	21%	52.7%	21.2%	28.5%

 Table 5.3: Intentionalistic Fallacy Answers on the Life Sciences Quiz

Rates of committing the intentionalistic fallacy were relatively high among manospherians, although they never exceeded those of correct answers. In one of the questions, manospherians even selected the fallacious distractor, i.e., "Men look for a healthy mate to bear children and propagate their genes, which is why they tend to select women with long hair, because hair length is correlated with health," at twice the rate of respondents in the counterpart group.¹⁰⁹³ This distractor is very similar to examples provided above as it confuses a proximate evolved mate preference (i.e., being attracted to long-haired women) with a conscious intent to propagate one's genes. Unfortunately, such confusing shortcuts also sometimes appear in evolutionary scientific literature itself, as in this excerpt from a leading evolutionary psychologist: "The current leading hypothesis for why women have affairs posits that women have adaptations for securing investment from one man while cuckolding him in order to obtain good genes from an affair partner."¹⁰⁹⁴ The next section is a critical appraisal of the Red Pill's use of evolution, which outlines the main discrepancies with mainstream evolutionary science.

E.4. A Scientific Critique of the Red Pill

4.a. Alphas and Betas

The term "alpha" originated in wolf research in the 1940s,¹⁰⁹⁵ and is still sometimes used to refer to the top-ranking individual in animal hierarchies. It was further popularized by Dutch primatologist Frans de Waal's book *Chimpanzee Politics*, published in 1982.¹⁰⁹⁶ De Waal recalls how this concept spread to the corporate world, self-help industry, and to conservative politicians such as Republican House Speaker Newt Gingrich:

 $^{^{1093}}$ 2x2 chi-square test run on the number of respondents who selected this intentionalistic fallacy distractor IF2 opposed to the number of those who selected any other option, among manospherians (33-115) and the counterpart group (18-133), X²=5.69, p=0.017.

¹⁰⁹⁴ David Buss et al., "The Mate Switching Hypothesis," *Personality and Individual Differences* 104 (2017): 143–49, <u>https://doi.org/10.1016/j.paid.2016.07.022</u>, 147. In order to explain adaptationism, popular science writers sometimes use what is called the "gene's eye view," that is writing "as if" people consciously acted with their genes in mind. This might contribute to popularizing the intentionalistic fallacy.

¹⁰⁹⁵ Rudolf Schenkel, "Expression Studies on Wolves," *Behaviour* 1 (1947): 81–129.

¹⁰⁹⁶ Frans de Waal, *Chimpanzee Politics: Power and Sex among Apes* (Baltimore: John Hopkins University Press, 1982).

"After he [Gingrich] put my book on the reading list for Congress members, the *alpha male* label began to gain currency in Washington, D.C. Unfortunately, the term's meaning narrowed with time. It came to stand for leading men with an obnoxious personality. Alphas are bullies who never cease to let everyone feel who's boss. Current titles in the business book section are telling, such as: *Become the Alpha Male: How to Be an Alpha Male, Dominate in Both the Boardroom and Bedroom, and Live the Life of a Complete Badass.*"¹⁰⁹⁷

The primatologist expressed regret at this abusive extension of a scientific term which he contributed to popularizing:

"The popular image of the alpha male doesn't fit the way primatologists use the term, however. The alpha male is merely the top-ranking male regardless of how nicely or horribly he behaves. In the same way, every group also has an alpha female. There can be only one alpha of each sex. Most of the time they aren't bullies but rather leaders who keep the group together."¹⁰⁹⁸

Similar regrets have been expressed by David Mech, a wolf expert who also played a key role in popularizing the "alpha" term. Reflecting in 2008, this scientist recalls that the original "alpha" concept was coined by German ethologist Rudolf Schenkel about wolves in captivity. For years, Schenkel's monograph was the authoritative source on wolf behavior, so much so that Mech drew largely from it when writing The Wolf: The Ecology and Behavior of an Endangered Species, his synthesis on wolf behavior, in the late 1960s.¹⁰⁹⁹ In his book, he therefore largely resorted to the alpha male concept. Mech remembers that "[t]he book was timely because no other synthesis about the wolf had been written since 1944, so The Wolf sold well."1100 However, he now recognizes that it relied on a faulty understanding of dominance hierarchies. In captivity, when many male wolves are put together, they do tend to fiercely compete for dominance in the hierarchy. However, this does not reflect actual wolf behavior in the wild. In fact, wolf packs are for the most part very similar to human families, with a pair of territorial breeding adults living with several generations of their own pup litters, until the older siblings disperse to find mates and start their own families. Mech thus now argues against using the term which he helped popularize: "there is no more reason to refer to the parent wolves as alphas than there would be to refer to the parents of a human family as the 'alpha' pair. Thus we now refer to these animals as the male breeder and female breeder and as the breeding pair or simply the parents."¹¹⁰¹ He notes that the term is fading from scientific literature on wolves, although still persistent in the media and the general public.¹¹⁰² The issue of changing terminology, he argues, is "not merely one of semantics

¹⁰⁹⁷ Frans de Waal, *Different: Gender Through the Eyes of a Primatologist* (New York: W.W. Norton and Company, 2022), 80.

¹⁰⁹⁸ Ibid.

¹⁰⁹⁹ David Mech, The Wolf: The Ecology and Behavior of an Endangered Species (New York: Doubleday, 1970).

¹¹⁰⁰ David Mech, "Whatever Happened to the Term Alpha Wolf?," *International Wolf: A Publication of the International Wolf Center*, Winter 2008, 4–8, 6.

¹¹⁰¹ Ibid.

¹¹⁰² He writes: "In the 448-page, 2003 book *Wolves: Behavior, Ecology, and Conservation*, edited by Luigi Boitani and myself and written by 23 authors, *alpha* is mentioned in only six places and then only to explain why the term is outdated," ibid., 5.

or political correctness. It is one of biological correctness."¹¹⁰³ For Mech, as for de Waal, the term evokes a "faulty view" of animal sociality based on "a rigid, force-based dominance hierarchy."¹¹⁰⁴

Despite those scientists' public interventions, the term "alpha male" has grown increasingly popular since its inception, a phenomenon that was no doubt partially fostered by its popularity in manosphere circles.

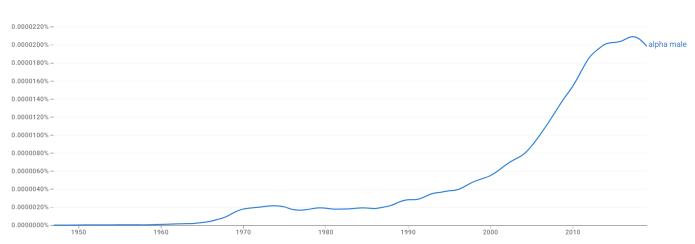


Figure 5.4: Use of the "Alpha Male" Phrase (1947-2019)

Appearance of the phrase "Alpha Male" in Google's NGram viewer, between 1947 and 2019.¹¹⁰⁵

In Red Pill ideology, social interactions are often seen through a biological lens, with the "alpha male" concept featuring prominently. As a term coming from animal research, it grants a scientific veneer to Red Pill discourse, while also fitting its dominance and competition-based view of nature, which we called "Darwinian antagonism." Yet, in many ways, the Red Pill use of the term is remote from the one found in animal behavior research. Firstly, Red Pillers employ "alpha" as a male-only term, referring to the most successful mating strategy in men. However, animal researchers also use the term to refer to females. In species like chimpanzees, where males and females have distinct dominance hierarchies, there is always an alpha male and an alpha female.¹¹⁰⁶ Secondly, social dominance does not necessarily imply physical dominance or ruthless leadership. As de Waal reminds us, being an alpha individual in primates requires political savvy and services to the community:

"The biggest and strongest male isn't necessarily on top, because networking, personality, age, strategic skills, and family connections all help individuals ascend the social ladder. Applied to the

¹¹⁰⁵ Google Books Ngram Viewer,

¹¹⁰³ Ibid., 7.

¹¹⁰⁴ David Mech, "Alpha Status, Dominance, and Division of Labor in Wolf Packs," *Canadian Journal of Zoology* 77 (1999): 1196–1203, 1198. Mech still argues that the term could be used in the context of the relatively rare larger wolf packs, which include several breeding adults.

https://web.archive.org/web/20240422082539/https://books.google.com/ngrams/graph?content=alpha+male&year_st art=1947&year_end=2019&corpus=en-2019&smoothing=3, generated and archived April 22, 2024. For details on Ngram, see footnote n°201, 51.

¹¹⁰⁶ De Waal, *Different: Gender Through the Eyes of a Primatologist*, 80.

genders, this means that a bonobo female may rank above everyone else in her community despite the presence of males far more muscular than herself. Among chimpanzees, even the smallest male may become the alpha. To do so, he needs the support of others. This introduces complexities: he needs to keep his allies happy, making sure they don't conspire with his rivals, and to win over females by protecting them and generously sharing food."¹¹⁰⁷

This is in stark contrast with the Red Pill vision of alpha men as independent and unwilling to provide for others: in social species, being a successful alpha individual requires considerable empathy and attention to others. More generally, if the alpha/beta dichotomy is central in Red Pill discourse, this is far from being the case in animal research. In Davies et al.'s *Introduction to Behavioural Ecology*, there are only sixteen occurrences of "alpha," applied to examples from four species: chimpanzees (1), marine isopods (9), dunnocks (4) and long-tailed manakins (2).¹¹⁰⁸ In all those cases, "alpha" is only used as a convenient label to refer to sexually successful individuals (almost exclusively males). It is quite clear that the term does not hold an important theoretical place in animal behavior research—it is not central to the Darwinian paradigm and does not explain or predict anything. Moreover, it is only applied to a few species, which humans are conspicuously absent from. In that regard, we can claim that the alpha/beta dichotomy as found in the Red Pill has little resemblance to that found in the field of animal behavior from which it originated. It is an illustration of the manosphere tendency to simplistically apply biological frameworks to human societies, a criticism which could also apply to their antagonistic view of male and female sexual strategies.

4.b. Antagonistic Darwinism

Red Pillers view male and female sexual strategies as irremediably opposed. Admittedly, there are cases when male and female fitness interests diverge, which is how evolutionary scientists explain the evolution of sexual conflict and sexual coercion.¹¹⁰⁹ However, this does not imply that those interests are always antagonistic. In fact, in a relatively monogamous species like humans, there is ample convergence between the sexes in terms of fitness interests, as argued by David Buss: "Men and women need each other for successful reproduction. Cooperation between the sexes, therefore, is a cardinal feature of human mating. Men and women fall in love, mutually choose each other, mutually consent to have sex, and have a shared interest in their children."¹¹¹⁰ The Red Pill view of sexuality as an arena for the "war of the sexes" is much too simplistic, as fitness interests are sometimes aligned, and sometimes divergent. For evolutionary biologists, intrasexual competition (i.e., competition between individuals of the same sex for reproduction) has also traditionally always been seen as a more powerful evolutionary force than intersexual conflict.

¹¹⁰⁷ Ibid., 203.

¹¹⁰⁸ Davies, Krebs, and West, *An Introduction to Behavioural Ecology*. This tally excludes one occurrence, which is in the bibliography and not in the text. As a comparison, Rollo Tomassi's Red Pill classic *The Rational Male* contains 229 occurrences of "alpha."

¹¹⁰⁹ Göran Arnqvist and Locke Rowe, Sexual Conflict (Princeton, Oxford: Princeton University Press, 2005).

¹¹¹⁰ Buss, *Evolutionary Psychology*, e-textbook version, 612.

When evolutionary scientists mention "strategies," they use the term in a sense inspired by game theory. Evolution can be construed as a competition between different behavioral strategies, selecting the ones which maximize fitness over generations. When behavioral ecologists discuss different mating strategies found in fish or insects, they therefore refer to this type of "strategy." This does not imply that those organisms consciously strategize to maximize their fitness, but just that they follow different gene-based variations in behavior patterns, variations that compete in the ultimate arena of natural selection. However, this terminology becomes confusing when applied to species with higher cognitive faculties and the capacity of conscious strategizing. Indeed, humans are capable of consciously devising complex strategies, such as investment or career strategies, by processing information of all sorts such as peer-advice, guidelines, legal frameworks, intuition, etc. These proximate strategies also have fitness consequences, and can therefore be considered as ultimate strategies too, in a Darwinian game-theoretical sense. But the two are not necessarily aligned, since people do not always consciously act in their genes' best interests.

One of the hallmarks of the Red Pill is to conflate the proximate and ultimate levels, as shown in our analysis of the intentionalistic fallacy. Thus, by overextending evolutionary scientific terminology to contemporary politics, Red Pillers depict feminism as a sexual strategy, in the ultimate sense. This would undoubtedly sound odd or ludicrous to any feminist, whose motivations are quite removed from this alleged "strategy." Not only do Red Pillers have an exaggeratedly sexually antagonistic view of evolution, but they also seamlessly import this Darwinian framework to contemporary politics, an epistemological slide with major ethical consequences.

E.5. From Evolution to Amorality: A New Social Darwinism?

When describing animal behavior, evolutionary scientists do not pass normative judgment, something which Red Pillers like Rollo Tomassi also endorse: "Ravenous wolves tearing apart an elk aren't evil; they're doing what nature has prepared them to do in order to survive."¹¹¹¹ Thus when describing women's behavior from an evolutionary standpoint, Red Pill writers remind their readers that, "[i]t's not a moral failing, as some would see it, it's a product of their biology."¹¹¹² Tomassi, who claims to be a dispassionate analyst of gender dynamics, therefore openly eschews morality: "to avoid the impression of a moralistic bias, that would otherwise color the objective deductions I attempt to make," he writes, "I intentionally avoid contexts of morality and strive to define my analysis in as amoral a way as possible."¹¹¹³ Amorality is a popular term in The Red Pill community, as exemplified by an interaction on Reddit, when a poster who mentioned "having principles" was promptly rebuked by another one who told him that "RP thinking is amoral. Preach your principles elsewhere […]" (TRP, 2017).

One of the Red Pill canon's seminal texts, as enshrined in the r/TheRedPill sidebar, is a 2013 Reddit post entitled "Sexual Strategy is Amoral," which illustrates the common justification

¹¹¹¹ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 185.

¹¹¹² Ian Ironwood, "Ironwood Speaks: Welcome To The Puerarchy. This Is What The Hell Is Wrong With You," Puerarchy, July 16, 2013, <u>https://web.archive.org/web/20200126175018/http://puerarchy.com/2013/07/16/ironwood-speaks-welcome-to-the-puerarchy-this-is-what-the-hell-is-wrong-with-you, archived January 26, 2020.</u>

¹¹¹³ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 284.

for amorality found in the community. Firstly, morality is variable: "there is no universal morality. There is nothing in the universe applying any law other than those of physics. The rest is abstraction. Morality is not black and white" (TRP, 2013). Red Pillers can therefore discard morality as "subjective," as expressed in another 2013 Red Pill manifesto: "What about my morals? My honor? My character? Morality is subjective and this is no different. While we won't advocate murder or rape, nearly everything else is fair game."¹¹¹⁴ Secondly, in a Darwinian framework, only fitness matters: "You might stick to your values, but those who have sex ... *have sex*. It's best illustrated through our ancestors. The idea was that whether or not we like the methods used whoever procreated made children, and those who didn't.. didn't" (TRP, 2013). Certainly, natural selection is a mindless phenomenon which can select for behaviors usually deemed moral (such as cooperation) as well as immoral (such as aggression). In that regard, Red Pillers are right in contending that sexual strategy—understood in an ultimate sense—is amoral.

Here, the conflation between ultimate and proximate meanings of the word "strategy" becomes extremely problematic. Since Red Pillers claim to be providing an ultimate "sexual strategy" for contemporary men, they can therefore justify eschewing the question of morality altogether. After all, they argue, nature is amoral, and they are just helping men fulfil the best natural sexual strategy they can: that of the alpha male. Moreover, since sex and society are viewed through the antagonistic Darwinian lens, feminist criticisms of manosphere misogyny can all be dismissed as mere ploys by females to advance their own sexual strategy and hamper men's. Thus, when discussing the "Ethics of Alpha," Rollo Tomassi argues that "women *never* doubt themselves on moral grounds for outshining their own competition in the sexual marketplace – they just do so covertly and with a polite smile, unburdened by ethical doubts. Hypergamy is its own excuse."¹¹¹⁵ This is the third justification for amorality. Women and their behavior are seen through biological—and therefore amoral—lenses, and in order to compete with them fairly, the Red Pill claims to only be mirroring the ruthlessness of women's innate sexual strategy. This is extremely convenient, as it allows to justify an absolute lack of ethical concerns, and even to blame it on women and feminists.

By framing all social and sexual interactions through a Darwinian frame, Red Pillers perform a familiar sleight of hand, that of Social Darwinism. In the late 19th century, Social Darwinists argued in the wake of Darwin and Spencer that unfettered competition was the way of nature. As such, competition between people, groups, businesses, or nations was seen as a positive good, ensuring progress through the mechanism of survival of the fittest.¹¹¹⁶ The flaw in that argument is twofold: firstly, businesses and nations are not subject to Darwinian natural selection, and more importantly, what is natural is not necessarily good. After all, evolution does not necessarily tend towards progress. It is just an amoral and undirected process. By prescriptively grounding public policy and society in nature, Social Darwinism pretended to be scientific and

¹¹¹⁴ Ian Ironwood, "Ironwood Speaks: Welcome To The Puerarchy. This Is What The Hell Is Wrong With You," Puerarchy, July 16, 2013, <u>https://web.archive.org/web/20200126175018/http://puerarchy.com/2013/07/16/ironwood-speaks-welcome-to-the-puerarchy-this-is-what-the-hell-is-wrong-with-you, archived January 26, 2020.</u>

¹¹¹⁵ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 28.

¹¹¹⁶ For details on 19th century Social Darwinism/Spencerism, see Chap. II, A, 100.

value-neutral, while it was in fact committing the naturalistic fallacy of ethics—that of abusively deriving prescriptive claims from descriptive observations. A similar process is at play in the Red Pill: its proponents claim to only be scientifically observing the way of nature. They conveniently forget that "nature" also granted humans with a faculty for empathy, morality, and romantic love, and that strictly speaking, no action is more or less "natural" than another. The criterion of "nature" as a guide for ethics is thus spurious. Normativity can only be derived from values, which cannot be themselves derived from empirical observations. Red Pillers are right to claim that nature is amoral, but this is exactly the reason why it can never be used to determine the right course of actions. Neither should it be used to deflect criticisms, as Red Pillers are wont to do when the negative social impacts of their precepts and worldviews are criticized.

Conclusion

The non-exhaustive review above showcases the different focuses of manosphere groups and ideologies. Throughout this chapter, the analytical purpose was twofold. Firstly, the goal was to try to identify misunderstandings, biases, and inaccuracies relative to the state of the art in evolutionary scientific knowledge, as was the case in our critique of incel determinism, the Red Pill's alpha/beta trope, or the male disposability JSS. The second objective was to highlight how appropriations of science fit in each group's agenda and ideology: PUAs and MGTOW might both see sex drive as a strong instinct coming from eons of evolution, but seduction coaches looking for costumers are not going to have the same prescriptive message (fulfil this drive to be happy) as that of a movement of voluntary celibates (reject this drive for higher pursuits). Evolutionary scientific knowledge, whether relatively accurate or interlaced with just-so stories, is always embedded in each manosphere group's interests, values, and agenda. This embeddedness influences the selection of specific themes and research over others (through conscious or unconscious motivated "cherrypicking"), and the normative value judgments derived from it (as in incel's blaming of women for their role in sexual selection). To use Swedish philosopher of science Mikael Stenmark's term, manosphere science can be seen as a case of "customized science":

"A customized science is, roughly, a science built according to, altered to, or fitted to a particular group's specifications—that is, the group's needs, interests, or values, its political ideology, or worldview. It is a science governed not merely by epistemic goals, such as increased knowledge and explanatory power, but also by nonepistemic goals, such as economic growth, sustainable development, the equality of women, the end of religion, or the glory of God. It is a science oriented towards a target group and shaped by this group's interests, values, and commitments."¹¹¹⁷

Although evolutionary science is present in all cases, specific appropriations vary between communities, and might even clash. Sometimes, those disagreements concern empirical reality: for instance, the bitter opposition of incels towards Pickup-Artists regarding the drivers of female mate preferences. Sometimes, two communities agree on the empirical reality, but disagree on the conclusions to draw from it. MGTOW and Red Pillers thus share the same antagonistic view of

¹¹¹⁷ Mikael Stenmark, "The Customization of Science: An Introduction to the Debate," in *The Customization of Science: The Impact of Religious and Political Worldviews on Contemporary Science*, ed. Steve Fuller, Mikael Stenmark, and Ulf Zackariasson (New York and Basingstoke: Palgrave Macmillan, 2014), 1–18, https://doi.org/10.1057/9781137379610_1, 2.

female hypergamy and sexuality, but while Red Pillers advocate for game as a male counter sexual strategy, MGTOW prefer to opt out of the confrontation altogether. This is a case in point for sociologist of science Ullica Segerstråle's argument that "evolutionary biology is a surprisingly flexible field" which "may be employed to prove almost any point one wishes."¹¹¹⁸ In spite of this diversity, there are overarching similarities, which will be explored in the following chapter.

The most obvious similarity between all manosphere appropriations of evolutionary science is their focus on sex differences. Whatever their group and perspectives are, all manospherians (except for some MRAs) operate under the assumption than male and female nature are fundamentally different, if not diametrically opposed, and that these differences have major sexual and social consequences. This was already shown by our analysis of manosphere just-so stories, 84.8 % of which speculated on the evolution of sex differences. This strong "sex differentialism" will be the focus of the next chapter, as it is undoubtedly one of the hallmarks of the manosphere, as well as one of the key reasons for its reliance on Darwinian evolution. Yet, contrary to what could be expected from groups which are sometimes categorized as male supremacist,¹¹¹⁹ evolutionary biology is rarely used to advocate for innate male superiority. In fact, in keeping with the manosphere's reversal of feminist oppression frameworks and insistence on male crisis and victimhood, their uses of biology often depict women as having the biological upper hand, usually through their prominent role in sexual selection and reproduction. Thus, for MGTOW and Red Pillers, female nature (i.e., hypergamy) is a truly predatory force, of which ordinary men are the gullible and unwitting victims. This then allows to mobilize men as a beleaguered group and to justify several kinds of counter-reactions such as "alpha game," or voluntary bachelorhood.

Manosphere groups manage to seamlessly weave their antifeminism into their view of evolution, which is a unique feature of manosphere ideology. For example, some incels accuse feminists of directly promoting eugenics by encouraging women to increase sexual selection pressure on undesirable males. Likewise, MRAs, MGTOW, and Red Pillers believe that gynocentricism in contemporary Western society is promoted by feminists, who defend women's economic, political, and sexual interests at the expense of men, all of which can be traced back to their innate sense of men's disposability, or to their hypergamous urges. Feminism is often depicted as a smokescreen designed to hide female nature and to let it run amok, which according to a crude antagonistic Darwinian worldview, is necessarily detrimental to men's interests. Manospherians are not always very clear on the nature of that alignment between feminism and female nature. For some, this is similar to a conspiracy, where feminists are conscious of their ultimate fitness interests, while others, such as Rollo Tomassi, disagree, as he argues that "there is no grand conspiracy, no secret mysterious cabal pushing a negative perception of masculinity."¹¹²⁰ Rejecting the conspiratorial overtones of some manospherians, he claims that, "[t]here doesn't need to be a unitary group of 'anti-men' bent on some melodramatic goal of world domination; because this

¹¹¹⁸ Segerstråle, "Implicit and Explicit Customized Science," 103.

¹¹¹⁹ E.g., Southern Poverty Law Center, "Male Supremacy," <u>https://web.archive.org/web/20230925161629/https://www.splcenter.org/fighting-hate/extremist-files/ideology/male-</u> <u>supremacy</u>, archived September 25, 2023.

¹¹²⁰ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 199.

feminized ideal is already embedded in our socialization. Fem-centrism *is* our collective social consciousness."¹¹²¹ These manosphere conceptions of sex differences, as well as of the links between feminism and human nature are explored further in chapter VI, as they represent the most puzzling and spurious claims of the manosphere regarding evolutionary biology, where "manosphere science" is firmly on the side of pseudoscience.

¹¹²¹ Ibid.

CHAPTER VI: MANOSPHERE SCIENCE

How Science, Pseudoscience, and Manosphere Ideology Combine to Create a Sexist Darwinian Worldview "I realized that most people have no first-hand contact with scientific knowledge. Literature on our community beliefs is not only existent, but extensive. I decided to use my academic knowledge to give support to the ROK [Return of Kings] community.

Many of the authors you will read about here are some of the most famous academics in behavioral sciences (Google scholar citations: Baron-Cohen: 96 020, Buss: 39 524, Baumeister: 87 528). I do not claim these summaries and articles will help you in arguments. We live in some sort of ochlocracy where we risk intimidation by hordes of angry women or betas if we hold beliefs congruent with scientific evidence. I remember a feminist saying something along the lines of: 'Nothing like good old scientific facts to justify your sexism.''¹¹²²

Introduction

As documented in the previous chapter, manospherians often legitimize their worldview by appealing to scientific knowledge. In the Red Pill article cited above, the writer links towards academic research to substantiate the seven pillars of the Return of Kings community ideology. The first of these is that "Men and women are genetically different, both physically and mentally," and four of the remaining six also pertain to the behavioral, psychological, reproductive, and hormonal differences between the sexes. Overlooking this article is a famous photograph of Charles Darwin. The manosphere narrative could not be clearer: on the one hand is the scientific might of the most illustrious past and present researchers, and on the other hand is a screeching horde of ideologically motivated "angry women" and science-denying feminists. In that frame, manospherians claim to be doing nothing more than repeating what researchers already state. However, the massive presence of just-so stories in the manosphere already put a dent in this narrative, prompting us to define "manosphere science" as a distinctly unique epistemic object. This chapter thus explores manosphere science in all its breadth and diversity, to reveal and understand this interplay between science and ideology so pervasive to the manosphere.

Section A focuses specifically on sex differences in manosphere discourse and ideology. After explaining statistical notions of group difference and its potential misunderstandings, this section empirically assesses the manosphere's views on sex differences. This analysis reveals widespread cherry-picking, just-so storytelling, sexual double standards, and traditional misogyny. In fact, when no backing is to be found in science, manospherians seem to have no difficulty relying on speculations, just-so stories, or even old misogynistic thinkers' views.

Section B reviews the areas in which manosphere science markedly departs from mainstream science. Firstly, its signature use of concepts which are extrapolated from existing scientific concepts, outdated, or even plain pseudoscientific. Then, I argue that manosphere science is best understood as part of a grand Darwinian-inspired patriarchal philosophy of history, which

¹¹²² "Ochlocracy" means government by the mob. Moshe Kelstein, "A Scientific Review of ROK's Community Beliefs," Return of Kings, May 27, 2015, https://web.archive.org/web/20221207174522/https://www.returnofkings.com/64303/a-scientific-review-of-roks-community-beliefs, archived December 12, 2022.

has itself no scientific grounding. Finally, the ways in which science can become personal are explored, as a Darwinian evolution framework sometimes provides manospherians with a sense of motivation, purpose, and identity.

A. SEX DIFFERENCES IN MANOSPHERE IDEOLOGY

A.1. The "Men from Mars, Women from Venus" Trope 1.a. What is a Sex Difference? Understanding the Statistics of Difference

Before proceeding with the analysis, a point on sex and gender terminology must be reiterated. After holding a cross-disciplinary conference on sexual difference at Stanford's Institute for Research on Women and Gender, legal scholar Deborah Rhode restated the basis for the sex/gender distinction: "Under contemporary usage, sex has referred to biologically based distinctions between man and woman and gender has referred to their cultural construction."¹¹²³ Although she recognizes the force this has granted feminist analyses, she also points out the limitations of such a strict dichotomy: "efforts to distinguish cultural and biological factors have their own limitations. Nature and nurture interrelate in ways that defy quantification." For example, she argues that "we cannot understand sex-based differentials of height, weight, and physical strength without considering the influence of diet, dress, division of labor, and so forth. Such cultural and biological factors can never wholly be disentangled."¹¹²⁴ Recognizing this, several feminist scholars have proposed forgoing the sex/gender dichotomy.¹¹²⁵ Despite being empirically blurry, I contend that the sex/gender dichotomy is still useful in terms of emphasis, evoking different aspects of the same phenomenon. Since this section discusses the Darwinian evolution of sex differences, which necessarily has a genetic basis, I use the term "sex differences" throughout, all the while recognizing that there is massive cultural, interpersonal, and environmental variability and flexibility in those, and that most could also be called "gender differences."

What is a sex difference exactly? In quantitative science, this is fundamentally a statistical term. On any given behavioral or physiological trait that is measured in a sample, we start with the implicit assumption that men and women will be similar—an assumption called the "null hypothesis." If the measurements deviate from similarity, statistical tests can estimate whether this is more likely due to chance variation in the sample, or whether this represents an actual difference in the population. If the likelihood of this being due to chance are very low (typically below 5%, a threshold called the "p value"), the difference is deemed "statistically significant." Among the most well-known sex differences are those in height, life expectancy, or aggression.¹¹²⁶ An important implication of that definition is that a sex difference can be significant without necessarily being massive. When samples contain very large numbers of people, even a minor difference between

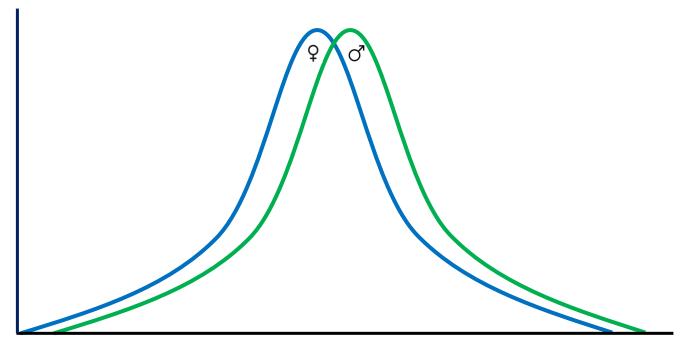
¹¹²³ Rhode prides herself on the organization of this conference, which brought together scholars from "anthropology, biology, history, law, literature, philosophy, political theory, psychology, and sociology," in an effort to become less "parochial" and create theoretical dialogue between different fields, Deborah Rhode, "Theoretical Perspectives on Sexual Difference (Introduction)," in *Theoretical Perspectives on Sexual Difference*, ed. Deborah Rhode (New Haven and London: Yale University Press, 1990), 1–9, 1; 2.

¹¹²⁴ Ibid., 4.

¹¹²⁵ See footnote n°590, 126.

¹¹²⁶ Differences in life expectancy (women>men) and height (men>women) in human populations are documented all over the medical, physiological, or demographic literature. For a meta-analysis of differences in aggression, see Janet Shibley Hyde, "Where Are the Gender Differences? Where Are the Gender Similarities?," in *Sex, Power, Conflict: Evolutionary and Feminist Perspectives*, ed. David Buss and Neil Malamuth (New York: Oxford University Press, 1996), 107–25, 113-114.

group averages will be considered significant, which is not necessarily the most informative regarding the extent of that difference between groups.¹¹²⁷ Below is a hypothetical schematic representation of the distribution of a continuous trait between men and women.



Number of cases

Figure 6.1: Schematic Sex Difference on a Continuous Trait

Continuous trait (e.g., weight)

With a large enough sample size, the average difference between men and women on this hypothetical trait will be considered statistically significant. However, there is massive overlap between the two distributions, which means that one should be interpreting statistical results with caution. Scientists look for deviations from the null hypothesis, and report significant results when finding those, but it does not mean that a significant sex difference is necessarily a large one—it just means that this difference will be reliably observed. Given the overlap in a scenario like the hypothetical one above, it would be difficult to reliably infer a person's sex from only knowing their measured value on the continuous trait. This is why statistical significance for different means is often meaningless if not accompanied with some quantification of the strength of the relationship between variables (e.g., sex and weight). This is called an "effect size," i.e., a statistic which allows to estimate the strength of this relationship.¹¹²⁸

Feminist psychologist Janet Shibley Hyde, who is an expert on sex/gender differences, has argued that scientists looking for sex differences can always find them if they look hard enough. According to her, this has mistakenly shaped the history of psychology, with the few significant

¹¹²⁷ Hyde explains that traditional significance tests "are highly dependent on n [sample size] so that a tiny effect can be significant if the n is large enough," ibid., 110.

¹¹²⁸ Famous effect sizes statistics are Pearson's correlation coefficient r, or logistic regression coefficients.

differences between men and women constantly foregrounded in textbooks.¹¹²⁹ For more than thirty years, she has been questioning those findings by conducting meta-analyses. In metaanalyses which include dozens of previous studies on psychological sex differences, statistical significance is the norm (because the sample is usually extremely large), so the real focus is on effect size. To measure this, meta-analyses compute a statistic called Cohen's d. Traditionally, the strength of the effect is seen as weak for d = 0.20, moderate for d = 0.50, and large for d = 0.80.¹¹³⁰ The question Hyde's meta-analyses are asking is: how large exactly are those much-touted psychological differences between the sexes? And her answer is often, not very large. Investigating differences in verbal ability in a meta-analysis of 165 studies with more than 1.4 million participants, she found a d of 0.11 in women's favor, concluding that "the magnitude of the gender difference in verbal ability is currently so small that it can effectively be considered to be zero."¹¹³¹ For mathematical abilities, she and her colleagues conducted a review of standardized test scores from 10 US states, totaling more than 7 million pupils, with an average effect size of d = 0.0065, showing almost complete similarity.¹¹³² These results show how quantitative results can be misleading if looking at statistical significance alone. The next section will showcase how quantitative results are misleadingly interpreted by manospherians.

1.b. Lay Misinterpretations of Quantitative Results: Manosphere Examples

With their enthusiasm for ovulatory cycle research, manospherians provide a perfect example for potential exaggerations or misunderstandings of quantitative results. For instance, after remarking that "Ovulating girls are the ripest picks for one night stands," PUA coach Heartiste tells his readers that "[s]cience has shown that ovulating girls tend to show more cleavage and thigh, so keep an eye out for miniskirts and low cut tops."¹¹³³ These assertions implicitly rely on scientific results which could be summarized this way:

- (A): There is a statistically significant difference regarding openness to casual sex between high fertility and low fertility phases of women's ovulatory cycle.
- (B): There is a statistically significant difference in how revealing clothing is between high fertility and low fertility phases of women's ovulatory cycle.

¹¹²⁹ Hyde, "Where Are the Gender Differences? Where Are the Gender Similarities?" Other psychologists agree, and call for foregrounding similarities rather than differences, e.g., Paul Hanel, Gregory Maio, and Antony Manstead, "A New Way to Look at the Data: Similarities Between Groups of People Are Large and Important," *Journal of Personality and Social Psychology* 116, no. 4 (2019): 541–62, <u>https://doi.org/10.1037/pspi0000154</u>.

¹¹³⁰ Jacob Cohen, *Statistical Power Analysis for the Behavioral Sciences*, 2nd ed. (New York: Routledge, 1988), <u>https://doi.org/10.4324/9780203771587</u>.

¹¹³¹ Janet Hyde and Marcia Linn, "Gender Differences in Verbal Ability: A Meta-Analysis," *Psychological Bulletin* 104, no. 1 (1988): 53–69, <u>https://doi.org/10.1037/0033-2909.104.1.53</u>, 64. These results have however been questioned in a more recent meta-analysis, which found a small difference, with women outperforming men on verbal performance (d = 0.29), Jennifer Petersen, "Gender Difference in Verbal Performance: A Meta-Analysis of United States State Performance Assessments," *Educational Psychology Review* 30, no. 4 (2018): 1269–81, <u>https://doi.org/10.1007/s10648-018-9450-x</u>.

¹¹³² Janet Hyde et al., "Gender Similarities Characterize Math Performance," *Science* 321, no. 5888 (2008): 494–95, <u>https://doi.org/10.1126/science.1160364</u>.

¹¹³³ Heartiste, On Game (Self-published, 2019), 129.

As explained above, such results do not necessarily imply that the effect is strong. For the purpose of illustrating this, let us assume that (B) was drawn from Haselton et al.'s classic 2007 study, "Ovulatory Shifts in Human Female Ornamentation: Near Ovulation, Women Dress to Impress."¹¹³⁴ In this study, thirty female participants were recruited to come to the lab twice, once in the low-fertility phase of their cycle, and one in the high-fertility phase. There, they posed for full-body pictures. Later on, 42 judges independently rated the clothing in the thirty pairs of photographs:

Clothing difference between the pictures ¹¹³⁶	High	Low	No
	fertility	fertility	difference
Wearing "more fashionable clothes"	18	8	4
Wearing "nicer clothes"	17	8	5
Showing more skin (upper body)	11	6	13
Showing more skin (lower body)	7	5	18
Wearing "sexier clothes"	6	7	17
Wearing more "accessories"	6	7	17
Wearing a skirt in one session but not other	3	0	27
Wearing a lacy top	3	1	26

 Table 6.1: Differences in Women's Clothing Choices Across the Ovulatory Cycle

 Adapted from Haselton et al. (2007)¹¹³⁵

Given the very low count for most cells, the researchers did not conduct statistical significance tests for this data, which is against common practice, and should already caution against generalization—in that regard, this paper cannot even be said to support (B). Owing to the difficulty of conducting hormonal assay procedures, ovulation studies in the 2000s tended to have very low sample sizes, making the empirical evidence rather fragile. Moreover, while the researchers were quick to point out the ovulatory cycle differences which supported their hypothesis, they did not include the third "no difference" column in their paper. Adding this column drastically shifts the picture, as we clearly see that most photographs were rated similarly whether the woman was fertile or not. In spite of this, the researchers claimed in their abstract that "the ornamentation effect is striking in [...] magnitude."¹¹³⁷

To go back to Heartiste's initial claim, based on this data, a PUA who would try to identify an ovulating woman through her clothing choices would get things wrong more often than not. Indeed, laboratory experiments are very different from the real world. In order to obtain this data,

¹¹³⁴ With 492 citations as referenced by Google Scholar on April 24, 2024, this study is the most cited one on the matter, Martie Haselton et al., "Ovulatory Shifts in Human Female Ornamentation: Near Ovulation, Women Dress to Impress," *Hormones and Behavior* 51, no. 1 (2007): 40–45, <u>https://doi.org/10.1016/j.yhbeh.2006.07.007</u>.

¹¹³⁵ Haselton et al., "Ovulatory Shifts in Human Female Ornamentation," 43.

¹¹³⁶ As independently estimated by the judges, who did not all agree. The concordance of their judgment is rather high however, ranging from 36% to 100% depending on the items.

the researchers excluded women who took hormonal contraceptives such as the pill, because those disrupt the standard estrus cycle. Moreover, they only chose to recruit partnered women, "[b]ecause previous studies have found stronger ovulatory effects in partnered than in non-partnered women."¹¹³⁸ Lastly, women for whom the hormonal assays in the lab were not conclusive were also excluded from the study. The PUA coach's claim can therefore be said to be spurious, partly because of exaggerations by the researchers themselves, and partly because of the tendency to just focus on differences, rather than on the magnitude of those differences.¹¹³⁹

Another similar example is a literal interpretation of the dual mating strategy hypothesis by a PUA on Reddit, who believes that women "secretly sneak off during ovulation to get pregnant with with the one they believe carries good genetics." He thus claims that: "If your woman is every going to cheat, it's most likely going to be during ovulation" (PUA, 2011). The underlying quantitative assertion, which we will call (C), is the following:

- (C): A majority of extra-pair heterosexual intercourse occurs during the high-fertility phase of women's ovulatory cycle.

Given the very sensitive nature of such research, the existing evidence is based on self-reports of sexual activity, or of sexual desire and fantasizing.¹¹⁴⁰ One relatively large study with positive findings, which predates this PUA's assertion and might possibly have inspired it (albeit indirectly), is Bellis and Baker's (1990).¹¹⁴¹ Their study is based on survey results from 2,708 British women who (1) were in a romantic relationship, (2) indicated whether their last sexual intercourse was with their main partner or with an extra-pair partner, (3) provided information allowing to estimate when that last intercourse occurred in their ovulatory cycle. Relative to the total amount of copulations, they found that the rate of "extra-pair copulation" (EPC) during menstruation was 6.6%, peaking at 7.3% during the more fertile ovulatory phase, and going down to 5% during the post-ovulatory phase where fertility declines (known as the "luteal phase"). Due to the large sample size, the result was statistically significant (with p=0.004). This study therefore supports the assertion (D) below:

¹¹³⁸ Ibid., 41.

¹¹³⁹ It must be pointed out that more recent and much more rigorous studies have failed to replicate the effect of ovulatory cycle on female clothing. Researchers are now questioning previous findings such as Haselton et al.'s, where sample sizes are extremely low, and which do not control for weather conditions, Julia Stern, Sabine Ostermann, and Lars Penke, "Investigating Cycle Shifts in Women's Clothing Style and Grooming," *British Journal of Social Psychology* 63, no. 1 (2024): 378–402, https://doi.org/10.1111/bjso.12681.

¹¹⁴⁰ A study which found an increase in self-reported sexual fantasizing and sexual desire towards extra-pair partners was Steven Gangestad, Randy Thornhill, and Christine Garver, "Changes in Women's Sexual Interests and Their Partners' Mate-Retention Tactics across the Menstrual Cycle: Evidence for Shifting Conflicts of Interest," Proceedings of the Royal Society B: Biological Sciences 269, no. 1494 (2002): 975-82, https://doi.org/10.1098/rspb.2001.1952. Pillsworth and Haselton also found that "women tended to report greater extra-pair desires at high fertility than at low fertility" but the result was not statistically significant and can therefore be dismissed, Elizabeth Pillsworth and Martie Haselton, "Male Sexual Attractiveness Predicts Differential Ovulatory Shifts in Female Extra-Pair Attraction and Male Mate Retention." Evolution and **Behavior** 27. 4 (2006): 247-58. Human no. https://doi.org/10.1016/j.evolhumbehav.2005.10.002, 253-254.

¹¹⁴¹ Mark Bellis and Robin Baker, "Do Females Promote Sperm Competition? Data for Humans," *Animal Behaviour* 40, no. 5 (1990): 997–99, <u>https://doi.org/10.1016/S0003-3472(05)81008-5</u>.

- (D): Heterosexual women are statistically significantly more likely to engage in extra-pair intercourse during the high fertility phase of their ovulatory cycle than during the low-fertility phase.

Note the difference between (D) and (C). This is not just a surface difference, but one with farreaching implications. In fact, the results from the Bellis and Baker survey support (D) but they falsify (C), the reason being the unequal length of the different phases: all things equal, women might be more likely to engage in extra-pair sexual activity around ovulation, but this does not mean that most of the infidelity is committed at that time.¹¹⁴² I contend that this misunderstanding of quantitative results is pervasive in laypeople's understanding of science. This is in no small part caused by scientific publishing itself, which tends to simplify results in abstracts, and to focus too much on statistical significance rather than on the magnitude of effects. This theoretical section compared manosphere claims to scientific evidence, for the purpose of demonstrating potential misinterpretations of quantitative results. However, there is no direct evidence that manospherians based their claims on the specific studies chosen. To examine this phenomenon further, I designed a specific item in my manosphere science quiz.

1.c. Lay Misinterpretations of Quantitative Results: Survey Responses

In 1989, David Buss and an international team of researchers conducted a cross-cultural survey of mate preferences across 37 cultures in 33 countries from all continents.¹¹⁴³ In the study, men and women were asked to rate and rank traits in a potential partner from least to most desirable. This landmark study shed light on cultural similarities and differences in mate preferences, as well as on similarities and differences between men and women. Overall, there was massive agreement between cultures, with an average between-country correlation of 0.78 for ratings and 0.74 for rankings. Between-countries differences were much stronger than sex differences, with countryof-origin accounting for 14% of the variance, while sex only accounted for 2.4%. Overall, men and women from all over the world had strikingly similar preferences (0.87 correlation between the sexes). On average, they agreed on the four most attractive traits in a partner in both ratings and rankings.¹¹⁴⁴ However, as predicted by the researchers through evolutionary theory, men rated and ranked physical attractiveness and good looks higher than women did, while women gave more importance to earning capacities and financial prospects. This study has therefore become a classic in evolutionary psychology, since it found a statistically significant sex difference which was consistent all over the world. It has been discussed in the manosphere, with a MGTOW seeing it as proof of sex differences and female hypergamy:

¹¹⁴² The study recorded 71 occurrences of EPC during the less fertile but longer luteal phase, and 69 occurrences of EPC during the ovulatory phase.

¹¹⁴³ Nigeria, South Africa, Zambia, China, India, Indonesia, Iran, Israel/Palestine, Japan, Taiwan, Bulgaria, Estonia, Poland, Yugoslavia, Belgium, France, Finland, Germany, Great Britain, Greece, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Canada, USA, Australia, New Zealand, Brazil, Columbia, and Venezuela, David Buss et al., "International Preferences in Selecting Mates: A Study of 37 Cultures," *Journal of Cross-Cultural Psychology* 21, no. 1 (1990): 5–47, https://doi.org/10.1177/0022022190211001.

¹¹⁴⁴ Top-rated traits by men and women out of a list of 18 traits: 1-Mutual attraction-love; 2-Dependable character; 3-Emotional stability and maturity; 4-Pleasing disposition. Top-ranked traits by men and women out of a list of 13 traits: 1- Kind and understanding; 2-Intelligent; 3-Exciting personality; 4-Healthy. The two lists of traits were different from one another, and were adapted by Buss et al. from earlier survey measures of mate preferences, ibid.

"[T]his paper takes a look at sexual mate preference over 37 countries..table 2 shows how inportant financial prospects are..and over the whole 37 countries this is greater for females than for males..this shows the hypergamy of women is worldwide..other tables show ambition..age, which shows that men look at younger mates..how good looking the partner is..and virginity" (MGTOW, 2015).

Even though the study mostly found similarity among cultures and between men and women, people seem to overinterpret the meaning of the statistical sex difference. In order to assess this, I designed the following questionnaire item (EP5):

- "In a study led by evolutionary psychologist David Buss, people from 37 cultures across the world were asked to rank the traits they found desirable in a mate. Women ranked "Good Earning Capacity" higher than men, while men placed "Physically Attractive" higher than women. The authors write: *These were the characteristics that showed the largest effects for sex. Indeed, these sex differences were statistically significant with nearly every sample, and appear to be among the most robust sex differences yet documented across cultures.*'

What logical deduction can be made from their statements? (EP5)

- A) Men ranked physical appearance as one of the most desirable traits in mates while women ranked earning potential as one of the most desirable traits in mates.
- B) Across the world, men tend to select good-looking mates while women tend to select high-earning mates.
- C) The difference in these male and female results is probably not due to chance, and could be replicated in other similar studies.
- D) On average, women ranked 'Good Earning Capacity' as a more desirable trait than 'Physically Attractive'."

The correct answer is (C), while all other options contain some form of mistaken assumption. Indeed, men ranked "Physically Attractive" in fifth position and women in seventh position. As for "Good Earning Capacity," it was on average ranked twelfth by men from all over the world, and ninth by women. This contradicts (A) as well as (D). These mistaken assumptions represent what I call the "Men from Mars, Women from Venus" bias, based on the title of 1992 pop-psychology bestseller *Men Are from Mars, Women Are from Venus*, which painted the sexes as psychologically opposite through the metaphor of different planets.¹¹⁴⁵ When people are presented with a sex difference on two traits—with women scoring higher on one, and men on the other—, they might abusively infer (1) that those differences are large, and therefore (2) that one

¹¹⁴⁵ John Gray, *Men Are from Mars, Women Are from Venus* (New York: Harper Collins, 1992). Self-help writer and relationship counselor John Gray has recently co-authored a book with Warren Farrell, Warren Farrell and John Gray, *The Boy Crisis: Why Our Boys Are Struggling and What We Can Do About It* (Dallas: BenBella Books, 2018).

trait is typical of women and that the other is typical of men. A Red Pill article citing this study seems to fall for this bias:

"David Buss gathered data from 37 cultures with a total sample size of over 10,000 to find out about mate preferences and concluded that men preferred youth and physical attractiveness because it displays fertility and reproductive capacity, and women prefer men with a great earning potential that can provide in the long term."¹¹⁴⁶

In fact, looking at the data, we can see that even though preference for physical attractiveness is significantly higher in men than in women, it is still ranked higher by both sexes than preference for resources. In no way do these survey results indicate that preference for beauty would be typical of men, while preference for resources would be typical of women. As often with statistical sex differences, there is massive overlap between men and women. Questionnaire item EP5 allowed to directly assess whether people committed this mistake or not:

Answer	Manosphere (n=148)	Counterpart (n=151)
EP5(A)	11.5%	32.5%
EP5(B)	16.2%	23.8%
EP5(C)	57.4%	21.2%
EP5(D)	10.1%	22.5%
No answer	4.7%	0%

Table 6.2: Answers on the Life Sciences Quiz Item EP5

As in the rest of the questionnaire, manospherians selected the correct answer at a significantly higher rate than the counterpart group.¹¹⁴⁷ In general, when answering a question on statistics, they tended to greatly outperform the counterpart sample, as shown below for the two survey items on statistics in the general scientific literacy section of the quiz (Lit2; Lit4):¹¹⁴⁸

 Table 6.3: Correct Answers on the Life Sciences Quiz Item Lit2 and Lit4

Correct Answer	Manosphere (n=148)	Counterpart (n=151)
Lit2	77.7%	55.6%
Lit4	80.4%	51%

It is therefore not surprising to find that the Men from Mars/Women from Venus bias is rarer among manosphere respondents. Conversely, on EP5, the correct answer was the least popular

¹¹⁴⁶ Moshe Kelstein, "A Scientific Review of ROK's Community Beliefs," Return of Kings, May 27, 2015, <u>https://web.archive.org/web/20221207174522/https://www.returnofkings.com/64303/a-scientific-review-of-roks-</u> <u>community-beliefs</u>, archived December 12, 2022.

¹¹⁴⁷ 2x5 chi-square test run on the answer counts between both groups, X^2 =56.3, p < .001.

¹¹⁴⁸ Survey materials can be found in Appendix 12, 507. To see Lit2 and Lit4, see pages 514-515. 2x4 chi-square test run on the answer counts between both groups, X^2 =45, p < .001.

among the counterpart group's US respondents. The high prevalence of this bias in the population should be further investigated. I contend that one of the inherent appeals in this Mars/Venus trope is its symmetry, as it balances a male-biased trait with a female-biased one.¹¹⁴⁹ Sometimes this symmetry can lead to spurious claims. For example, in Mystery's 2005 dating guide, the seduction coach writes that "[w]omen take a much larger risk, evolutionarily speaking, when they have sex. Sex is also a much larger investment for them than it is for men."¹¹⁵⁰ This echoes a common view in evolutionary psychology, where fitness costs of sex are higher for women (unwanted pregnancy, STDs, sexual violence), thus explaining the potential evolution of psychological mechanisms aimed at lowering these risks, as illustrated in Mystery's claim: "For thus reason, women have emotional circuitry designed to take this into account. For example, women tend to experience much more anxiety just prior to sex with a new lover."¹¹⁵¹ However, he then adds that "[m]en take a larger risk than women when first approaching," which is mere just-so storytelling, and rather implausible at that. He thus concludes that "[i]n ancient times, this posed a legitimate safety concern and thus men still experience approach anxiety."1152 Here, a seductive symmetrical argument conceals the fact that one of these claims has robust empirical and theoretical support. while the other one is the author's own speculation.

When the two sexes are presented as symmetrically opposed, as two different subspecies coming from two different "planets," it usually makes for gross oversimplifications of biology, as in this excerpt from incels.wiki: "Male courtship additionally consists in signaling their willingness and ability to provide resources as women heavily depend on them, whereas female courtship consists only in displaying sexually selected dimorphic traits, beauty and adornment."¹¹⁵³ This very crude view of sexual selection is a prime example of the Mars/Venus trope, overinflating existing differences between the sexes' mate preferences and courtship strategies to the point of making empirically false claims (i.e., "female courtship consists *only* in displaying sexually selected dimorphic traits, beauty and adornment.")

As already made clear throughout our analysis, manospherians tend to exaggeratedly picture the sexes as diametrically opposed, with genetic sex differences playing a key role in their understanding of gender relations and society as a whole. There is no clear evidence that this would stem from a widespread misunderstanding of statistical sex differences, however. As the next section showcases, ideological bias seems to be the main driver here, as women are constantly depicted negatively, often with the help of misogynistic readings of evolutionary research.

¹¹⁴⁹ I would like to research this further experimentally, to understand if this sort of misunderstanding is specific to sex differences or if it applies to all statistical differences between groups.

¹¹⁵⁰ Mystery, The Venusian Arts Handbook, 20.

¹¹⁵¹ Ibid. For review of such hypothesized psychological mechanisms in women, see Buss, *Evolutionary Psychology*, Chapter 11: Conflict Between the Sexes," e-textbook version, 612-624.

¹¹⁵² Mystery, *The Venusian Arts Handbook*, 20. Mystery's approach anxiety JSS is analyzed above, Chap. IV, C, 218. ¹¹⁵³ Incels.wiki, "Intrasexual Competition,"

https://web.archive.org/web/20201128215318/https://incels.wiki/w/Intrasexual_competition, archived November 28, 2020

A.2. Manosphere Sexism and Sex Differences

Analyzing manosphere content on sex differences is a challenge: indeed, some sex differences mentioned are perfectly documented, some exist but are exaggerated, while others are pure inventions. While it would be impossible to extensively review this central aspect of manosphere ideology, this section focuses on those areas where biology is evidently colored by misogyny, and where the manosphere departs from the scientific literature in four ways: (1) false empirical claims, (2) value judgments on biology and behavior, (3) omitting discussions of male nature, and (4) use of nonscientific misogynistic sources.

2.a. The Evolution of Infidelity: A Case of Cherry-Picking

As explained above, manospherians are particularly attentive to the evolutionary scientific literature on female sexuality and female mating preferences and strategies.¹¹⁵⁴ This branch of evolutionary research was initiated by feminist scientists, as it corrected historical male bias in biology and showed the flexible, and sometimes very active sexual behavior of females.¹¹⁵⁵ It might therefore seem surprising to see Sarah Hrdy, one of the feminist pioneers of this "female turn" in evolutionary thinking, be cited in the manosphere:

*"Females should be, if anything, more competitive than males, not less, although the manner in which females compete may be less direct, less boisterous, and hence, more difficult to measure" - The Woman That Never Evolved -- by Sarah Blaffer Hrdy"*¹¹⁵⁶

However, this is less paradoxical than it seems. Feminists in the 1970s were eager to liberate women from oppressive sexual norms, to have them fully enjoy their sexuality free of guilt, without fear of pregnancy or opprobrium. As such, dismantling Darwin's old contention that females were sexually reserved and coy was a feminist breakthrough: females could be as sexually competitive and promiscuous than males. Half a century later, manospherians hold radically different value judgments on female promiscuity and on women's sexual liberation, as shown by this incel's reaction to a study on infidelity:

"This study proves why the sexual revolution was by far one the biggest mistakes the west could've made. Paired with biological drives to cheat, and because you cannot run away from your genetically hard-wired desires, giving women complete sexual freedom was opening pandora's box" (incel, 2020).

Although infidelity is just a matter of scientific inquiry for evolutionary scholars, that is not the case in the manosphere, where emotions on the topic run high. As a space where men can share

¹¹⁵⁴ See Chap. V, B, 237; 244.

¹¹⁵⁵ On Sarah Hrdy, see Chap. II, B, 121. See also Malin Ah-King, *The Female Turn: How Evolutionary Science Shifted Perceptions About Females* (London: Palgrave Macmillan, 2023).

¹¹⁵⁶ Cited in Anonymous, "Male and Female: Equal but Different," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105095445/http://masculineprinciple.blogspot.com/search/label/Chapter%202%2</u> <u>0-%20Sexuality</u>, archived January 5, 2021.

their dating, relationship, and marriage experiences, the manosphere is home to a lot of pain, anger, and bitterness. Apart from conflictual divorces, one of the most frequent sources of resentment is being cheated on by a female partner. In a MGTOW discussion entitled "What are the worst lies a woman ever told you?," one finds dozens of testimonies of men who claim they were cheated on by wives or girlfriends. To some men reading those testimonies, realizing that their misfortunes were shared by others had a comforting effect: "I cant tell you how therapeutic it is to my conscience to hear others listing the same lies I've heard day in and day out for years and years from multiple women" (MGTOW, 2014). For others, as shown in the following quotation, it just paints a truer picture of reality, showing that women are no better than men when it comes to honesty and fidelity:

"Men have been taught to believe that females are true and kind and just and that it is our inability as men to restrain our base urges to dishonesty, violence and fucking around that destroy marriages when, in fact, it is just as often the females who lie, cheat and lash out against us" (MGTOW, 2015).

Yet, for others such as this MGTOW, the fine line between personal testimony and generalization is easily crossed: "She turned out to be a very selfish, self-centered, arrogant, cheating bitch but then again, aren't they all like that?" (MGTOW, 2016). The following excerpt from a Red Pill redditor perfectly illustrates that dynamic (I got cheated on, *ergo*, all women are cheaters):

"I was in a LTR [Long-Term Relationship] and applying to med school. [...] Fast forward to a month after I find out I didn't get in anywhere, and all of a sudden she's tearfully confessing to cheating six month ago and telling me how we shouldn't be together because she doesn't know if she loves me anymore.

Long story short: AWALT [All Women Are Like That]. No exceptions" (TRP, 2016).

Evolutionary thinking easily supports generalizations about women. MRA lawyer Roy Den Hollander married a Russian woman who turned out to be a sex worker, an experience that he claimed scarred him for life. He even created a website to share his 1500-page account of the story.¹¹⁵⁷ There, one finds an evolutionary explanation for female infidelity:

"A woman's drive for sex and economic support, which is the modern-day form of protection, made infidelity a way of life for her. Females spread their bets, so if one man bites the dust, either physically or economically, she still had other beaus to depend on. To keep her beaus tied to her, she needed to cheat on all of them but still convince each one with her tears, entreaties and sex that he was the only one. Over millions of years, natural selection eliminated the faithful females, since they tended to die out with only one male protecting and supporting them. That left modern-day man with only a huge pool of hos— billions of them."¹¹⁵⁸

 ¹¹⁵⁷ <u>https://web.archive.org/web/20230130132220/http://been-scammed.com/main/</u>, archived January 30, 2023.
 ¹¹⁵⁸ Roy Den Hollander, *Stupid Frigging Fool PART II*, <u>https://web.archive.org/web/20220330132627/http://been-scammed.com/main/SFF/7.b.StupidFriggingFoolPt2.pdf</u>, archived March 30, 2022, 19-20.

This is reminiscent of David Buss's mate switching hypothesis: "Sometimes, a woman's husband stops bringing in resources, starts abusing her, or otherwise declines in his value to her as a mate. Ancestral women might have benefited from short-term mating to cope with this adaptive problem."1159 Yet, there are three major differences between the academic hypothesis and Hollander's rendition of it. Firstly, evolutionary psychologists view sexual behavior as flexible, as a set of conditional strategies. Their point is not to say that all women are genetically hardwired to always cheat on their partners: in fact, most people do not cheat most of the time. Yet, the ultradeterministic vocabulary of the manosphere tends to obscure this fact, e.g., "women have literal primal urges to cheat on their husband, urges hardcoded in their DNA" (incel, 2020). Evolutionary researchers contend that a conditional propensity for infidelity might have evolved over time if it conferred fitness benefits for the women engaging in it. Since infidelity is a well-known aspect of human sexuality, they thus try to identify its correlates (such as dissatisfaction with one's current relationship) through evolutionary hypothesizing. This does not imply that the behavior is ubiquitous or irresistible. Secondly, evolutionary scholars indicate the speculative nature of their hypotheses ("Ancestral women *might...*"), which is not the case with Hollander. And finally, they do not pass any moral judgment on the behavior they study, in stark contrast with Hollander's sexist vocabulary ("huge pool of hos"). Here, the issue is not primarily with understanding the research, but simply with pre-existing negative normative value judgments on female sexuality. These can come from one's experience of infidelity, as in the case of Hollander, or from one's relationship to sex, as is the case with incels.

Incels resent the fact that other people have sex. In that context, any type of sex research is bound to infuriate them. But that is even truer of hypotheses on the evolution of female mating strategies and infidelity. Since these insist on the prominent evolutionary role of females' agency and multiple mating, incels see them as cruel reminders of their rejection by women and of their own sexlessness. Thus, it is certainly among incels, who are the most avid consumers of evolutionary psychology in the manosphere, that reactions to such research are the most starkly misogynistic:

- "So women are hardwired to be cheating whores there is no escape" (incel, 2020).
- "Women are absolute scum" (incel, 2021).
- "The punishment for adultery in Islam is death. [...] I realize now that this is a good and necessary thing to prevent degeneracy and cuckolding which is in the genetic code of femoids [women]" (incel, 2020).
- "High IQ thread. Further proves that foids [women] are brainless primates that can't control their biological behaviour that could lead to other people suffering from their actions. This is why they shouldn't be allowed to control society or else this world will go to shit" (incel, 2021).

In all those discussions on the evolution of infidelity, there is no mention of male instincts and male behavior. If women's propensity for infidelity makes them "brainless primates," what about the well-established *male* propensity? Are men "absolute scum" as well for being equipped

¹¹⁵⁹ Buss, *Evolutionary Psychology*, e-textbook version, 359. See also Buss et al., "The Mate Switching Hypothesis."

with mechanisms coming from an evolutionary legacy of short-term and extra-pair mating? This is not a line of reasoning ever found in the manosphere. Thus, the age-old sexual double standard is reproduced in these seemingly scientific discussions: in men, infidelity is so evident and unproblematic that it does not require any comments or explanation, while in women it is a major concern, warranting competing hypotheses, and prompting scathing condemnations. Evolutionary explanations are thus used to depict a monolithic and inflexible view of female "biological behaviour," but are rarely applied to male behavior. This is all the more striking since, as reminded by David Buss, "[m]en in most cultures pursue extramarital sex more often than do their wives."¹¹⁶⁰ While the leading evolutionary psychologist does indeed devote attention to the evolution of female infidelity, he does not ignore male infidelity, which is both more prevalent and much less of an evolutionary puzzle. Indeed, as male mammals, men are the product of an evolutionary history in which extra-pair mating would have provided obvious fitness benefits (in the form of additional offspring), without incurring the costs of pregnancy.¹¹⁶¹

Evolutionary scientists study a broad range of behaviors, some of which society usually regards positively (cooperation, altruism, romantic love), and some negatively (infanticide, aggression, infidelity). In the manosphere, this research is selectively appropriated, with a particular focus on the "dark side" of female nature, that is on the evolution of female behaviors judged as undesirable or immoral. The example of infidelity thus illustrates two of the four dynamics running through this section: (2) negative value judgments on behavior, as manospherians have very negative views on female promiscuity and reformulate existing evolutionary hypotheses with misogynistic slurs; and (3) omitting discussions of male nature, which would paint a much different picture. I argue that, by only focusing on the evolution of female infidelity, manosphere communities, although they cite established research, end up depicting a biased version of reality, where male behavior remains unquestioned and biological explanations are only applied to women. The examples of empathy and romantic love might be even more revealing, as manosphere science seems to run completely opposite academic research.

2.b. Reverting the Female Empathy Advantage

In the manosphere, women are usually portrayed as lacking empathy, in particular towards men, as illustrated by these quotes from MGTOW redditors:

"Men are the doers and makers, and that's what I'm proud about being a man. We make stuff happen and not one thing would work without us. We have better brains on average and more true empathy, morality, and infinitely more philosophical capacity" (MGTOW, 2016).

"Men mistakenly assume those women think and operate the same way as men. They assume those women are being motivated by empathy and/or sympathy.

¹¹⁶⁰ Buss, *Evolutionary Psychology*, e-textbook, 351.

¹¹⁶¹ Ibid., see "Chapter 6: Short-Term Sexual Strategies," e-textbook version, 331-332.

But for women, there is always a cost benefit analysis, it's always about what they can gain, either in the present, or as an insurance for the future" (MGTOW, 2019).

"They are to narcissistic and lack any empathy. No female could ever truly put themselves in the shoes of man.

Females would be frightened to death if they lived 1 day in a mans shoes" (MGTOW, 2019).

"My son is in the 4th grade and shit like this just scares the hell out of me. Women/girls at any age are basically evil with zero sense of empathy or morals... but teen girls are the absolute worst" (MGTOW, 2019).

"Whatever crumbs were left of my beta facade finally cracked when I realized, point blank, boot in the forehead, that women have no empathy for men" (MGTOW, 2017).

"Lack of empathy is almost universal in the women I know of. If they cannot empathize, they cannot understand how their behavior affects anyone else" (PUA, 2015).

This pervasive manosphere belief is usually linked to manosphere evolutionary just-so stories, most notably male disposability. MRA YouTuber Karen Straughan explains why she thinks women are conditioned to feel no empathy for men:

"We're training her to not allow guilt or empathy or acknowledgment of a man's humanity or any sense that he might just maybe deserve it more, to convince her to give her seat to him, because for millennia, the human species absolutely depended on her feeling 100 percent entitled to that seat."¹¹⁶²

To her, this is "in the chromosomes," and stems from humanity's evolutionary history:

"We made our way as humans through a really harsh history, and we became the dominant force on this planet, and one of the reasons we were so successful is because we have consistently put women's basic needs first, their need for safety, support and provision. It was in humanity's best interest for women to be essentially self-interested and for men to be essentially self-sacrificing."¹¹⁶³

Among Red Pill communities, the same type of argument exists, albeit with a slightly different evolutionary narrative. Women are thought to be innately self-centered, ruthlessly selfish, and incapable of empathizing, which is called "female solipsism." Rollo Tomassi, who might have coined the term, has his own evolutionary JSS on the matter, which he calls "War Brides." Eschewing MRA-style group selection, he argues:

"Given the harsh realities that women had to endure since the paleolithic era, it served them better to psychologically evolve a sense of self that was more resilient to the brutal changes she could expect be subjected to. Consider the emotional investment a woman needs to put into mothering a child that could be taken away or killed at a moment's notice."¹¹⁶⁴

¹¹⁶² Karen Straughan, "Feminism and the Disposable Male," YouTube.com, November 5, 2011, <u>https://web.archive.org/web/20210106131628/https://www.youtube.com/watch?v=vp8tToFv-</u> bA&t=1s&ab_channel=karenstraughan, archived June 1, 2021.

¹¹⁶³ Ibid.

¹¹⁶⁴ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 186.

Given a human evolutionary history marked by tribal warfare, Tomassi argues, with women under constant risk of being kidnapped by other tribes, they were naturally selected "to cut former emotional ties more readily (in favor of [their] new captor) and focus on a more self-important psychology – solipsism."¹¹⁶⁵ In both those cases, evolutionary just-so stories buttress the claim that women have an empathy or compassion deficit. The problem of course is that those are mere speculations. In fact, one could as easily create a simplistic "counter-JSS" to Tomassi's. Since according to him tribal warfare was such an important selective pressure, and since it was the men who engaged in warfare, shouldn't empathy have been "selected out" from their psychology too, as it is assuredly a detrimental trait to possess in battle?¹¹⁶⁶ As for infidelity, manospherians seem to have a myopic focus on women's evolution and behavior, making for one-sided explanations that sound convincing in isolation, but are not enough to establish an actual sex difference.

The evidence manospherians provide for women's supposed empathy deficit tends to be based on anecdotes or fallacious reasoning. The nature of this "evidence" is illustrated by the definition of compassion found in Roy Den Hollander's Evolutionarily Correct Cyclopedia: "Females know about compassion, but only when it's directed toward them. They genetically understand how to take advantage of a man's decency. Enough of these phony female hard-luck stories meant to manipulate a guy's compassion."¹¹⁶⁷ Note how women are called "females," the biological term used in all species, while men are just "men." The encyclopedia entry goes on: "Men are by far the more compassionate. 74% of the females survived the Titanic but only 20% of the men. If females were the compassionate sex, the numbers would have been reversed. Of course, to a Feminist, none of the men should have survived." Here, feminists are ridiculed using a strawman argument, while a single event is supposed to provide evidence for a universal sex difference. Hollander goes on: "Social Security, Medicare, Medicaid, and welfare programs-all were passed by largely male legislators and all have a majority of female beneficiaries." This is not so much proof of higher male compassion, as Hollander contends, as a corollary of the overwhelming male majority in Congress.¹¹⁶⁸ As for women's being the majority of welfare beneficiaries, it can parsimoniously be explained by the higher poverty of women.¹¹⁶⁹ Finally, the

¹¹⁶⁵ Ibid., 187.

 ¹¹⁶⁶ It is really not certain that tribal warfare would have existed for most of *Homo Sapiens* (pre)history, "Only in the past 10,000 or so years has interclan warfare become an integral part of human lives," Sarah Hrdy, *Mothers and Others: The Evolutionary Origins of Mutual Understanding* (Cambridge: Harvard University Press, 2009), 247.
 ¹¹⁶⁷ Roy Den Hollander, *Evolutionarily Correct Cyclopedia*,

https://web.archive.org/web/20220327081540/http://www.roydenhollander.com/main/Writings/CyclopediaUpdate2. 20.19.pdf, archived March 27, 2022, 16.

¹¹⁶⁸ As of writing, in May 2024, women only occupy 25% of seats in the Senate and 29% of seats in the House of Representatives, the highest proportion so far in all of US history, Rebbeca Leppert and Drew Desilver, Pew Research "118th Number Center. Congress Has Record of Women." January а 3. 2023. https://web.archive.org/web/20240427073127/https://www.pewresearch.org/short-reads/2023/01/03/118th-congresshas-a-record-number-of-women/, archived April 27, 2024.

¹¹⁶⁹ According to the 2018 Census data, women represent 56% of the American people living below the poverty line, Center for American Progress, "The Basic Facts About Women in Poverty," August 3, 2020, <u>https://web.archive.org/web/20231208224202/https://www.americanprogress.org/article/basic-facts-women-poverty/</u>, archived December 8, 2023.

definition ends with a personal anecdote: "I've played a few sports in my life and suffered my share of injuries. But whenever I was hobbling around on crutches or with a cane, never once, not once, did a girl give me her seat or move so I could pass."

This lack of solid empirical evidence is surprising given the manosphere's habit of citing academic research. However, this is easily explained in the case of empathy: scientific evidence directly contradicts the manosphere, repeatedly finding an empathy advantage for women. Before reviewing the evidence, it must be noted that "empathy" is a rather vague umbrella term, which is "used to describe at least eight related, but distinct cognitive, affective, and behavioral phenomena," such as understanding the mental state of someone else, imagining how one would feel in their situation, feeling the same emotions as they do, as well as concern for people in need, etc.¹¹⁷⁰ These have been further classified into three dimensions: affective empathy (feelings about others' feelings), cognitive empathy, (knowledge and perception of others' feelings), and prosocial motivations (behaviors geared towards alleviating distress).¹¹⁷¹ The three dimensions have been studied extensively, with much concurring evidence pointing towards a general female advantage from infancy onwards.¹¹⁷² The potential mechanisms evoked for this sex/gender difference are gendered socialization, as well as neural and hormonal differences. Testosterone, for instance, has been shown to decrease the ability for empathy.¹¹⁷³ Drawing on evidence from ethology, social psychology, economics and neuroscience, Christov-Moore et al. conclude that "by the time they are toddlers, females appear more prosocial, recognizing and willing to help/comfort individuals in distress, and sex/gender difference in empathy continue to be consistent through adolescents and into adulthood."1174

Comparisons with other mammalian species reveal similar patterns, and evolutionary hypotheses regarding this sex difference hinge on the selective pressure put on females by their history of being primary caretakers of offspring ("primary caretaker hypothesis"):

"[T]he evidence thus far is consistent with the idea that selective pressures shaped females' anatomy, physiology, and neurobiology to facilitate sensitivity to infants' internal states and resultant nurturing behavior. Hence, sex differences in foundational aspects of empathic behavior may derive from a common evolutionary history of maternal care."¹¹⁷⁵

¹¹⁷⁰ David Lishner, Steven Steinert, and Eric Stocks, "Gratitude, Sympathy, and Empathy," in *Encyclopedia of Evolutionary Psychological Science*, ed. Viviana Weekes-Shackelford and Todd Shackelford (Cham: Springer International Publishing, 2016), 1–4, <u>https://doi.org/10.1007/978-3-319-16999-6_3053-1</u>, 2.

¹¹⁷¹ Magali Jane Rochat, "Sex and Gender Differences in the Development of Empathy," *Journal of Neuroscience Research* 101, no. 5 (2023): 718–29, <u>https://doi.org/10.1002/jnr.25009</u>.

¹¹⁷² Ibid., for a review of the evidence. See also Leonardo Christov-Moore et al., "Empathy: Gender Effects in Brain and Behavior," *Neuroscience and Biobehavioral Reviews* 46, no. 4 (2014): 604–27, <u>https://doi.org/10.1016/j.neubiorev.2014.09.001</u>.

¹¹⁷³ The evidence is reviewed in Christov-Moore et al., 30.

¹¹⁷⁴ Ibid., 32.

¹¹⁷⁵ Ibid., 10.

One of the most common manosphere claims about empathy is that women have none towards men: e.g., "No female could ever truly put themselves in the shoes of man" (MGTOW, 2019). As an example, they often take the "women and children first" cultural norm, as in Hollander's arguments that "[if] females were the compassionate sex," most survivors of the Titanic would have been men instead of women. In one of the rare manosphere acknowledgments of empathy research, MRA blogger Angry Harry lambasted psychologists and neuroscientists, telling his readers that "the next time that you hear one of these 'scientists' tell you that women are more empathic than men, please bear in mind that you are listening to gender politics at work; not science in progress."1176 He too used the Titanic to make his argument, arguing that "no experiments by our politically corrected psychologists and neuroscientists can ever erase that history."¹¹⁷⁷ Here again, manospherians seem to be missing the mark. Research has shown that "males, but not females, are more empathetic towards female targets and targets who they perceive as deserving of help. Females, in contrast, appear more indiscriminately empathetic."¹¹⁷⁸ Rather than showing a lack of female empathy, it seems more likely that the reigning cultural norms at the time of the Titanic sinking in 1912 would reflect this increased male empathy towards women. In that regard, it would entirely contradict the manosphere's contention: it is not women who tend to lack empathy for men, but men themselves.¹¹⁷⁹

The example of empathy shows how, relying on anecdotal evidence, manospherians can build a vision of sex differences sometimes completely divorced from the current state of empirical research and of evolutionary hypothesizing. Not only do they ignore the female empathy advantage, but they even reverse it, with the help of evolutionary just-so stories. This example highlights two of the four dynamics cited above. Firstly, omitting discussions of male nature (3): as manospherians focus solely on female behavior, they elaborate speculative narratives to argue for an empathy deficit in women, but never really consider men's evolution or behavior. Secondly, their empirical claims are false (1), in open contradiction with the growing body of evidence on gender/sex differences in empathy.

2.c. "Women Can't Love": "Just-So" Sex Differences in Romantic Attachment

In keeping with their vision of women as congenially incapable of empathy and fidelity, Red Pillers also argue that women are fundamentally unable to love men. This is a central tenet of

¹¹⁷⁶ Angry Harry, "Who Is More Empathetic; Men or Women?," <u>https://web.archive.org/web/20201111203657/http://angryharry.com/Who-Is-More-Empathic-Men-Or-Women.htm</u>, archived November 11, 2020.

¹¹⁷⁷ Ibid.

¹¹⁷⁸ Christov-Moore et al., "Empathy," 33.

¹¹⁷⁹ Scholars have also proposed evolutionary hypotheses for this sex-directed empathy in men, e.g., "Although speculative, it is possible that these sex differences in empathy may be the consequence of different evolutionary selective pressures on males and females [...] For males, increased empathy specifically directed at females may have improved their chances of reproduction, as both sexes prefer mates that are more kind, while decreased affective empathy directed at males may have been adaptive in competitive contexts such as competing for mates.," ibid., 33-34.

Red Pill philosophy, enshrined as the sixth "Iron Rule of Tomassi": "Women are fundamentally incapable of loving a man in the way that a woman expects to be loved by a man."¹¹⁸⁰ Tomassi realizes that this goes against common cultural beliefs, and recalls that accepting this was "a very tough part of [his] own unplugging."¹¹⁸¹ In the MGTOW community, these men who have forfeited the possibility of ever having romantic relationships are particularly invested in the idea that women are incapable of love. As expressed in a MGTOW Reddit thread entitled "Women love money NOT you" (MGTOW, 2019), they believe that women's love is fickle and conditional, only lasting for as long as their partner provides resources. For the many divorced men in the community, this belief stems from their own misfortunes in marriage:

"I just recently got divorced, after ten years of marriage. When we got married, I was making 5 times more than her. She treated me like I was royalty.

Then she got a better job. I was making 3 times more than her. She treated me like a roommate.

With her latest job, I only made twice as much as her. She left me for no good reason within 6 months.

I saw the changes happen so fast. It was obvious that once she was making enough money to live comfortably on her own, I was worthless to her.

Now I'm MGTOW for life. I don't care if I ever date again or have sex again for the rest of my life. Women are incapable of real love, other than towards their children" (MGTOW, 2019).

This is a familiar pattern, where a man goes from his negative personal experience with a woman to a generalization about all women.¹¹⁸² This alleged fickleness of women's love is humorously described in a Red Pill article: "When a woman tells you she will love you forever, insert the phrase (Right now I feel like) before it, so you get the proper translation into Womanese: '(Right now I feel like) I will love you forever' (TRP, 2013). On the other hand, men are always depicted as capable of unconditional love: "Women love pragmatically and have no capacity to love unconditionally for romantic partners, only their children. Men can love women unconditionally" (TRP, 2014). In MGTOW and Red Pill groups, women's love for men is widely regarded as "opportunistic" or "pragmatic" in opposition to men's supposed boundless romanticisms to effect their imperatives (hypergamy)."¹¹⁸³ Men, he explains, are looking for a partner with which they can be honest, emotional, and vulnerable, but this is just a fantasy. Taking the Red Pill means abandoning these romantic myths for what he believes to be a more realistic vision of female nature:

"Our girlfriends, our wives, and even our mothers are incapable of this idealized love. As nice as it would be to relax, trust and be vulnerable, upfront, rational and open, the great abyss is still the lack of any capacity for women to love Men as Men would like them to."¹¹⁸⁴

¹¹⁸⁰ Rollo Tomassi, The Rational Male (Reno: Counterflow Media LLC, 2013), 226.

¹¹⁸¹ Ibid., 227.

¹¹⁸² For a similar example on infidelity, see Chap. VI, A, 287.

¹¹⁸³ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 224.

¹¹⁸⁴ Ibid., note the use of capital letters for "Men" but not for "women."

In the Red Pill worldview, women's love is first and foremost thought to be conditional on resource provisioning. This is a distorted interpretation of women's mate preference for a partner with resources. Among MGTOW in particular, as well as for many divorced MRAs, this is the main argument for avoiding relationships and marriage. Male love is thus seen as an emotion with a completely different Darwinian function than female love: men's propensity for unflinching love would have evolved to have them "serve" women and sacrifice for them—in keeping with the male disposability JSS—, while women's love would be shallower and inherently instrumental: "Women are more selfish than men are in matters of money and love. Man's love is expected to be sacrificial, woman's isn't" (TRP, 2014). This JSS is summed up in *The Masculine Principle*:

"In an evolutionary survival scenario, it makes sense too, that men would love women deeper than women would 'love' men. It is a man's deep love that will make him sacrifice his produced goods and even his life for the woman he loves. This rarely happens the other way around."¹¹⁸⁵

As for women, their different fitness interests are thought to have selected for an ultimately manipulative form of love:

"It is in both her and her offspring's advantage to have the man still hopelessly in love with her, providing and protecting his brains out while she slyly seeks out her next suitable mate before giving the present 'tool' his walking papers."¹¹⁸⁶

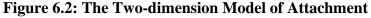
This is once again based on the tendency to focus on the past selective pressures which shaped female behavior, without consideration of male nature (3). Findings from evolutionary psychology are selectively exaggerated, until they bear little resemblance with scientific empirical knowledge. In fact, one could make similar overinterpretations of the greater male sexual motivation or preference for physical beauty, and say that men are congenially incapable of love, and only superficially motivated by sex and aesthetic features. This would be committing the now familiar slide from a statistical difference, an average tendency, to an absolute categorical difference between the sexes—the Men from Mars/Women from Venus bias. When trying to substantiate their claim of women's incapacity to love, manospherians mostly use theoretical abstract arguments, evolutionary just-so storytelling, and anecdotes. As for empirical research on the matter, there is actually surprisingly little.

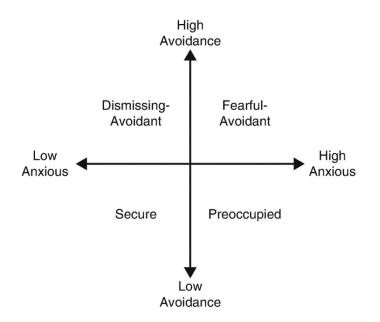
Indeed, love researchers do not seem to expect strong differences between the sexes in romantic attachment. In his meta-analysis of sex differences in romantic attachment, evolutionary psychologist Marco Del Giudice explains that "[t]he tacit consensus in the field is that sex

¹¹⁸⁵ Anonymous, "You're Such a Tool! (Briffault's Law)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105100002/http://masculineprinciple.blogspot.com/2015/03/youre-such-tool.html</u>, archived January 5, 2021.

¹¹⁸⁶ Ibid. For another example of this JSS: "It's my own opinion, as well as the opinion of many other MGTOWs, that women are not hardwired for the same level of love that men are. This is partially to do with the fact that women need to look after children and need to divert those resources elsewhere," Sandman, "Introduction to MGTOW," YouTube.com, August 24, 2014, <u>https://web.archive.org/web/20210104171134/https://www.youtube.com/watch?v=iVXdxaaRiAU&t=1s&ab channe</u> l=Sandman, archived January 4, 2021.

differences do not exist, or at least can be safely ignored; romantic attachment is seen as a sexually monomorphic trait."¹¹⁸⁷ As an evolutionary psychologist however, he is doubtful that no sex differences would be found in something as closely related to reproduction as romantic love, where selective pressures would have differed for men and women over evolutionary history. Since men are more interested in short-term mating, and since love is mostly thought to promote long-term relationships between partners, Del Giudice argues, "It follows that men should display higher avoidance than women across cultures."¹¹⁸⁸ He is referring here to the widely used two-dimension model of attachment, where people are classified into four "attachment styles" based on two dimensions: avoidance and anxiety, as shown on figure 6.2 below:





Source: Encyclopedia of Evolutionary Psychological Science¹¹⁸⁹

This model is the standard to measure romantic attachment in adults, through a 36-item questionnaire called the Experiences in Close Relationship-Revised (ECR-R).¹¹⁹⁰ Del Giudice's meta-analysis of results from a hundred studies and more than sixty thousand respondents found a weak sex difference, with a tendency for men to score higher on avoidance and lower on anxiety than women (D=0.28 for surveys with the general population, but only D=0.12 for college

¹¹⁸⁷ Marco Del Giudice, "Sex Differences in Romantic Attachment: A Meta-Analysis," Personality and Social Psychology Bulletin 37, no. 2 (2011): 193–214, https://doi.org/10.1177/0146167210392789, 193. ¹¹⁸⁸ Ibid., 194.

¹¹⁸⁹ Carrie Veronica Smith and Benjamin Hadden, "Romantic Attachment," in Encyclopedia of Evolutionary Psychological Science, ed. Todd Shackelford and Viviana Weekes-Shackelford (Cham: Springer International Publishing, 2018), 1-10, https://doi.org/10.1007/978-3-319-16999-6_1714-1, 5.

¹¹⁹⁰ Chris Fraley, Niels Waller, and Kelly Brennan, "An Item Response Theory Analysis of Self-Report Measures of Adult Attachment," Journal of Personality and Social Psychology 78, no. 2 (2000): 350-65, https://doi.org/10.1037/0022-3514.78.2.350. 18 items aim to measure anxiety, e.g., "I'm afraid that I will lose my partner's love," and 18 aim to measure avoidance, e.g., "I don't feel comfortable opening up to a romantic partner."

samples).¹¹⁹¹ There was however massive overlap between the sexes, and variability between regions and survey types. These results do not seem to violate the "tacit consensus" that there are no major sex differences regarding romantic attachment and love. As for research on sex differences in the intensity of romantic feelings and commitment, there does not seem to be any. Given the state of psychological research on the matter, it is therefore safe to say that the manosphere's characterization of women is completely unsubstantiated (1). There is no conclusive evidence of a deficit in women's capacity to experience and feel love just like men.

2.d. Sex Hormones or the Biological Metaphorization of Sex Differences

Testosterone (generally abbreviated as "T") and estrogens are one of the primary mechanisms behind sexual dimorphism. At specific stages of human development, in particular during the fetal stage and at puberty, their effects are responsible for the physiological changes that differentiate men and women.¹¹⁹² This is why some endocrine dysfunctions lead people to have bodies that are neither typically male nor female.¹¹⁹³ On a behavioral level, the effects of hormones are still relatively uncharted. For example, studies reveal rapid rises in T-levels when men find themselves in competitive situations, but we do not know how this T is produced so rapidly. Nor do we know how its effects on behavior can happen so fast.¹¹⁹⁴ In fact, the very measurement of hormone levels is far from straightforward, with different methods yielding different results.¹¹⁹⁵ As a result, the scientific literature is usually quite cautious, acknowledging the many uncertainties that still hover around the hormone-behavior conundrum. Conversely, when hormones are mentioned in the manosphere, they are frequently described as an irresistibly potent force, in keeping with our findings on instincts:

"Don't be a slave to your biological instinct. YOU are not the author of your extreme desire to have a mate. It is all hormones" (incel, 2018).

"Here is the truth. We are nothing more than hairless apes, and love is nothing more than a biological chemical reaction. This "love" phenomena is just a release of hormones that compels us to breed" (MGTOW, 2017).

¹¹⁹¹ These meta-analytical effect size values should be interpreted similarly to Cohen's d, as explained above on page 279. However, since the avoidance/anxiety scale is a two-dimensional construct, the researcher compiled a statistic named the Mahalanobis distance D which calculates the effect of sex on the two dimensions of romantic attachment, Del Giudice, "Sex Differences in Romantic Attachment," 197.

¹¹⁹² Carole Hooven, *T: The Story of Testosterone, the Hormone That Dominates and Divides* Us (New York: Henry Holt and Company, 2021), 50-74.

¹¹⁹³ This is for example the case of CAH (congenital adrenal hyperplasia), where testosterone production is abnormally high, causing people with XX (female) chromosomes, to develop masculine-looking genitals, hypertrophied clitorises, etc. Besides, complete androgen insensitivity syndrome (CAIS) causes people with XY (male) chromosomes to not develop in a sex-typical way, as their body does not react to testosterone, hampering the development of outside male genitalia. These intersex conditions, which usually cause infertility, reveal the key importance of hormones in sex development, Carole Hooven, *T: The Story of Testosterone, the Hormone That Dominates and Divides Us* (New York: Henry Holt and Company, 2021), 52-54; 91-92.

¹¹⁹⁴ Hooven, T: The Story of Testosterone, the Hormone That Dominates and Divides Us, 178-179.

¹¹⁹⁵ Lisa Welling and Robert Burriss, "Investigating the Ovulatory Cycle: An Overview of Research and Methods," in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford (New York: Oxford University Press, 2019), 109–23.

"Women do nothing more than obey their hormones and genetic goal too" (MGTOW, 2020).

"To be sure, we can think logically and make decisions, but we're not nearly as in control of ourselves as we'd like to think we are. Hormones and neurotransmitters are our bodies' way of telling us what to do" (TRP, 2014).

Despite these simplistic narratives about the effects and potency of hormones, one also finds accurate information in the manosphere. Well-known endocrinological facts are referred to, such as the widely different amount of T between men and women, the cyclical nature of female hormone levels, the difference between T and its more potent form DHT (dihydrotestosterone), the existence of specific receptors for each hormone, or the more confidential 2D/4D ratio.¹¹⁹⁶ The incels.wiki page on testosterone is remarkably cautiously worded, emphasizing the tentative nature of the findings and the flaws of endocrinological studies:

"A large amount of these kinds of studies do not take these inter-hormone interactions into account, do not use particularly reliable measures of testosterone, have low sample sizes, do not take into account interindividual differences in sensitivity to androgens, and do not take into account the effects prenatal and pubertal 'priming' may have on shaping the body's response to testosterone in adulthood."¹¹⁹⁷

This could be straight out of an endocrinology textbook or journal article, as more than fifty studies from peer-reviewed journals are referenced in this entry's footnotes. Given their fascination with biological sciences, manospherians were hypothesized to perform well on the two basic endocrinology questions of the science quiz, which proved to be the case:¹¹⁹⁸

Correct Answer	Manosphere (n=148)	Counterpart (n=151)
Horm1	84.5%	71.5%
Horm2	76.4%	62.3%

 Table 6.4: Correct Answers on the Life Sciences Quiz Item Horm1 and Horm2

However, this does not mean that the manosphere's vision of sex hormones is value-neutral. In fact, it is a very good example of the way sexist value judgments can color seemingly scientific discussions (2). In the manosphere, testosterone is thus lauded and often presented as a panacea, while estrogens are mentioned almost exclusively in a misogynistic and metaphorical way.

Testosterone, the sex hormone found in much greater quantity in males and responsible for the development of male primary and secondary sexual characteristics, is routinely employed in

¹¹⁹⁶ The ratio between the length of the index (2D=second digit) and the ring finger (4D=fourth digit) is a sex difference (on average, women have longer indexes, while men have longer ring fingers) which has been linked with testosterone exposure, see Elizabeth Hampson, "Sex Differences in Cognition: Evidence for the Organizational-Activational Hypothesis," in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford (New York: Oxford University Press, 2019), 43–66, 49-50.

¹¹⁹⁷ Incels.wiki, "Testosterone," <u>https://web.archive.org/web/20220914172612/https://incels.wiki/w/Testosterone</u>, archived September 14, 2022.

¹¹⁹⁸ 2x4 chi-square test run on the answer counts between both groups, $X^2=14.25$, p=0.003.

popular discourse as a metaphor for masculinity in general, since it is responsible for the formation of penises, growth of facial hair, or the deepening of the voice, and linked to predominantly masculine behavior such as aggression and competitiveness. As testosterone expert Carole Hooven puts is, "if the Y chromosome is the essence of maleness, then T is the essence of masculinity, at least in the popular mind."¹¹⁹⁹ No wonder that this hormone holds a special place in the manosphere.

The Red Pill and Pickup Artist communities both aim at giving advice to men on how to become successful. For TRP in particular, this implies becoming a confident, muscular, and unapologetically masculine "alpha male" (as opposed to an effete "beta"). Dating coach Heartiste claims he knows just the remedy to being a beta: "There's a reason betas look so soft — it's no coincidence that they are likely suffering from low testosterone."¹²⁰⁰ Thus, testosterone is an integral part of his seduction guide, as he tells his readers to mimic its presence through posture: "Keep your head cocked upward slightly. This will accentuate the heaviness of your brow ridge and the heft of your chin and jaw, both indicators of alpha testosterone levels."¹²⁰¹ His readers are also told to display testosterone through behavior:

"Occasional displays of testosterone (ODTs) are more effective, require less effort, and are more fun than "talking it out" when the relationship is rocky. Curse profligately, punch a wall, slam a door, grab a wrist, break a lamp, menacingly wield a heavy object, and disappear for days at a time — then sit back as she swoons and resubmits to your authority."¹²⁰²

Heartiste's directive is clear: "Your goal as a man, then, is to keep your testosterone level as naturally high as possible."¹²⁰³ He then provides a full guide to raise one's T levels through adopting healthy exercising, dieting, and sleeping practices. This echoes conventional Red Pill wisdom, as found in "The Red Pill Constitution": "a man must take care of his body in order to potentiate his mind, higher testosterone will enhance cognition, increase confidence and increase energy levels."¹²⁰⁴ Sometimes, a commercial dynamic clearly underlies these paeans to testosterone. This is the case with Mo Saleem, a testosterone advocate who wrote articles on Return of Kings.com to advertise his testosterone-enhancing methods. For example, this self-proclaimed "independent men's health researcher" authored an article entitled "7 Benefits of Testosterone that You Probably don't Know," citing no less than 19 different studies to justify its claims.¹²⁰⁵

¹¹⁹⁹ Hooven, T: The Story of Testosterone, the Hormone That Dominates and Divides Us, 9.

¹²⁰⁰ Heartiste, On Game, 401.

¹²⁰¹ Ibid., 108.

¹²⁰² Ibid., 240.

¹²⁰³ Ibid., 399.

¹²⁰⁴ Anonymous, "The Red Pill Constitution," Illimitable Men, last update on October 30, 2015, <u>https://web.archive.org/web/20201222232035/https://illimitablemen.com/archives/the-red-pill-constitution/</u>, archived December 22, 2020.

¹²⁰⁵ Mo Saleem, "7 Benefits of Testosterone that You Probably don't Know," Return of Kings, November 29, 2017, <u>https://web.archive.org/web/20220925120222/https://www.returnofkings.com/138630/7-benefits-of-testosterone-that-you-probably-dont-know</u>, archived September 25, 2022.

This article shows how implicit positive value judgments about masculinity underlie manosphere descriptions of testosterone (2). For benefit n°4, "Testosterone Drives your Competitiveness," Saleem cites a few studies. But these studies never claim that increased competitiveness is necessarily a boon for men. This normative assertion is taken for granted by the author, who simply argues: "As men, it is in our nature to be competitive,"¹²⁰⁶ thus clearly committing the naturalistic fallacy. Similarly, benefit n°6 is "Testosterone Makes You Less Risk Averse," for which Saleem cites a study which found that "Gamblers with high testosterone also tend to engage in greater risks."¹²⁰⁷ It is unclear how beneficial this effect of testosterone is, yet Saleem argues that "if you look at the men who have achieved greatness, they are also the ones who have engaged in a hefty amount of risk."¹²⁰⁸ In those examples, the descriptive findings of science are interpreted within a simplistic normative framework in which a virile vision of masculinity is lauded. Thus, if masculinity=good, and testosterone=masculinity, then it invariably follows that testosterone=good. This leads to a cherry-picked reading of the literature on the effects of T, where only the positive ones are highlighted, as remarked by a Red Piller in the comments: "While positive testosterone effects are noted, it would have been useful to mention cons. For example: premature aging, acromegaly effects, balding, etc." (TRP, 2017).¹²⁰⁹

There are other subtle ways in which the article simplifies research findings to support his pro-testosterone commercial agenda. After summarizing findings from three studies, Saleem writes that "if you've been wrestling with a bout of depression, it's likely that declining T is a contributing cause."¹²¹⁰ However, the results from the studies he cites are far from warranting this assertion. Indeed, what Saleem claims is that drop in testosterone levels are one of the main causes of male depression, in all circumstances. However, the first study he cites to prove his point was conducted on men between the ages of 71 and 89, making generalization to his presumably much younger readership uncertain.¹²¹¹ It found that elderly men with depression were much more likely to have low testosterone levels. However, this was purely correlational, and the researchers called for a randomized controlled trial to establish the causal link: low testosterone might be causing the depression, but the reverse might be also true. The second study cited is a meta-analysis of the links between exogenous (i.e., artificially administered) testosterone and mood.¹²¹² Saleem summarizes the findings by saying that "an analysis of 16 human trials with 944 subjects revealed a significant

¹²⁰⁶ Ibid.

¹²⁰⁷ Ibid.

¹²⁰⁸ Ibid.

¹²⁰⁹ Agromegaly is a disorder that is caused by excess growth hormone (GH), and not testosterone.

¹²¹⁰ Mo Saleem, "7 Benefits of Testosterone that You Probably don't Know," Return of Kings, November 29, 2017, <u>https://web.archive.org/web/20220925120222/https://www.returnofkings.com/138630/7-benefits-of-testosterone-that-you-probably-dont-know</u>, archived September 25, 2022.

¹²¹¹ Osvaldo Almeida et al., "Low Free Testosterone Concentration as a Potentially Treatable Cause of Depressive Symptoms in Older Men," *Archives of General Psychiatry* 65, no. 3 (2008): 283–89, https://doi.org/10.1001/archgenpsychiatry.2007.33.

¹²¹² Hamid Amanatkar et al., "Impact of Exogenous Testosterone on Mood: A Systematic Review and Meta-Analysis of Randomized Placebo-Controlled Trials," *Annals of Clinical Psychiatry: Official Journal of the American Academy of Clinical Psychiatrists* 26, no. 1 (2014): 19–32.

positive impact of testosterone treatment on mood."¹²¹³ What he conveniently omits however, is that this causal link of exogenous testosterone on mood was only true in hypogonadal men, that is men whose bodies failed to naturally produce enough testosterone, but not statistically significant in eugonadal men, i.e., the vast majority of men with healthily functioning testicles. Similarly, while Saleem claims that the third study showed how exogenous testosterone relieved depressive symptoms, he fails to mention that this study too was only conducted on hypogonadal men.¹²¹⁴

Abnormally low T levels ("hypogonadism") have many deleterious health consequences in men, and Saleem uses this in his sales pitch. By misrepresenting studies on the negative effects of hypogonadism in aging men, he makes a general case for the "benefits" of T in all men. His claims go so far from the scientific literature he cites that they can be considered plain false (1). Interestingly, none of the manospherians discussing testosterone in the article's comment section seems to have fact-checked Saleem's claims, which are directly contradicted by the very scientific studies he is citing. The comments however passionately discuss the pros and cons of Testosterone Replacement Therapy (TRT), the medicalized injection of exogenous testosterone for hypogonadal men. It can be presented as life-changing, as in this incel's testimony:

"My face is fucked up as well. On Top of that, I my body type is horribly skinny. I started working out and made ZERO progress. Went to the doctor and found out I have low testosterone. Started TRT and can build muscle and grow facial hair for the first time in my life." (incel, 2018)

Since most incels are deeply insecure and unsatisfied about their physical appearance, raising T levels can be seen as a solution to more wellbeing, as in this other incel testimony:

"Work on your body and eat healthy. I was 100% suicidal every damn day and lonely af and you know what I did. I set a goal of loosing 30lbs and just focused on wtf I need to do hit my goal. Along that journey of educating my self, working out. You will build testosterone. This is key. T IS KEY. Testosterone will change your confidence, your body, your brain. It will make girls stare for no reason because your only focused on you and you beautiful body you are slowly carving" (incel, 2018).

Another way to raise T levels is by using anabolic androgenic steroids, substances which contain synthetic or natural T-derivatives. These masculinizing and muscle-building drugs are traditionally used by bodybuilders or athletes, although they are illegal in the US, as well as banned by all major sports bodies. Despite all this, they have become relatively common in the US.¹²¹⁵ One

¹²¹³ Mo Saleem, "7 Benefits of Testosterone that You Probably don't Know," Return of Kings, November 29, 2017, <u>https://web.archive.org/web/20220925120222/https://www.returnofkings.com/138630/7-benefits-of-testosterone-</u>that-you-probably-dont-know, archived September 25, 2022.

¹²¹⁴ Keisuke Okada et al., "Comprehensive Evaluation of Androgen Replacement Therapy in Aging Japanese Men with Late-Onset Hypogonadism," *The Aging Male* 17, no. 2 (2014): 72–75, https://doi.org/10.3109/13685538.2014.888052.

¹²¹⁵ The National Institute on Drug Abuse (NIDA) explains that "[i]t is difficult to estimate the true prevalence of steroid misuse in the United States because many surveys that ask about illicit drug use do not include questions about steroids," NIDA, "Steroids and Other Appearance and Performance

EnhancingDrugs(APEDs)ResearchReport,"revisedFebruary2008,https://web.archive.org/web/20220921032701/https://nida.nih.gov/download/815/steroids-other-appearance-2008,

can find testimonies from steroid users in the manosphere, from Red Pillers who are assiduous weightlifters, as well as incels who have a keen interest in physical enhancement techniques (bodybuilding, steroids, plastic surgery). Most discussions revolve around the efficiency and the side effects of these drugs.

As shown by these examples, testosterone generates vivid interest in the manosphere, and while its basic properties seem well-known, they are often exaggerated or extrapolated, with T appearing as a sort of panacea. Even though research may be abundantly cited, the interpretations are often heavily framed by a positive appreciation of masculinity, which tends to selectively highlight the "advantages" of T, and to obscure its major side effects. Sometimes, testosterone ceases to designate a molecule and just becomes a metaphor for masculinity, as in the end of Heartiste's "Testosterone Guide": "Testosterone is the fuel of vitality. Of life. When you act to keep it high, you are giving a giant middle finger to all those who would like you to sit down, shut up and follow orders like an obedient bootlicker."¹²¹⁶

Estrogens are usually called the female sex hormones.¹²¹⁷ Contrary to T, estrogens are almost exclusively discussed in the manosphere in a metaphorical way, standing for women or feminine traits in general. And the connotations are never positive:

- "Imbuing these sections of the American society with estrogen driven, irrational feminine traits may rank as the determinative factor in initiating the end of this country's success" (MRA, n.d.).¹²¹⁸
- "Like it or not, the threat of a looming breakup, whether the facts justify it or not, will spin her into a paranoid estrogen-fueled tizzy [...]" (PUA, 2019).¹²¹⁹
- "Here you go again with your estrogen fuelled crazy talk" [to a woman in a reddit discussion] (incel, 2018).
- "These are the worst lies that just one estrogen based sociopath told me" (MGTOW, 2015).

Other than being linked with paranoia, sociopathy, irrationality, or insanity, estrogens are also sometimes humorously treated as a "foul" or smelly substance. The contrast with the treatment of T is quite glaring.¹²²⁰ If estrogens stand for naturally feminine traits, then these are not very well-perceived in the manosphere, despite the frequent lamentations that they have been denatured by feminism. Yet, women with high levels of T are not in favor either, even for T-apologist Heartiste:

performance-enhancing-drugs-apeds-research-report.pdf?v=b864e9e791bbde96f1c35024bc52084f, archived September 21, 2022, 7. In the 1990s, there were an estimated 1 million past and current steroid users, see Charles Yesalis et al., "Anabolic-Androgenic Steroid Use in the United States," *JAMA* 270, n° 10 (1993): 1217–21, https://doi.org/10.1001/jama.1993.03510100067034.

¹²¹⁶ Heartiste, On Game, 401.

¹²¹⁷ They are called like this because of their key role in female reproduction. Estrogens are present in men as well, albeit at much lower concentrations. They play a key part in male health as well, see Gaetano Lombardi et al., "Estrogens and Health in Males," *Molecular and Cellular Endocrinology* 178, no. 1 (2001): 51–55, <u>https://doi.org/10.1016/S0303-7207(01)00420-8</u>.

¹²¹⁸ Roy Den Hollander, *Stupid Frigging Fool Part 6*, <u>https://web.archive.org/web/20200720231850/http://been-scammed.com/main/SFF/7.f.StupidFriggingFool Pt6.pdf</u>, archived July 20, 2020, 40.

¹²¹⁹ Heartiste, On Game, 212.

¹²²⁰ The word "estrogen" comes from "oestrus" which comes from the Ancient greek *oistros* meaning "frenzy," thus revealing a long history of negative connotations for the feminine.

"IT'S EASY TO IDENTIFY A SLUT. High T girls are easy to spot. Check for forearm hair, narrow hips, broad shoulders, a penchant for cursing, a flat ass (adjusted for race), career ambition, and status whoring."¹²²¹ Here the value judgments and double standards are made extremely clear. While T is sometimes portrayed as a panacea for men, in women, it seems that neither testosterone nor estrogens could have any positive effects.

This section showed how sex hormones can take on a symbolic dimension, often remote from the research on these important molecules.¹²²² Although in some areas, manosphere science seems like an exaggerated or biased version of science, in others, it completely departs from the scientific consensus. This is particularly the case with discussions of female irrationality and intellectual inferiority.

2.e. Traditional Misogyny and Female Inferiority: Abandoning Science?

Sometimes in the manosphere, it seems that women just cannot win: whether they have high testosterone or high estrogen, a sexist interpretation awaits. Similarly, they can paradoxically be presented as more emotional than men, but also as less loving and empathetic. In a clever twist, the author of The Masculine Principle lays out the difference: "Women have more emotions but they are shallower. Men have fewer emotions but they run deeper."1223 With this convenient dichotomy, the author can claim that men have "truer" feelings of love, all the while depicting women as emotional and irrational beings: "Children communicate emotionally, and since women have evolved to become 'better carers of children,' they have also evolved to be more in tune to the language of children, which is emotion."¹²²⁴ From this evolutionary premise, which, as we have seen, is widely shared in evolutionary hypothesizing on empathy ("primary caretaker hypothesis"), he goes out to argue that "Women have mentally 'evolved' to be something intermediate between the child and the man."¹²²⁵ This strange assertion is openly drawn from German philosopher Arthur Schopenhauer's writings.¹²²⁶ The idea that women are childish, less intellectually and emotionally mature than men is a discreet, albeit present trope in the manosphere. For instance, the incels.wiki entry on "Femoid" (i.e., "women") contains a section entitled "Women are literally spoiled children":

"Men are frequently accused of childishness, when in truth it is women who are more childlike. Girls mature faster than boys, but this simply means they arrest in their development prematurely compared to men, not that they reach the same level of maturity earlier. For example, well into their 20s, women look exactly like teenage boys, but with boobs and long hair. Women also cry on average just as much as young teens and they expect things being done for them and their minds

¹²²¹ Heartiste, On Game, 52.

¹²²² As explained further in Chap. VI, A, 297, sex hormones are increasingly infused with political symbolism in contemporary US politics.

¹²²³ Anonymous, "You're Such a Tool! (Briffault's Law)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105100002/http://masculineprinciple.blogspot.com/2015/03/youre-such-tool.html</u>, archived January 5, 2021.

¹²²⁴ Ibid.

¹²²⁵ Ibid.

¹²²⁶ Just above his JSS, the author cites Schopenhauer's claim that women "are childish, foolish, and short-sighted — in a word, are big children all their lives, something intermediate between the child and the man," cited in ibid.

being read, a passivity that has been noted by many throughout history. Women also generally evade any accountability and few people like to hold them accountable either because of how cute they look, resulting in them becoming hopelessly solipsistic, meaning they live in their own world."¹²²⁷

This paragraph contains hyperlinks towards scientific studies about development and occurrence of crying. But it also links towards another incels.wiki page of "Timeless quotes on women"—a carefully curated listed of misogynistic quotes from the Old Testament, Ancients, all the way up to the present day.¹²²⁸ This shows that, while some sex differences presented in the manosphere are grounded in the scientific literature, others are not. Most notable is the age-old notion that women lack capacity for rational thinking, or are just plainly intellectually inferior. To support this claim, current research is rarely mentioned (which would be difficult owing to lack of evidence and support). Yet, on those matters, a host of other sources are routinely mobilized including ancient thinkers, religious texts, medieval poetry, and philosophers. This is especially the case in the MGTOW movement, which features both a deep distrust towards women and a reverence for (male) thinkers and inventors of the past.¹²²⁹ Misogynistic quotes from past luminaries and revered sources are thus given pride of place in MGTOW writing. There are surprisingly confidential texts found in the manosphere, for example this anonymous 18th-century essay entitled *Man Superior to Woman*, whose chapter III is entitled "Whether Women are equal to Men in their intellectual Capacity, or not":

"If the business of the mind were nothing more than to contrive a dress; to invent a new fashion; to set off a bad face; to heighten the charms of a good one; to understand the economy of a tea-table; to manage an intrigue; to conduct a game at quadrille, and to lay out new plans of pleasure, pride and luxury; then women must be owned to have a capacity not only equal but even superior to us. But as the understanding of man has infinitely higher objects to employ its speculations on, objects beyond the very aim of the ablest women; their intellectual faculties are so evidently inferior to his, that I should think it an impertinence in me to take up any time to prove it. Need we look any farther than their soft, simpering, silly faces to fathom the perceptible depth of their understandings?"¹²³⁰

For a community that prides itself on scientific accuracy, the use of such blatantly unscientific sources is certainly discreditable. Most of them offer no evidence, not even anecdotal. Yet, some manosphere writers present those old literary, religious, or philosophical texts as authoritative sources on issues which are fundamentally empirical (4). Some even seamlessly mix scientific writings with them.¹²³¹ The sheer diversity of these sources is remarkable, showing the

¹²²⁷ Incels.wiki, "Femoid," <u>https://web.archive.org/web/20210107152234/https://incels.wiki/w/Femoid</u>, archived January 7, 2021.

¹²²⁸ Incels.wiki, "Timeless quotes on women," <u>https://web.archive.org/web/20240122072205/https://incels.wiki/w/Timeless quotes on women</u>, archived January 22, 2024.

¹²²⁹ See list of MGTOW precursors above in Chap. V, D, 258.

¹²³⁰ This 18th century essay was reproduced on the early MGTOW blog No Ma'am, before being archived by The Red Pill community, <u>https://web.archive.org/web/20220902155931/https://theredarchive.com/blog/NO-MA%27AM/man-superior-to-woman-chapter-three.33931</u>, archived September 2, 2022. According to the manosphere source, this text was published in 1739, while a scholarly source claims it was published in 1744, Jessica Banner, "Dressed in the Trappings of a Sentimental Heroine: Costuming Shakespeare's Juliet on the Eighteenth-Century English Stage," *Theory and Practice in English Studies* 10, no. 1 (2021): 79–100, 81.

¹²³¹ The best example being Anonymous, *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105094916/http://masculineprinciple.blogspot.com/</u>, archived January 5, 2021.

respect of some activists for past (male) writers and their willingness to find intellectual forebears.¹²³² On the topic of sex differences, Arthur Schopenhauer once against stands out as a MGTOW favorite. Interestingly, some of his writings feature a sort of proto-Darwinian reasoning, linking traits to their survival function:

""[...]as nature has equipped the lion with claws and teeth, the elephant with tusks, the wild boar with fangs, the bull with horns and the cuttlefish with ink, so it has equipped woman with the power of dissimulation as her means of attack and defense, and has transformed into this gift all the strength it has bestowed on man in the form of physical strength and the power of reasoning." – Arthur Schopenhauer, *On Women*, 1851."¹²³³

Often, those quotes on sex differences are accompanied with calls for women's subservience, which naturally followed from female inferiority for past misogynistic thinkers:

"The woman follows the man. In her youth she follows her father and elder brother; when married, she follows her husband; when her husband is dead, she follows her son.' – Confucius $(c.551 - c.479 \text{ BCE})^{n1234}$

"In short, the woman makes it a criterion of manliness that the man should be superior to herself mentally, that she should be influenced and dominated by the man; and this in itself is enough to ridicule all ideas of sexual equality' -- Otto Weininger, *Sex and Character,* "Male and Female Characteristics' (1903)."¹²³⁵

"Finally, every player must be willing to apply these words from Nietzsche's Thus Spake Zarathustra: 'Thou goest unto the women? Remember thy whip!' Just make sure it's a strong one. These pretty beasts are intractable."¹²³⁶

"That woman is by nature intended to obey is shown by the fact that every woman who is placed in the unnatural position of absolute independence at once attaches herself to some kind of man, by whom she is controlled and governed; this is because she requires a master. If she, is young, the man is a lover; if she is old, a priest'- Schopenhauer, *On Women* (1851)."¹²³⁷

¹²³² Literary scholar Donna Zuckerberg even devoted a book to the uses of Ancient sources in the manosphere, Zuckerberg, *Not All Dead White Men*.

¹²³³ Cited in "Don't Marry – Why Modern, Western Marriage Has Become A Bad Business Decision For Men," compiled October 2006, <u>https://web.archive.org/web/20210121092815/https://dontmarry.wordpress.com/</u>, archived January 21, 2021.

¹²³⁴ Cited in Anonymous, "The Garden of Eden, Empty Vessels and Relative Truth," *The Masculine Principle*, March 11, 2015,

https://web.archive.org/web/20210105095757/http://masculineprinciple.blogspot.com/2015/03/empty-vessels-and-relative-truth.html, archived January 5, 2021.

¹²³⁵ Cited in Anonymous, "Sex Sells (Hypergamy Explained)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105095445/http://masculineprinciple.blogspot.com/search/label/Chapter%202%2</u> <u>0-%20Sexuality</u>, archived January 5, 2021.

¹²³⁶ Cited in Christopher Contrary, "Women Have No Sense Of Justice," Return of Kings.com, March 22, 2014, <u>https://web.archive.org/web/20170316112943/https://www.returnofkings.com/30485/women-have-no-sense-of-justice</u>, archived March 16, 2017.

¹²³⁷ This is cited three times in Anonymous, *The Masculine Principle*, March 11, 2015, https://web.archive.org/web/20210105094916/http://masculineprinciple.blogspot.com/, archived January 5, 2021.

In chapter IV, I have shown how women tend to be portrayed as more animal-like and driven by instinct and biology. This usually implies a denial of their rationality and intellectual faculties. Women's intellectual inferiority is often discussed in the manosphere, with a combination of anecdotes, evolutionary just-so storytelling, and traditional misogyny. Depending on the point at hand, manospherians can alternately depict women as "naturally" cunning and manipulative, or as congenially stupid. From the false premise that males evolved to serve females and their needs,¹²³⁸ manospherians can make extremely flexible claims. They can call for men to open their eves about females' cunning evolved strategy and refuse to accept it. Here, the evolutionary storytelling provides a powerful rallying meta-narrative, that of swallowing the Red Pill or blackpill. However, this exact same premise can also be used to argue for men's innate superior abilities: "No matter what men set out to do, aside from raising children, women cannot compete with men on a level playing field because we have evolved to best perform our tasks in order to make ourselves useful to women."1239 In the absence of empirical tests and peer contradiction and scrutiny, evolutionary hypothesizing is almost unboundedly flexible. And when evolution is not enough to account for the alleged intellectual inferiority of women, it can conveniently be supplemented by other environmentalist explanations. In an article entitled "Are Men More Intelligent than Women?," MRA blogger Angry Harry thus claims that men's already innately superior intelligence is reinforced throughout their lives:

"Men are, indeed, more intelligent and creative than women, on the whole. They work at it. They strive for it. They value it. They are loved for it. They are wanted for it. And the mental environments in which they choose to spend their time definitely develop their talents even further."¹²⁴⁰

Likewise, in an article on A Voice For Men entitled "Brain in a Vat," writer Stephen Jarosek argues that one needs "to dump the mainstream evolutionary psychology (EP) paradigm."¹²⁴¹ In his view, rather than focusing on genetic differences between men and women, it is more convenient to look at the way intellect is developed and reinforced through life. Through the article, he argues that modern women are so pampered and provided for that they never develop their mental faculties: "there are actually grounds to infer that provided-for women who never have to do anything except shop shop, text text text and dance dance finish up actually losing their intellectual capabilities."¹²⁴² After having established that "organs, such as brains, do atrophy in the absence of stimulation from the environment," he then concludes that "[i]f the modern woman seems kinda dumb, well then maybe that's because she really is." His argument, which he

¹²³⁸ See Chap. V, A, 232 above for critique of the male disposability JSS. As a reminder, most male mammals do not provide any form of care or support for their mates and offspring.

¹²³⁹ Anonymous, "You're Such a Tool! (Briffault's Law)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105100002/http://masculineprinciple.blogspot.com/2015/03/youre-such-tool.html</u>, archived January 5, 2021.

¹²⁴⁰ Angry Harry, "Are Men More Intelligent than Women?," June 5, 2000, <u>https://web.archive.org/web/20201112010854/http://www.angryharry.com/esMenareMoreIntelligentthanWomen.htm</u>, archived November 12, 2020.

¹²⁴¹ Stephen Jarosek, "Lessons from Nature: Brain in a Vat," A Voice For Men, January 27, 2012, <u>https://web.archive.org/web/20230530045838/https://avoiceformen.com/women/lessons-from-nature-brain-in-a-vat/</u>, archived May 30, 2023.

¹²⁴² Ibid.

calls a "systems theory," mostly hinges on the long-discredited Lamarckian view of evolution, where acquired characteristics are transmitted from a generation to the next, a filiation which he acknowledges: "Systems theory resonates with aspects of Lamarckism."

Even though academic research, including evolutionary behavioral sciences, cannot do much to provide evidence for male intellectual superiority, manospherians are particularly invested in this idea. As such, they are wont to invoke all sorts of sources: misogynists of old, anecdotes, evolutionary just-so stories, and even new pseudoscientific theories such as Jarosek's. Each time, they lambast the scientific establishment. While Jarosek develops his own view of evolution in reaction to "the impoverished state of our life sciences,"¹²⁴³ a Return of King article entitled "Why Men Are Intellectually Superior to Women" argues that "academia today is no place for either rational thought or liberal enquiry."¹²⁴⁴ In the article, the author cites deceased antifeminist philosopher David Stove, who wrote an essay on female intellectual inferiority.¹²⁴⁵ Stove argued that any results provided by psychologists on mathematical ability or other such tests could be dismissed, because those researchers are ideologically and professionally motivated to reach findings which support equality. The Red Pill author concurs, and writes that Stove "would have appreciated the manosphere."¹²⁴⁶ To this Red Piller, the evidence for female intellectual inferiority is self-evident: "If you can go through decades of life and continue to stubbornly believe in the intellectual equality of men and women you must have been either paying no attention to the activities of either group or been willfully ignoring them."¹²⁴⁷

While they regularly cite and use science as a source of legitimacy for their ideas, manospherians are also prone to dismissing the entire scientific establishment if it contradicts other views.¹²⁴⁸ Yet, a claim about a sex difference is inherently empirical, and would be hard to adjudicate without the help of scientific and statistical methods. In that regard, their assertions can be considered as false (1), as well as clearly motivated by misogyny (2). Throughout this section, we have explored the canon of manosphere ideology on sex differences. Surprisingly flexible, and sometimes apparently contradictory, it sees women as Machiavellian and manipulative, but also as congenially childish and stupid; as emotional, yet incapable of true love or empathy. Underlying these often-ungrounded empirical claims (1) is a wealth of misogynistic value judgments on women (2), as was made clear in the case of infidelity. Even molecules like sex hormones—which are present in both men and women—become adorned with sexist symbolism. Just-so stories can always make up explanations for female behavior by imagining the selective pressures that weighed on ancestral women. Revealingly, such speculations are sometimes opposed to dominant

¹²⁴³ Ibid.

¹²⁴⁴ Michael Seville, "Why Men Are Intellectually Superior to Women," Return of Kings, February 25, 2014, <u>https://web.archive.org/web/20201109002920/https://www.returnofkings.com/29112/the-intellectual-inferiority-of-</u> women, archived November 9, 2020.

¹²⁴⁵ David Stove, "The Intellectual Capacity of Women," *Proceedings of the Russellian Society* 15 (1990): 1–16. Stove was also a known critic of Darwinism, see footnote n°816, 183.

¹²⁴⁶ Michael Seville, "Why Men Are Intellectually Superior to Women," Return of Kings, February 25, 2014, <u>https://web.archive.org/web/20201109002920/https://www.returnofkings.com/29112/the-intellectual-inferiority-of-women</u>, archived November 9, 2020.

¹²⁴⁷ Ibid.

¹²⁴⁸ This ambivalence towards academia is described in Chap. IV, A, 177.

hypotheses in evolutionary science, and rarely mention what those disciplines say about *male* behavior (3). This might be explained by the fact that evolutionary human sciences do not paint a particularly rosy picture of men either, as explained by gender studies scholar Martha McCaughey:

"It is interesting to note that both HBE [Human Behavior and Evolution] and feminist scholars agree that Western history is one of men aggressively seeking to control women, treating women as property, and defining women in ways that rationalize men's sexual oppression of them. [...] What distinguishes HBE theory from other accounts of sexual politics is its view that men's sexually aggressive and promiscuous behavior is rooted in human evolution."¹²⁴⁹

When making false empirical claims, backed up by homemade theories and just-so stories, or even ancient philosophers (4), manosphere science is no more than ideology painted with scientific veneer. The next section therefore focuses on the most distinctly unscientific elements of manosphere evolutionism.

B. WHEN MANOSPHERE SCIENCE IS NOT SCIENTIFIC

This chapter's analyses have revealed a wealth of differences between manosphere science and its academic counterpart: exaggerations of statistical difference, presence of value judgments, omissions, cherry-picking, etc. This section now turns to the domains in which manosphere science appears to be epistemologically distinct from academic science, owing to its different concepts and theories, or to its normative underpinning.

B.1. The Pseudoscientific Elements of Manosphere Science

1.a. Hypergamy: The Crown Jewel of Manosphere Ideology

Academic Definitions

No concept is more central to both the Red Pill and blackpill than hypergamy. Before looking at the place this concept holds in the manosphere, academic relevance will be examined. The first thing to note is that it is not a particularly central concept in evolutionary life sciences, with no mention of the term in our undergraduate life sciences textbook corpus.¹²⁵⁰ When I interviewed evolutionary psychologist Glenn Geher and asked him about the term, his answer was striking: "so I'll be totally honest, I've not heard that phrase 'hypergamy."¹²⁵¹ Although an EP professor can have spent their entire career without hearing the term, it is present in Springer's *Encyclopedia of Evolutionary Psychological Science*. There, it is used as a synonym for the "Women Marry Up" entry:

"There is a large body of evidence that women tend to marry up (hypergamously) in terms of status to a far greater extent than is the case with men. This tendency for women to be more interested in

¹²⁴⁹ Martha McCaughey, *The Caveman Mystique: Pop-Darwinism and the Debates Over Sex, Violence, and Science* (New York: Routledge, 2008).

¹²⁵⁰ For composition of the corpus, see Chap. III, C, 160.

¹²⁵¹ Glenn Geher, June 2023, interview with the author. For more details on the interview, see Chap. III, C, 161.

the status, or the potential to gain status, of a potential partner has been shown to exist across cultures." 1252

Hypergamy is defined as the fact of marrying socially and economically upwards. A similar definition can be found in sociology: "hypergamy: marriage to a person of higher social status than oneself. In practice most marriages occur between people of broadly similar social status."¹²⁵³ There, it is a purely descriptive label to conveniently refer to marriage patterns, but it does not hold a theoretically important place. In cultural anthropology too, a similar, albeit narrower definition can be found:

"**[H]ypergamy** is the practice of women being married 'up' in social status. In systems of marriage exchange, the practice designates wife-givers as lower in status than wife-takers. This can be as specific as the giving of women in tribute to political superiors or as vague as the general sense that it is more accept able for women than men to marry above their station."¹²⁵⁴

There, "hypergamy" does not refer to a human universal or sex difference, but simply to a feature of some social systems in which marriage follows hierarchical patterns. It has therefore traditionally been particularly applied to societies with caste systems, like India.¹²⁵⁵ There appears to be a rift between the definitions of hypergamy in the non-evolutionary social sciences and in evolutionary psychology. For evolutionary psychologists, female hypergamy is not only a matter of social structure and marriage patterns, but also of female preferences. Indeed, the encyclopedia of EP entry authoritatively claims that "[f]emale hypergamy can seemingly be found in all human societies and is underpinned by differential evolutionary pressures on females," and that females "have been selected, to a greater extent than males, to be more interested in the status of their potential partner."¹²⁵⁶ This sex difference is one of the main findings of evolutionary psychology, which is supported by broad cross-cultural evidence.¹²⁵⁷ Evolutionary scholars believe this is an evolved mate preference, as it is congruent with the greater parental investment in female mammals. Given the large costs of reproduction for a woman, it would have paid off over evolutionary history for women to select higher-status and higher-resources partners as mates. And indeed, in species with dominance hierarchies, status in the hierarchy is associated with higher reproduction.¹²⁵⁸ A common feminist rebuttal to this hypothesis is that women might just be looking for status and resources in a husband because they tend to be deprived of these things in patriarchal societies. To counter that rebuttal, evolutionary psychologists have been empirically assessing the presence of female hypergamy in non-industrialized egalitarian hunter-gatherer societies, or on the contrary, in the extremely gender egalitarian Scandinavian countries, allowing

¹²⁵² Edward Dutton, "Women Marry Up," in *Encyclopedia of Evolutionary Psychological Science*, ed. Todd Shackelford and Viviana Weekes-Shackelford (Cham: Springer International Publishing, 2018), 1–3, <u>https://doi.org/10.1007/978-3-319-16999-6_249-1</u>, 1.

¹²⁵³ Tony Lawson and Joan Garrod, *Dictionary of Sociology* (London and Chicago: Fitzroy Dearborn, 2001), 114.

¹²⁵⁴ Thomas Barfield, ed., *The Dictionary of Anthropology* (Oxford: Blackwell, 1997), 254-255.

¹²⁵⁵ E.g., Kingsley Davis, "Intermarriage in Caste Societies," *American Anthropologist* 43, no. 3 (1941): 376–95. ¹²⁵⁶ Dutton, "Women Marry Up," 3.

¹²⁵⁷ For a review of the cross-cultural evidence, see Buss, *Evolutionary Psychology*, e-textbook version, 225-227.

¹²⁵⁸ In a meta-analysis of the fitness benefits of dominance in 25 primate species, it was indeed found that dominant males had higher fecundity and mating success than subordinate males, Bonaventura Majolo et al., "Fitness-Related Benefits of Dominance in Primates," *American Journal of Physical Anthropology* 147, no. 4 (2012): 652–60, https://doi.org/10.1002/ajpa.22031.

them to conclude: "Evidence that this phenomenon is indeed a matter of evolution can be found in its prevalence even in modern, sexually egalitarian societies."¹²⁵⁹ Unsurprisingly, it is this female-specific and evolutionary oriented definition of hypergamy which prevails in the manosphere.

Manosphere Definitions

In the Red Pill sidebar, one finds a definition of hypergamy which is perfectly aligned with academic definitions: "Hypergamy: Commonly referred to as "marrying/dating up". In a dating sense this translates to being attracted to men of high(er) status than that the women hold themselves" (TRP, 2014). Another definition found in a MGTOW glossary emphasizes the innate aspect of this hypergamy: "Hypergamy. Every woman's innate urge (and willingness) to sleep with a male of higher status than the one she's currently settling for - virtually guaranteeing that her boyfriend or husband is never her first choice."1260 There are notable differences between this definition and academic EP definitions. Firstly, MGTOW turn a statistical sex difference into a biological truth about "every woman," a pattern which has been running through our analyses. Secondly, in typical manosphere fashion, this is presented as an irresistible "urge." But the signature manosphere distortion of the hypergamy concept is all the abusive corollaries that are added to it. Indeed, the fact that women tend to marry or date "up" in terms of status or riches does not imply that, once they are in a relationship, they would constantly be on the lookout for even higher-status or higher-resources partner. Yet virtually all manosphere interpretations of hypergamy take this for granted. In fact, hypergamy is seen as responsible for a wide range of phenomena, from female infidelity to marriage dissatisfaction and higher rates of divorce initiated by women. As acknowledged by the incels.wiki definition, the term has many meanings in the manosphere:

"In the manosphere, the term hypergamy is used more broadly for marrying or dating up and it sometimes refers to dating up relative to a woman's previous partner or relative to other males available, not just herself or the social standing of her family, and it sometimes simply refers to female mate preferences for socioeconomic status or for the activity of whoring for resources and related female sneakiness."¹²⁶¹

Beyond incels.wiki's familiar attempt at scientific "objectivity," familiar misogynistic value judgements on female behavior resurface at the end of the definition ("whoring for resources"). Paul Elam, one of the leading contemporary MRAs extends his definition of hypergamy to all sorts of behavior, even sexual, in his usual vitriolic style:

"Hypergamy is the innate tendency in women to reduce men to mere utilitarian value, to extract as much value from men as possible and to continue to do so until the man's energy and resources are exhausted. In short, hypergamy is the universal drive in women to turn men into appliances, and

¹²⁵⁹ Dutton, "Women Marry Up," 3.

¹²⁶⁰Mgtow.com,"GlossaryofTerms,"https://web.archive.org/web/20210104143807/https://www.mgtow.com/glossary/, archived January 4, 2021.1261Incels.wiki, "Hypergamy," https://web.archive.org/web/20210107145101/https://web.archive.org/web/20210107145101/https://incels.wiki/w/Hypergamy, archived January 7, 2021.

whether that appliance is a dildo or an ATM or both, makes little difference. At this point, some female readers (and some men) will be screaming that not all women are like that. Sorry, but one way or another ALL heterosexual women practice hypergamy, and my money is on the idea that most lesbians do as well. It's biological programming, not a conscious choice."¹²⁶²

Although manosphere definitions sometimes somewhat coincide with academic definitions, there is a substantive difference. For academics, hypergamy is a descriptive label to refer to a specific phenomenon. In the manosphere, hypergamy is the name for a "universal drive." Not only is this tendency exaggerated, but it is given its own existence, as something irrefutable, tangible, as a "constant subroutine running in [a woman's] hindbrain."1263 In The Rational Male, Rollo Tomassi addresses a criticism from one his blog's readers who wanted to stick with the academic definition and argued that "[h]ypergamy states that a woman seeks a man of higher status than herself for marriage. Nothing less, nothing more."1264 With the usual ambivalence towards academia documented earlier. Tomassi answers that he "won't argue with the credentials of the researchers," but nonetheless accuses them of being biased by "the feminine imperative."¹²⁶⁵ In a society where feminism is seen as hegemonic, Tomassi believes that researchers contribute to "keeping the definition of Hypergamy in as closed a way as possible to benefit the feminine." He then presents the manosphere as a group of men who rationally connect the dots and extend the concept of hypergamy to more domains: "God forbid men (PhDs or otherwise) should have the temerity to extrapolate any further social, psychological or evolutionary implications that could've influenced that Hypergamy dynamic into existence."¹²⁶⁶ This is a rare instance of a manospherian acknowledging that the academic concept is extrapolated and extended by manospherians. Tomassi is unapologetic about this, claiming that "Hypergamy is a term that should have a much broader definition," owing to the wealth of "eminently observable feminine behaviors that manifest as result of Hypergamy's influence."¹²⁶⁷ He approvingly cites another reader, whose definition of hypergamy encompasses women's short-term and long-term mating preferences for men who are "rich, good looking, fit, well dressed, high social cache, high prestige job (preferably one which involves risk, physical risk being better than mere monetary risk)," as well as "extroverted, dominant, the leader of his group of friends, able to command any social situation, and so on."¹²⁶⁸

In short, for Red Pillers, hypergamy is the innate, irresistible, and constant drive for women to pair up with an alpha male (incels have the same view except they call these men "Chads"). For MRAs and MGTOW, the focus is more on the exploitative nature of hypergamy, which is seen as a ruthless "utilitarian" drive to exploit men and their resources. This showcases the flexibility of this notion, which is axiomatic in manosphere science all the while being so blurry as to potentially explain all phenomena.

¹²⁶² Elam, Men. Women. Relationships, 82.

¹²⁶³ Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 56.

¹²⁶⁴ Ibid., 197.

¹²⁶⁵ Ibid., 198.

¹²⁶⁶ Ibid.

¹²⁶⁷ Ibid.

¹²⁶⁸ Ibid., 197.

Hypergamy as Manosphere Science's Middle-Level Theory

In his evolutionary psychology textbook, David Buss gives an epistemological representation of the discipline. On top sits the uncontested Darwinian principle of evolution by natural selection. Below are "middle-level theories" derived from the principle of evolution, but amenable to change or refutation, as Buss writes: "These middle-level theories are still fairly broad, covering entire domains of functioning. They are also fair game for scientific testing and possibly being proven false."¹²⁶⁹ Robert Trivers's parental investment theory is one such middle-level theory for example. From these middle-level theories, Buss explains, evolutionary scholars derive hypotheses. The predictions from those hypotheses are then empirically tested, leading to rejection or support for the hypothesis. Below is a graphic representation of this process:

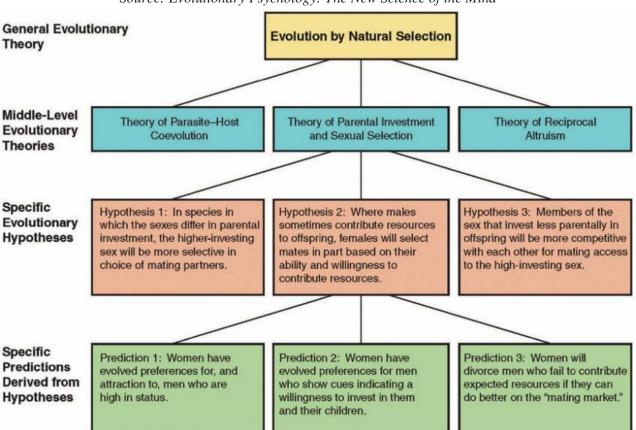


Figure 6.3: Levels of Evolutionary Analysis Source: Evolutionary Psychology: The New Science of the Mind¹²⁷⁰

[Caption] "The figure shows one version of the hierarchy of levels of analysis in evolutionary psychology. General evolutionary theory occupies the highest level in the hierarchy. Each middle-level theory must be consistent with general evolutionary theory but cannot be derived from it. Specific evolutionary hypotheses about evolved psychological mechanisms or behavior patterns are derived from each middle-level theory. Each specific evolutionary hypothesis can generate a variety of specific testable predictions. Support for each hypothesis and theory is evaluated by the cumulative weight of empirical evidence."

¹²⁶⁹ Buss, *Evolutionary Psychology*, e-textbook version, 93.

¹²⁷⁰ Ibid.

I contend that hypergamy is the central middle-level theory of manosphere science. Indeed, with this blurry and elastic concept, manospherians are able to "explain" a wide range of phenomena. However, since they do not conduct any empirical test, it is never really open to refutation. While the middle-level theories of evolutionary psychology are a crucial part of the hypothetico-deductive process guiding scientific inquiry, hypergamy in the manosphere has become an irrefutable axiom of evolutionary theory, which can explain anything through just-so storytelling.

I will now illustrate the boundless flexibility of hypergamy as a spurious middle-level theory. For instance, it is often the underlying principle behind the alleged sex differences examined in this chapter. The manosphere's vision of hypergamy can perfectly explain why a woman would cheat on her partner: isn't she hardwired to be looking for alternatives, for a higher status partner at all times? As for her supposed inability to love as deeply as a man can, this is allegedly also the product of hypergamy. As Tomassi writes, "It is men who are the real romantics, not women, but it is the grand design of hypergamy that men believe it is women who are the romantic ones."¹²⁷¹ According to him, this conceals the fact that "[h]ypergamy, by its nature, defines love for women in opportunistic terms." From an empirical perspective, these claims are extremely vague. Hypergamy becomes personified and the actual processes are unclear. If hypergamy is just a "psychological subroutine" playing in women's mind, how exactly does it accomplish this "grand design" of manipulating men?

As for the (false) female empathy deficit, this is seen as a consequence of hypergamy too— "Hypergamy is selfish by nature, and it shows no mercy" (TRP, 2015). This is why Red Pill writers tell their readers to never reveal any weakness to their female partners. Although men would love showing vulnerability to their loved ones, they write, women could never show empathy for a man, and their incontrollable hypergamy would just lead them to abandon a man who has just confessed weakness.¹²⁷² Hypergamy is so central to the manosphere's vision of female nature that it is often synonymous with it. And as explored throughout chapters V and VI, this vision is as unflattering as it can get: at times manipulative and ruthless, at times childish and overemotional, at times fickle and solipsistic. Hypergamy is even used by the author of *The Masculine Principle* to explain male domination in society. After tersely explaining that "Hypergamy is basically a desire for dominance from one's mate,"¹²⁷³ shifting away from the usual focus on status and/or resources, he thus concludes that women are responsible for patriarchal domination:

"No, men did not 'force' women into submission – women *naturally* desire men who are better than them. They want men who are taller than them, who are smarter than them, who are richer than

¹²⁷¹ Rollo Tomassi, "Women in Love," r/TheRedPill sidebar, December 27, 2011, accessible at <u>https://archive.vn/A1y2j</u>, archived March 30, 2020.

 $^{^{1272}}$ For example, Rollo Tomassi's Iron Rule n°9 tells men to never self-deprecate in front of their female romantic partners, as any admission of weakness would be a major turnoff to their hypergamous instincts, Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 232-234.

¹²⁷³ Anonymous, "Sex Sells (Hypergamy Explained)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105095445/http://masculineprinciple.blogspot.com/search/label/Chapter%202%2</u> <u>0-%20Sexuality</u>, archived January 5, 2021.

them. Women sexually desire men who are more powerful than them – and this power naturally exudes from a man who possesses it in the form of *confidence*. Yes, hypergamy."¹²⁷⁴

Through an elastic and all-encompassing middle-level theory, manospherians can therefore use hypergamy to account for just about any phenomenon. For example, the fact that women initiate divorce more than men is often taken in the manosphere as a proof of rampant female hypergamy. This nicely confirms the idea that women's love is shallow, materialistic, and that they are always looking to abandon their mate. However, manospherians never consider alternate explanations. Yet, there is a wide literature on the potential explanations for this gap in divorce initiating.¹²⁷⁵ As a researcher who follows the hypothetico-deductive method, sociologist Michael Rosenfeld thus explored competing hypotheses to determine which one fit the data best: do women divorce more because heterosexual marriage is inherently sexist and unsatisfactory for them? Or is it because they are more sensitive to relationship issues? Or because of power differentials within couples? To him, the fact that a majority of divorces—but not of ordinary nonmarital breakups—are initiated by women (69% in his longitudinal study of 2,538 US individuals in heterosexual marriage as oppressive or uncomfortable."¹²⁷⁶ By contrast, one of the major issues with the manosphere's obsessive focus on hypergamy is the refusal to consider alternate explanations.

This tendency is best illustrated by an example from incels.wiki. After scrutinizing the US Center for Disease Control and Prevention's 2011 National Intimate Partner and Sexual Violence Survey, the wiki's authors noticed a puzzling fact. In the survey, women and men reported similar rates of sexual victimization: over the past 12 months, 1.6% of women reported that they had been raped, while 1.7% of men reported that they had been made to penetrate.¹²⁷⁷ Yet, the self-reported lifetime prevalence rates were widely dissimilar, with 19.3% of women saying they had experienced rape in their lifetime, while only 6.7% of men reported being made to penetrate in their lifetime. This is indeed noteworthy: how could the rates be similar in the past twelve months, but so different over the lifetime? One could propose several hypotheses to account for that fact: (A) maybe the subset of men who reported being made to penetrate over the past twelve months were repeatedly victimized over their lifetime; (B) maybe men who are made forced to penetrate tend to die prematurely; (C) maybe 2011 has seen a surge in rates of men's sexual victimization; (D) maybe men tend to rapidly erase acts of sexual coercion from the recollection of their sexual

¹²⁷⁴ Ibid.

¹²⁷⁵ This is reviewed in Michael Rosenfeld, "Who Wants the Breakup? Gender and Breakup in Heterosexual Couples," in *Social Networks and the Life Course: Integrating the Development of Human Lives and Social Relational Networks*, ed. Duane Alwin, Diane Felmlee, and Derek Kreager (Cham: Springer, 2018), 221–43.

¹²⁷⁶ Anonymous, "Women More Likely Than Men to Initiate Divorces, But Not Non-Marital Breakups," American Sociological Association, August 22, 2015,

https://web.archive.org/web/20240117230246/https://www.asanet.org/women-more-likely-men-initiate-divorcesnot-non-marital-breakups/, archived January 17, 2024.

¹²⁷⁷ Matthew Breiding et al., "Prevalence and Characteristics of Sexual Violence, Stalking, and Intimate Partner Violence Victimization — National Intimate Partner and Sexual Violence Survey, United States, 2011," *Morbidity and Mortality Weekly Report Surveillance Summaries* 63, no. 8 (2014): 1–18. The CDC distinguishes between rape, which entails nonconsensual penetration of the victim, and being made to penetrate, where the victim is forced to penetrate the perpetrator.

history, (E) maybe contemporary men are more comfortable reporting acts of sexual coercion than before, etc. None of these hypotheses are mutually exclusive. To investigate this puzzling piece of data, predictions would have to be derived from the hypotheses and then empirically assessed. However, incels.wiki confidently declares that (A) is the "only possible" explanation, and in a surprisingly twisted argument, depicts this as a confirmation of female hypergamy:

"Interestingly, although the annual incidence of rape for women and being forced to penetrate for men are similar, a much smaller percent of men than women reported either type of victimization over a lifespan. Mathematically this is only possible if a small group of men are being victimized repeatedly, and thus perhaps this provides evidence for hypergamy even in women's choices of which men they sexually victimize."¹²⁷⁸

Incels are so invested in the idea that women are naturally drawn towards a subset of attractive men (Chads) that they manage to see evidence for this anywhere. Here, they claim that the men who are repeatedly victimized are those Chads who are the prime targets of female hypergamy. Yet, when looking more closely at the CDC data, it appears that in more than half the cases of being made forced to penetrate (54.5%), the perpetrator was a current or former intimate partner. This does not necessarily rule out the wiki's bizarre "explanation," but it makes it much less probable. Although I described female hypergamy as a central middle-level theory of manosphere science, these examples show that manosphere science is epistemologically remote from actual science. Instead of confronting competing hypotheses through empirical tests of their predictions, manospherians consistently look for confirmation of their preexisting belief and theories. They never try to falsify their hypotheses, and thus fall short of the standard Popperian criterion for science. As such, although hypergamy is a relatively common term in academic writing, including in the evolutionary behavioral sciences, I contend that the manosphere's use of the concept is distinctly pseudoscientific. Not only is this dynamic flexibly "extrapolated" to designate just about anything one dislikes about women, but it is also given supreme importance, overriding all other competing forms of explanation. In a way, the manosphere's multi-faceted use of hypergamy as its middle-level theory relies on a massive collective confirmation bias.

As the manosphere's central middle-level evolutionary theory, hypergamy allows to explain any observation, sometimes in contorted ways. But in doing so, manospherians never consider alternative hypotheses, and selectively focus on what they consider as evidence, sometimes scientific, and sometimes anecdotal and spurious, which confirms their view of female nature. Reflecting on customization of science, feminist philosopher Lynn Hankinson Nelson argues that there is no such thing as an objective and non-customized science. Indeed, she points out that research findings "always reflects, to varying degrees and in various ways, the historical and cultural views and values of the science communities and of the larger communities within

¹²⁷⁸Incels.wiki,"TheScientificBlackpill,"https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific Blackpill,archivedDecember25,2023.

which that science is embedded."¹²⁷⁹ However, she does not see this as a problem. In fact, she claims that having an explicitly customized scientific research program, as is the case with feminist scholarship, is perfectly scientifically tenable, as long as it remains "evidentially normal," that is, as long as "evidence is given its due":

"What is it 'to give evidence its due'? It includes all the obvious elements we take to constitute good research/science: formulating research questions and hypotheses clearly, carefully collecting and analyzing relevant data, and carefully weighing what the data indicate about the research question or hypothesis framed in response to it. It also includes not ignoring alternative hypotheses that are equally viable in terms of their commensurability with available evidence and/or with what is to be explained, and are eminently available for consideration. After all, the evidential warrant for a hypothesis includes not just its apparently confirming evidence, but also the absence of alternative and equally viable hypotheses. Giving evidence its due also requires not ignoring evidence that conflicts with one's present hypothesis (or its rationale), though one suspects such cases are relatively uncommon."¹²⁸⁰

As was demonstrated, manosphere science cannot qualify as evidentially normal. With the meaning of hypergamy "extrapolated" to mean just about anything, one could hardly argue that the manosphere's hypotheses are "formulated clearly." On the contrary, they are often asserted with such confidence that their hypothetical nature is completely obfuscated. Maybe even more damning is their ignoring of alternative hypotheses, which is to Nelson one of the prerequisites for having a rigorous, albeit customized, science. The rest of this section showcases the other pseudoscientific elements of manosphere science.

1.b. Briffault's Law: An Outdated and Erroneous Theory

Briffault's law is the most striking example of how manosphere science combines mainstream evolutionary scientific knowledge with outdated and/or spurious elements. This natural law was coined by French surgeon, novelist, and amateur anthropologist Robert Briffault (1876-1948) in his 1926 book *The Mothers: A Study of the Origins of Sentiments and Emotions*.¹²⁸¹ In this anthropological treatise, where matriarchy is seen as the original state of humanity, Briffault laid out the following principle: "The female, not the male, determines all the conditions of the animal family. Where the female can derive no benefit from association with the male, no such association takes place."¹²⁸²

To my knowledge, this "law" was never seriously taken by the scientific establishment. It is never mentioned in the animal behavior literature and would be scoffed at by any evolutionary

¹²⁷⁹ Lynn Hankinson Nelson, "Feminism and Science," in *The Customization of Science: The Impact of Religious and Political Worldviews on Contemporary Science*, ed. Steve Fuller, Mikael Stenmark, and Ulf Zackariasson (New York and Basingstoke: Palgrave Macmillan, 2014), 37–54, 37.

¹²⁸⁰ Ibid., 41.

¹²⁸¹ Robert Briffault, *The Mothers: A Study of the Origins of Sentiments and Emotions* (London: Allen and Unwin, 1926).

¹²⁸² Robert Briffault, *The Mothers: The Matriarchal Theory of Social Origins* (New York: The Macmillan Company, 1931), 21-22. The version I am citing is an abridged US reprint from the original British version, which was published in three massive volumes.

biologist. Indeed, life is so varied and complex that it tends to defy general "laws" such as this one. More importantly, it just does not make sense from a Darwinian perspective. When males and females have diverging fitness interests, Darwinian theory does not make any prediction as to whether female or male interests triumph. In fact, sexual reproduction in animal species is the result of a long co-evolutionary process between males and females.¹²⁸³ Just a few examples are enough to refute Briffault's law. For example, in *Panorpa* scorpion flies, a male usually presents a nuptial gift of saliva and dead insects to a female, which she will feed on during copulation to ensure the growth of eggs. However, in some cases, males resort to forced copulation, grasping females with a specialized organ (the notal organ) and impregnating them without offering a gift.¹²⁸⁴ This is a case where fitness interests of males and females diverge, and the former are sometimes able to get away with imposing their own reproductive strategy at the expanse of the latter: "The female loses because she obtains no food for her eggs and has to search for food herself, while the male benefits because he avoids the risky business of finding a nuptial gift."¹²⁸⁵ If females could decide on the occurrence of all "associations," as Briffault contended, surely they would avoid these.

Closer to humans, primatologist Sarah Hrdy describes a species of primates where females are "the most wretched and least independent of any nonhuman primates": hamadryas baboons.¹²⁸⁶ In this species, which dwells on the arid plateaus of Ethiopia, Sudan, Somalia or Saudi Arabia, males "kidnap" or lure away females from a juvenile age, before tyrannically leading them for their entire lives:

"From the first day, the immature female is conditioned by her captor to unfaltering obedience. Wherever her male leads, she follows. If she hesitates, she is stared at (a threat), chased, and herded. If she balks, she is bitten on the scruff of her neck. A female who strays even a few meters for an unscheduled drink of water is chased and bitten-occasionally with such force that she is lifted right off the ground."¹²⁸⁷

This example would contradict manospherians inspired by Briffault's law when they insist that "[e]verywhere in nature, the male is the reproductive servant of the female" (MGTOW, 2002). In that case, natural selection seemingly operated on female hamadryas to make them more subordinate "sexual servants": "After a period of conditioning, the chastised female quickly learns to follow. Her compliance toward males is virtually unique among monkeys and essential to the working of the system."¹²⁸⁸ Superficially, when applying human values, it seems that this is truly oppressive. From a Darwinian point of view however, Sarah Hrdy argues that females make do with what they can. Male hamadryas are twice the size of females, and female hamadryas do not appear to form bonds and coalitions against their tyrannical patriarchs, as happens in other baboon species. The specific ecological conditions and evolutionary history of the species might very well mean that females are stuck in a "niche," in which evolving to be subordinate was the best

¹²⁸³ Göran Arnqvist and Locke Rowe, Sexual Conflict (Princeton, Oxford: Princeton University Press, 2005).

¹²⁸⁴ Davies, Krebs, and West, An Introduction to Behavioural Ecology, 209-210.

¹²⁸⁵ Ibid.

¹²⁸⁶ Sarah Hrdy, *The Woman That Never Evolved* (Cambridge, London: Harvard University Press, 1981), 101. ¹²⁸⁷ Ibid., 102-103.

¹²⁸⁸ In fact, when trying to kidnap females from the savanna baboon species, male hamadryas are surprised and frustrated to learn that those more independent females just run away. Ibid., 103.

reproductive strategy. Sexual reproduction is always the product of a co-evolutionary process between the sexes, sometimes resulting in mating systems which seem to favor the males, as in the case of hamadryas, and sometimes the females, as in the famous case of the praying mantis where females attempt to devour courting males.¹²⁸⁹ In no way does evolutionary theory, nor the empirical record, support Briffault's simplistic law.

It remains unclear how this obscure and specious "law" reached the manosphere, as remarked by Red Pill godfather Rollo Tomassi: "Briffault's Law has found an unlikely popularity in the 21st century manosphere."¹²⁹⁰ One of its popularizers is undoubtedly the anonymous MGTOW author of *The Masculine Principle*, who abundantly refers to Briffault's law, which he expands by adding three corollaries to it:

"1 - Past benefit provided by the male does not provide for continued or future association.

2 - Any agreement where the male provides a current benefit in return for a promise of future association is null and void as soon as the male has provided the benefit (see corollary 1)

3 - A promise of future benefit has limited influence on current/future association, with the influence inversely proportionate to the length of time until the benefit will be given and directly proportionate to the degree to which the female trusts the male (which is not bloody likely)."¹²⁹¹

The law, along with its corollaries, gets routinely invoked in the manosphere. While it is blatantly false, it is easy to see how it perfectly espouses manosphere notions of male disposability and hypergamy, as well as their individual and political standpoints. To MRAs fighting against what they see as a female-biased family court system, the law's insistence on females' innate domination in the "animal family" is a convincing explanation. MGTOW who were divorced by their wives acknowledge the bitter truth behind the idea that "no association takes place" when females stop deriving benefits from a relationship. In fact, a MGTOW forum member made it the signature under his profile picture: "Where women derive no benefit from association with a male, no association happens. Fine by me!" Likewise, for incels who insist on the supremacy of females in sexual selection, Briffault's law enjoys a similar popularity. In The Red Pill community, Briffault's law is enshrined among the ideological canon of the subreddit's sidebar, i.e., the "Theory Reading" that any newcomer to the community must accomplish. Although this law is as unscientific as it gets, this is never questioned by manospherians, who cite it as an authoritative law of nature without further explanation, as in this argument from Tomassi: "You will never find a lasting contentment with a woman because she holds first right of refusal in any intimate relationship (i.e., Briffault's Law)."1292 In a r/TheRedPill post, where a moderator simply posted the law and its corollaries as a "refresher," none of the dozens of comments questioned its

¹²⁸⁹ Tim Birkhead et al., "Sexual Cannibalism in the Praying Mantis *Hierodula Membranacea*," *Behaviour* 1/2 (1988): 112-118.

¹²⁹⁰ Rollo Tomassi, *The Rational Male: Preventive Medicine* (Reno: Counterflow Media LLC, 2015), e-book version, 100.

¹²⁹¹ Anonymous, "You're Such a Tool! (Briffault's Law)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105100002/http://masculineprinciple.blogspot.com/2015/03/youre-such-tool.html</u>, archived January 5, 2021.

¹²⁹² Rollo Tomassi, "She's Not Yours," The Rational Male, October 15, 2020, <u>https://web.archive.org/web/20210105111800/https://therationalmale.com/2020/10/15/shes-not-yours/</u>, archived January 5, 2021.

provenance and veracity. Its status as an absolute truth is best encapsulated by this MGTOW poster on Reddit: "Briffault's law is always true, no matter what place, what culture, what country or what women it is being applied to" (MGTOW, 2019).

The case of Briffault's law perfectly illustrates how manospherians, who can be so critical about research they disagree with, become extremely uncritical and gullible when confronted with knowledge confirming their worldview. Here, this is a law coming from a forgotten amateur anthropologist with a matriarchal view of nature. This might be the last thing that people would expect the manosphere to be enthused about, especially given the wealth of outdated patriarchal anthropology or biology they could have chosen to cite. But as I have exposed throughout this dissertation, the manosphere is fond of biological theories in which males are powerless and females dominant—sometimes making them paradoxically aligned with Darwinian feminists.¹²⁹³ This echoes their contemporary assessment of a male malaise or crisis in Western society. Thus, Briffault's law, like hypergamy and male disposability, is usually a convenient rallying cry, a biological meta-narrative which allows to call for men's rebellion against a female-biased "natural order." As in this example from *The Masculine Principle*, this matriarchal pseudo-law of nature is paradoxically cited to justify and encourage male control in heterosexual relationships:

"Briffault's law is the reason the most important word a man must learn in his relationships with a woman is 'No!' If a man keeps nothing for himself and simply gives it all to her, she has no reason to continue to associate with him. No matter what he does, it soon will become 'What have you done for me lately?' He *must* keep the benefits he bestows upon her under his control, and learn to say no often, as she will naturally try to get him to pass them on to her. No, I won't spend \$100 for roses on Valentine's Day. No, we're not going to Hawaii for a vacation (unless you are paying, Toots!) No, you cannot move in with me. No, you cannot move in now that you've been evicted – that is what your girlfriend's couch or your parent's spare room is for. NO! We won't get be getting married. No! You are not going on the pill so we can have bareback sex. No! No! No! No! No! NO! "¹²⁹⁴

Although Briffault's Law might be the most widely circulating spurious biological claim in the manosphere, there are other examples. My research mostly focuses on manosphere (mis)uses of the paradigmatic Darwinian evolutionary theory. However, a thorough examination of the place of science in the manosphere would not be complete without mentioning the occurrences of other fringe pseudoscientific beliefs.

1.c. Pseudoscience in the Manosphere

Manospherians had very high scores on the undergraduate level life science quiz and tend to have high levels of scientific education (59% of manosphere survey respondents had college

¹²⁹³ We have for example seen the similarities between incels' take on sexual selection and 19th-century Darwinian feminists, in Chap. V, C, 251, or the Red Pill's fascination for female mating strategy research which originated in a feminist impetus to correct historical male bias in science, Chap. VI, A, 286.

¹²⁹⁴ Anonymous, "You're Such a Tool! (Briffault's Law)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105100002/http://masculineprinciple.blogspot.com/2015/03/youre-such-tool.html</u>, archived January 5, 2021.

degrees, 22% of which were postgraduate degrees).¹²⁹⁵ They are also very unsympathetic to antiscience movements such as religious creationism. However, manosphere science is also the reflection of the broader popular and Internet cultures in which it is embedded. With the enduring success of empirically specious knowledge such as astrology, it is not altogether surprising to find some scientifically discredited concepts in the manosphere, such as "reptilian brain,"¹²⁹⁶ or popular distortions of academic concepts as in the case of "alpha male."¹²⁹⁷ As such, although they are not central to manosphere science, this section reviews similar examples.

Neuro-Linguistic Programming (NLP)

At the origin of the modern Pickup-Artist community was a dating coach called Ross Jeffries. And at the start of his vocation was Neuro-Linguistic Programming (NLP), which was developed in the 1970s by a linguist, John Grinder, and a computer scientist and mathematician named Richard Bandler.¹²⁹⁸ They contended that their approach would be a therapeutic miracle, as they thought they had identified deep truths about the way people behave. According to NLP, people have a sensorial "preferred representational system" and store subjective sensorial representations of the world in their mind. Proponents of NLP claimed that behavior could thus be understood and also manipulated by understanding and triggering these sense-based internal representations of the world.

As a voguish sort of crossover between hypnosis and psychology in the 1980s-1990s, NLP piqued the interest of the young Ross Jeffries, who was "drift[ing] between paralegal jobs, lonely and girlfriendless,"¹²⁹⁹ according to *New York Times* journalist-turned-PUA Neil Strauss:

"That all changed when he was in the self-help section of a bookstore and his hand, he claims, involuntarily reached out and grabbed a book. That tome was Frogs Into Princes, the classic book on NLP by John Grinder and Richard Bandler. Ross went on to devour every book on the subject he could find.

One of his heroes had always been the Green Lantern, who was endowed with a magic ring able to bring the desires of his will and imagination to life. After using NLP to end a long streak of involuntary chastity by seducing a woman who'd applied for a job in the law office where he worked, Ross Jeffries believed he had found that ring. The power and control that had eluded him his whole life was finally his."¹³⁰⁰

NLP techniques became central to the early teachings of Jeffries, which proved massively influential in developing the PUA community in the 1990s, much more central in fact at the time than evolutionary-based theories. Yet, since its inception, NLP and its principles have never been empirically supported, as evidenced by the critical investigations and meta-analyses by specialists

¹²⁹⁵ See table 4.1 above, 167.

¹²⁹⁶ See above, Chap. IV, B, 193.

¹²⁹⁷ See above Chap. V, E, 260.

¹²⁹⁸ John Grinder and Richard Bandler, *The Structure of Magic I: A Book About Language and Therapy* (Palo Alto: Science and Behavior Books, 1975); John Grinder and Richard Bandler, *The Structure of Magic II: A Book About Communication and Change* (Palo Alto: Science and Behavior Books, 1976).

¹²⁹⁹ Neil Strauss, *The Game: Penetrating the Secret Society of Pickup Artists* (New York: Regan Books, 2005), 124. ¹³⁰⁰ Ibid.

in the relevant fields of neurology, psychology, or cognitive sciences.¹³⁰¹ In spite of this, NLP become a psychological fad, influencing various self-help teachers and psychotherapists. Today, the scientific consensus is that NLP is pseudoscientific, empirically false, with dynamics closer to that of a religion or cult than to a legitimate scientific field or theory.¹³⁰²

Nonetheless, NLP remains a discreet presence in more recent PUA writings. Dating coaches from the 2000s and 2010s sometimes nodded to their readers' being versed in NLP theory and techniques, without elaborating too much on the technical jargon of NLP that they mentioned in passing (such as "anchor" and "patterning"):

- "Students of NLP will notice the embedded language of loss anchored to the moment."¹³⁰³
- "For those readers versed in NLP, this phase is a good time to practice your patterning."¹³⁰⁴
- "If you have something to do with NLP then this will help you" (PUA, 2018).

Today, NLP has mostly disappeared from popular culture, dating guides and PUA discussions. Yet, it was once instrumental in the birth of the community, which was itself a key step in the advent of the manosphere as we know it. This example shows how pseudoscientific fads can rise and fall, and influence a community before receding from it. It illustrates the fact that the manosphere is of course not isolated from broader cultural trends and is not immune to embracing pseudoscience either.

Human Pheromones

Pheromones are chemical signals that allow communication between members of a species. They "have been identified in every part of the animal kingdom, including mammals," such as mice, goats, and rabbits.¹³⁰⁵ However, there is no conclusive evidence yet for the existence of pheromones in humans, although this has been the object of much scientific effort and inquiry.¹³⁰⁶ In spite of this, manospherians sometimes make claims about the importance of pheromones. This is particularly the case of Rollo Tomassi, who emphasizes their role in prompting "mate guarding

¹³⁰¹ Christopher Sharpley, "Research Findings on Neurolinguistic Programming: Nonsupportive Data or an Untestable Theory?," *Journal of Counseling Psychology* 34, no. 1 (1987): 103–7, <u>https://doi.org/10.1037/0022-0167.34.1.103</u>.

¹³⁰² For a recent meta-analysis which shows that NLP is empirically unsupported, see Tomasz Witkowski, "Thirty-Five Years of Research on Neuro-Linguistic Programming. NLP Research Data Base. State of the Art or Pseudoscientific Decoration?," *Polish Psychological Bulletin* 41, no. 2 (2010): 58–66, <u>https://doi.org/10.2478/v10059-010-0008-0</u>. For exploration of its pseudoscientific aspects, see Bruce Thyer and Monica Pignotti, *Science and Pseudoscience in Social Work Practice* (New York: Springer Publishing Company, 2015).

¹³⁰³ Heartiste, *On Game*, 193.

¹³⁰⁴ Mystery, *The Venusian Arts Handbook*, 168.

¹³⁰⁵ Tristram Wyatt, "The Search for Human Pheromones: The Lost Decades and the Necessity of Returning to First Principles," Proceedings of the Royal Society B: Biological Sciences 282, no. 1804 (2015): 20142994, https://doi.org/10.1098/rspb.2014.2994. For an article laying out the evidence for existence of human pheromones, see Karl Grammer, Bernhard Fink, and Nick Neave, "Human Pheromones and Sexual Attraction," European Journal of and Reproductive **Obstetrics** Gynecology Biology 118, no. (2005): 135-42, & 2 https://doi.org/10.1016/j.ejogrb.2004.08.010. ¹³⁰⁶ Ibid.

response in men" during female ovulation, as well as "in sexual attraction and arousal."¹³⁰⁷ No doubt this is linked to Tomassi's fascination for biological explanations to human behavior, or what he calls "biomechanics."¹³⁰⁸

Beyond the example of the main Red Pill guru, it seems that some manospherians use pheromones to think about every situation. For instance, MRA lawyer Roy Den Hollander repeatedly attributes his attraction to women to the pheromones they supposedly "radiate": "the girls started pumping pheromones in my direction. If I got too close, I could actually feel them seeping into my body along with the heat that young girls naturally radiate."¹³⁰⁹ Likewise, after arguing that male sweat is olfactorily attractive to women, a Red Pill redditor says that he feels like "wearing cologne or body spray detracts from the natural pheromones [his] body makes, which has an effect on women" (TRP, 2014). One thing is certain: empirical evidence is severely lacking to substantiate such claims. Pheromones might exist in humans as in other mammals, but we do not know much yet about them.

While this may not be distinctly pseudoscientific (yet) as this is a research area under serious investigation by biologists, there are no empirical grounds yet for arguing that pheromones are a meaningful influence on human behavior. A hypothesis we could make regarding the relative popularity of pheromone-based explanations among manospherians is that it appeals to their tendency to view behavior through a biological lens. As shown in this dissertation, explanations based on evolution, genes, or hormones abound in the manosphere, and surely pheromones belong to the same mental category. In a comment on why women allegedly love going to the gym, hormones and pheromones are even conflated as this incel speaks of "testosterone pheromones": "There's too much testosterone pheromones in the air and usually there's at least 1 Chad in the gym. 1 eye contact with Chad = 1 completed day" (incel, 2018). As shown by Nettle et al., people tend to consider explanations that "sound" biological (i.e., evolutionary, genetic, or hormonal) as more similar and more compatible together than with other types of explanations (i.e., psychological, sociocultural).¹³¹⁰ Since manospherians are particularly fond of biology-based explanations, it is rather unsurprising that the idea of olfactory chemical influences on behavior would intuitively appeal to them, even in absence of solid scientific proof.

So far, our analysis has mostly focused on the empirical claims of the manosphere. Those have been repeatedly compared to the state of the research in order to identify potential biases, exaggerations, double standards, or pure fabrications. However, manosphere science differs from

¹³⁰⁸ Tomassi uses this term to refer to the fact that human behavior can be reduced to the level of physiological mechanisms (at the level of neurons, hormones, cells, genes, etc.). This is an improper use of the term, as biomechanics is a specific branch of biology which uses the methods of mechanics.

¹³⁰⁹ Roy Den Hollander, *Stupid Frigging Fool Part 7*, <u>https://web.archive.org/web/20200720231829/http://been-scammed.com/main/SFF/7.g.StupidFriggingFool_Pt7.pdf</u>, archived July 20, 2020, 33.

¹³⁰⁷ Respectively Rollo Tomassi, *The Rational Male: Positive Masculinity* (Reno: Counterflow Media LLC, 2017), e-book version, 162; Rollo Tomassi, *The Rational Male* (Reno: Counterflow Media LLC, 2013), 135.

¹³¹⁰ Nettle, Frankenhuis, and Panchanathan, "Biology, Society, or Choice."

the scientific literature in another way: it is often enmeshed in broader normative considerations about the sense of history and decline of the species.

B.2. An Antifeminist Evolutionary Philosophy of History 2.a. Darwinism and Philosophy of History

As explained by philosopher of science Michael Ruse, although Darwin himself produced evidentially normal, "mature" science, this was not the case of his followers and enthusiasts. All through the late 19th century, Darwinian evolution became inextricably enmeshed with the idea of progress, as evolution was thought to inevitably lead to superior forms of life, with Man on top of the hierarchy:

"The cultural notion of Progress may not have been virtually the sole epistemological support of evolution, but it was still a driving factor in what made evolution an attractive idea. And for this reason, evolution did not enter the portals of respectable, professional science. It became a kind of popular science—certainly a science of the public domain—a kind of secular religion."¹³¹¹

In other words, in the 19th century, Darwinism became as much a philosophy of history as a scientific theory. While a scientific theory aims solely at describing the world, a philosophy of history takes things further by encompassing descriptive theory in a normative meta-narrative, where facts of life and nature are granted a value, a sense, a purpose. Today, this is seen as dangerously unscientific, and scientists try to refrain from organizing their findings into a grand normative narrative. In fact, as shown by Ruse, the new generation of Darwinian scientists of the early 20th century strove hard to make their science respectable by omitting references to progress, even though they believed in it: "These men all knew that shoving progress—a token for cultural and social Progress—into their science would be the death of what they were doing. They wanted—they wanted desperately—to be able to do evolutionary studies in a professional way."¹³¹²

In seemingly all popular receptions of Darwinism since its inception, it seems that philosophy of history has never been far away. As a theory explaining the history of all life on earth, Darwinian evolution seems to almost inevitably be drawn in this area, notably because it challenges religious narratives. In the manosphere as well, this conflation between descriptive and normative is commonplace. A characteristic example is the idea of reproduction being the purpose of living beings, as in this incel's forum post: "A foid's only existence on this planet is to get impregnated by a Chad who has superior genetic quality for her offspring. After she has a baby with him, her purpose has been fulfilled as a woman" (incel, 2020). Yet, evolution by natural selection is a mechanistic explanation, which does not allow to derive philosophical judgments about the purpose of an organism as this incel did. What the theory says is that a modern woman is the product of a line of organisms which all successfully reproduced. As such, her body and mind can be understood as a set of naturally selected adaptations which helped her ancestors survive and reproduce more successfully than other competitors. The Darwinian *function* of an adaptation is of

¹³¹¹ Michael Ruse, "Evolution and the Idea of Social Progress," in *Biology and Ideology: From Descartes to Dawkins*, ed. Denis Alexander and Ronald Numbers (Chicago and London: University of Chicago Press, 2010), 247–75, 266. ¹³¹² Ibid., 269.

course to enhance fitness and is therefore intimately linked to reproduction. But this does not entail that the *purpose* of an individual is reproduction. Indeed, humans have evolved higher cognitive faculties which allow them to give a sense to their own existence, to embrace values and to pursue objectives. In short, they can individually and/or collectively choose a purpose, whether inspired by religion, politics, or values. Darwinism can be used as a set of values, in which case a person would see survival and reproduction in order to pass down genes as their purpose in life. However, this is epistemologically distinct from evolutionary science, which is strictly descriptive. Someone claiming that their Darwinian-based normative philosophy of human purpose is logically derived from evolutionary science would thus be committing the naturalistic fallacy, that is deriving an "ought" from an "is." It is true that organisms have been designed over eons of natural selection to be effective at survival and reproduction (is), but it does not imply that survival and reproduction should be the principal occupations and objectives of those organisms (ought).

2.b. A Patriarchal Philosophy of History

In the manosphere, one can observe a shared pseudo-Darwinian philosophy of history running among all communities. Incorporating evolutionary biology with antifeminism, it usually presents a very simplified version of human history, starting from unspecified ancestral times to the present, and even foraying into the future. Although it is empirically dubious (i.e., evolutionarily and historically simplistic and questionable), I will not treat this narrative as a set of empirical claims which should be confronted with scientific literature. Indeed, I argue that this grand meta-narrative on human history and nature is best understood as a patriarchal philosophy of history, which is thus unscientific in nature, and should be treated as such. It is a political strategy, aimed at picturing feminism as destructive and "unnatural," while keeping the moral authority of nature on the manosphere's side.¹³¹³

There are many versions and variations of this patriarchal philosophy of history. Using examples from all manosphere communities, this section sketches the common core of this narrative. The story usually starts in an unspecified ancestral state of "nature." Back then, resources were scarce, life was dangerous, and survival was the name of the game. As a result of these selective pressures, men and women evolved different set of instincts and abilities: "Mother Nature knew that in order for humans to survive, it required a division of labor because no one person could perform all the tasks necessary to assure the proper upbringing and survival of children."¹³¹⁴ Among men, there were dominance hierarchies. "Alpha men" were the fittest, most charismatic leaders and proficient hunters. As providers of meat, resources, and social rank, they were ideal mates for women. Since those fathers provided the best fitness benefits for their offspring, female hypergamy was ubiquitous and unleashed. As a result, society was polygynous, with dominant men monopolizing access to sexual reproduction. Men thus competed among each other for rank in the hierarchy and access to women. Women's reproduction and survival on the other hand hinged on

¹³¹³ For exploration of the ways in which the moral authority of nature has been made to serve political agendas since ancient times, see Lorraine Daston and Fernando Vidal, eds., *The Moral Authority of Nature* (Chicago: The University of Chicago Press, 2004).

¹³¹⁴ Roy Den Hollander, *Stupid Frigging Fool Part VI*, <u>https://web.archive.org/web/20200720231850/http://been-scammed.com/main/SFF/7.f.StupidFriggingFool_Pt6.pdf</u>, archived July 20, 2020, 30.

rejecting subordinate males: "An important aspect of hypergamy is that it implies the rejection of most males."¹³¹⁵ It also implied a constant female monitoring of male status and resources in order to find the best potential mate:

"Hypergamy is not monogamy in the human sense. Although there may be only one 'alpha male' at the top of the pack at any given time, which one it is changes over time. In human terms, this means the female is fickle, infatuated with no more than one man at any given time, but not naturally loyal to a husband over the course of a lifetime."¹³¹⁶

This "natural" state of affairs, the story goes, was then shaken "[w]ith the transition from hunter-gatherer to agrarian societies some 10,000 years ago,"¹³¹⁷ although most accounts do not provide precise dates. With this deep anthropological and socioeconomic change, sexual dynamics supposedly shifted, with the rise of culturally endorsed monogamy and marriage. This was the revenge of beta males, who finally had widespread access to sexuality:

"It's only after humanity embraced agriculture and industrialization did the concept of the beta provider come to fore. Caring for children – especially just after birth – requires the ability to provide for both woman and child. The steady, reliable man who kept a solid farm or worked hard in the factory was the best option for a woman looking to spawn.

In fact, so good was the beta provider that an entire matrix of social expectations was built to steer young women towards that type of man. Family, community, the culture at large made it very clear that the often economically unstable – but vagina tingle-causing – alpha was not an appropriate father."¹³¹⁸

This new social arrangement put strong limits on female hypergamy, through a push towards establishing the institution and norms of heterosexual marriage: "Monogamy artificially strengthens the male's position by insisting that (1) each female must choose a different male; and (2) each female must stick to her choice."¹³¹⁹ More than anecdotal, this cultural invention is seen by manospherians as the root of human development and progress, as expressed by MGTOW YouTuber Sandman: "I think that the main reason civilization rose in the first place was because patriarchy put a muzzle on the desires of women."¹³²⁰ With heterosexual patriarchal marriage, men could ensure their paternity, socially and sexually control their mates, and control hypergamy. It also allowed them to devote their competitive energies towards other things than becoming an "alpha male" and reproduction:

¹³²⁰ Sandman, "Amish Women," YouTube.com, July 2, 2015,

¹³¹⁵ Francis Roger Devlin, "Sexual Utopia in Power," r/TheRedPill sidebar, December 27, 2011, <u>https://archive.vn/A1y2j</u>, archived March 30, 2020, 153.

¹³¹⁶ Ibid.

¹³¹⁷ Roy Den Hollander, *Stupid Frigging Fool Part VI*, <u>https://web.archive.org/web/20200720231850/http://been-scammed.com/main/SFF/7.f.StupidFriggingFool Pt6.pdf</u>, archived July 20, 2020, 31.

¹³¹⁸ The Private Man, "Fulfilling a Woman's Hypergamy," September 9, 2011, <u>https://web.archive.org/web/20210216164311/https://theprivateman.wordpress.com/2011/09/09/fulfilling-a-womans-hypergamy/</u>, archived February 16, 2021.

¹³¹⁹ Francis Roger Devlin, "Sexual Utopia in Power," r/TheRedPill sidebar, December 27, 2011, accessible at <u>https://archive.vn/A1y2j</u>, archived March 30, 2020, 178.

https://web.archive.org/web/20210104171405/https://www.youtube.com/watch?v=A4AJxWbXR7A&t=410s&ab_ch annel=Sandman, archived January 4, 2021.

"The consequences of marriage must have appeared soon after its institution: The efforts previously spent fighting over mates were replaced by strenuous exertions to provide for, rear, and defend offspring. No doubt neighboring tribes wondered why this one had recently grown so much more powerful. When they learned the reason, imitation must have seemed a matter of survival."¹³²¹

Manospherians regard this fictionalized period of traditional patriarchy as beneficial for humanity, as expressed by PUA coach Roosh V: "yes, that equilibrium had men exerting their control and superiority over women, but it was an equilibrium nonetheless that has helped the human species perpetuate and colonize the Earth."¹³²² It is viewed as a time of balance, where the innate drives of both men (competitive drive towards being an "alpha") and women (hypergamy) were tamed or channeled towards civilizational pursuits that served the species. In the *Masculine Principle*, the author explains that marriage was a mutually beneficial contract, in which men exchanged their labor force against women's reproductive capacities:

"feminists are *somewhat* truthful when they claim that women were 'owned' as chattel. A wife's *sexuality* (*NOT her person*), was very much 'owned' by her husband and it *was* in fact used as a means of production: The production of the husband's *own* children. But, as always, feminists are only capable of speaking in *half-truths*. The part of the 'women were owned as chattel' song leaves out the second verse, which is 'and men were owned as beasts of burden.' [...] Women took something *very real* in exchange for selling their sexuality. They took a man's labour as their own, and they benefited from this in almost every way imaginable. So did the children she mothered benefit a great deal, *and so did society in general*."¹³²³

This sort of contract had the immediate effect of including all the previously excluded beta males in reproduction, and thus having them work hard to provide for these offspring:

"Once married and *attached to their own children*, these beta males were suddenly yoked like an ox and working at 100% capacity. This utilization of the full capacity of male labour is what pulled mankind into a civilization. It is what built our houses and planted our corn. It built our roads and our bridges. It created our literature and our art. It created, well, pretty much everything that we have. Men, women and children all obviously benefited from this."¹³²⁴

Socially enforced monogamy is seen here as the root of human civilization and progress. To manospherians, it did so by setting cultural limits on female hypergamy, thus allowing all men to reproduce, prompting the author of the *Masculine Principle* to exclaim: "Welcome to the Patriarchy! (Sometimes it is simply known as civilization, but also, occasionally, as *fatherhood*)."¹³²⁵ In the manosphere's patriarchal philosophy of history, this idealized state of affairs was put to an end by the advent of feminism.

¹³²³ Anonymous, "The Fraud of Modern Marriage (Women as Chattel)," *The Masculine Principle*, March 11, 2015, <u>https://web.archive.org/web/20210105101743/http://masculineprinciple.blogspot.com/2015/03/the-fraud-of-modern-marriage.html</u>, archived January 5, 2021.

¹³²¹ Francis Roger Devlin, "Sexual Utopia in Power," r/TheRedPill sidebar, December 27, 2011, accessible at <u>https://archive.vn/A1y2j</u>, archived March 30, 2020, 178.

¹³²² Roosh V, *The Best of Roosh* (self-published, 2013), 177.

¹³²⁴ Ibid.

¹³²⁵ Ibid.

2.c. Feminism: Unleashing Female Nature or Unnatural Perversion?

The Masculine Principle's philosophy of history is a rare exception where the civilizational turning point starts with 19th-century feminists advocating for female suffrage. The author focuses on the 1848 Seneca Falls Convention's *Declaration of Sentiments*, which he criticizes at length.¹³²⁶ However, in most cases, the narrative is centered around 20th-century feminism, from the 1960s-1970s onwards. The feminist undermining of traditional patriarchal marriage is seen as having shattered the old social order, which, for Rollo Tomassi, was rooted in evolutionary biology. Marriage allowed men to ensure the paternity of their offspring, thus answering an important Darwinian selective pressure:

"The need to control women's sexuality is nothing less than men's evolutionary compulsion to ensure that their compromise in parental investment is not for nothing. In a social order where masculine responsibility to wife and children was balanced with a commensurate masculine authority to enforce those responsibilities, men could nominally control the reproductive process. Part of that process included possessing a woman. This was both an evolutionary imperative and a social imperative."¹³²⁷

In short, patriarchal marriage is seen as a sort of "cultural adaptation" which favored men's reproductive interests. As a consequence, all feminist attacks on this institution can be interpreted through the antagonistic Darwinian framework. Through that lens, feminism is not viewed as a movement for equality and social justice, but as a power play by women to regain their long-lost sexual power. And in the manosphere, this is usually synonymous with restoring hypergamy: "Feminism is the logical outcome of advanced industry/technology and the natural proclivity of females to maximize their mating strategy of hypergamy in liberal countries."¹³²⁸ While patriarchal marriage was an arrangement which is thought to have kept both male and female nature in check, "modern feminism" is accused of disrupting this "gender equilibrium that has existed for millennia."¹³²⁹ With the removal of those checks, modern civilization is thus often described as reverting back to pre-civilized times:

• "[W]hen certain checks and balances in society are removed the animal nature which has the same impulses as100.000 years ago comes to the fore" (MGTOW, 2014).

Sentiments hinges on its reliance on the idea of natural rights. To him, voting rights are a legal right, but not a natural right. Furthermore, he argues that the USA was not originally meant as a democracy with universal suffrage, but as a republic, and that at the time of writing in 1848, many men were also denied the franchise.

¹³²⁶ See Anonymous, *The Masculine Principle*, March 11, 2015, Chapter 3 pt. 3-6 on 19th century women's suffragists,

https://web.archive.org/web/20210105100950/http://masculineprinciple.blogspot.com/search/label/Chapter%203%2 0-%20The%20Gender%20War, archived January 5, 2021. The author's main criticism of the *Declaration of*

¹³²⁷ Rollo Tomassi, "She's Not Yours," The Rational Male, October 15, 2020, <u>https://web.archive.org/web/20210105111800/https://therationalmale.com/2020/10/15/shes-not-yours/</u>, archived January 5, 2021.

¹³²⁸ Incels.wiki, "Feminism," <u>https://web.archive.org/web/20210107144415/https://incels.wiki/w/Feminism</u>, archived January 7, 2021.

¹³²⁹ Roosh V, *The Best of Roosh* (self-published, 2013), 177.

- "Men have long understood that instinctual male behavior was barbaric at heart and needed to be suppressed in order for civilization to prevail. What was forgotten was that instinctual female behavior was even less civilized."¹³³⁰
- "A characteristic feature of decadent societies is the recrudescence of primitive, precivilized cultural forms. That is what is happening to us. Sexual liberation really means the Darwinian mating pattern of the baboon pack reappears among humans."¹³³¹
- "It is not the pursuit of equality or the love of egalitarian values that has led to feminist governance, but pure blind human biology practiced in the same way it was on the African Savanna three million years ago."¹³³²

This view is particularly popular among incels, who believe they are the main losers of this civilizational change. With the disappearance of socially enforced patriarchal monogamy, unattractive men like them lose all chance of ever reproducing: "Sexually we're devolving to very tribal times where only a select few males get most of the women, you can't maintain a strong society with that, men need to be motivated with women/sex/love/prospects of children or a family" (incel, 2021). In typical MRA fashion on the other hand, Paul Elam mostly frames hypergamy as centered around exploitation of resources:

"Nonetheless, what's happened here is that women, their raw biological power masquerading as feminism, have taken the dominant alpha status in our culture, and the result is quickly becoming an age of oppression and injustice more insidious and intractable than any other. It is in the biological, survival-oriented nature of women to enhance their lives through the utilization of male labor and male expendability, without compunction or moral constraint, and that is exactly where our culture has ended up on an Orwellian scale."¹³³³

Even though definitions of hypergamy are elastic and manyfold, and although manospherians focus on different aspects of feminism and society, a common thread runs through these narratives: feminism and the weakening of patriarchal family structures are said to have provoked the unleashing of female nature. In that regard, manospherians do not side with nature, but call to rein it in. As we have seen, hypergamy is used to "explain" most phenomena, and this grand meta-narrative allows to condemn any change in gender norms and gender relations as a dangerous decline of Western civilization caused by feminism—from the rise of divorce rates to the dating app and social media culture, and even the very existence of the incel community itself.

If manospherians often accuse feminism of having unleashed female nature, they also sometimes paradoxically reverse the argument and accuse feminism of being unnatural. When this happens, their discourse echoes more classical misogynistic appropriations of biology. Patriarchal gender arrangements are then seen as reflecting a "natural order," and feminism as a dangerously unrealistic and utopian attempt to topple this order. This usually reveals the deeply misogynistic

¹³³⁰ Manosphere blogger Vox Day, cited in Ironwood, *The Manosphere: A New Hope for Masculinity*, e-book location 30%.

¹³³¹ Francis Roger Devlin, "Sexual Utopia in Power," r/TheRedPill sidebar, December 27, 2011, accessible at <u>https://archive.vn/A1y2j</u>, archived March 30, 2020, 163.

¹³³² Elam, Men. Women. Relationships, 144.

¹³³³ Ibid., 143.

and traditionalist strand of manosphere antifeminism. On those occasions, they do side with nature, and apply this frame to various cultural changes caused by feminism.

For example, manospherians often complain about the loss of femininity in women, who they claim have been indoctrinated by feminism to stop caring about their appearance to focus on intellectual endeavors instead:

"Go into any middle-of-the-road bar in a major city and what do you see? Overweight women with short hair, loose clothing, and flip-flops. Feminism has taught women that it's okay for them to look like they just rolled out of bed and that any attempt to look 'feminine' will make men desire them for their looks instead of their intellectual and philosophical brains. Evolution laughs. Men are attracted to beauty, and always will be."¹³³⁴

As manospherians bemoan the loss of what they see as traditional femininity, they thus deplore the fact that contemporary Western women dedicate their lives to professional and intellectual pursuits. To some, this diverts them from their natural childbearing role:

"The only acceptable duty for the female human is to take care of the cock and the casa. Anything else is superfluous and detrimental to the process of life. In exchange, the man provides for her so she's not required to work. That's how it has worked for hundreds of thousands of years, but now we're supposed to believe that the last 50 years is progress. To me it looks like de-evolution, one that we all have let happen."¹³³⁵

Less blatantly sexist writers still argue that women's focus on career is unnatural, and that women are misleadingly indoctrinated into thinking that they can "have it all":

"But more recently, the false promises of feminism have lured girls away from this system—which worked for millennia. For at least the last two generations of women, an ideology that promised them that they could enjoy the benefits of their prime years *indefinitely*, while *also* getting everything men were getting, was devastatingly persuasive and irresistible."¹³³⁶

There are two corollaries to this hostile view of women in the workforce. The first one is that middle-aged career women have wasted their "prime years" of sexual attractivity. Older women who are attracted to younger men (known as "cougars") are seen as particularly "unnatural": "Go against nature and you'll feel its fury, as childless cougars prowling clubs on the weekends can tell you."¹³³⁷ As argued in the Red Pill sidebar, despite the "feminist' media's attempt to normalize 'cougarhood," it could "never become mainstream due to sheer biological realities" (TRP, 2010). The second corollary, which is much more political, is that women are not suited to occupy traditionally male jobs in the first place, since it diverts them from the natural maternal tasks for which they evolved. MRA lawyer Roy Den Hollander thus constantly refers to roles and jobs which are "evolutionarily correct" or "evolutionarily suited" to men or women:

¹³³⁴ Roosh V, *The Best of Roosh: Volume One* (Self-published, 2013), 143.

¹³³⁵ Ibid., 149.

¹³³⁶ Tuthmosis Sonofra, "The 15 Magical Years of Womanhood," Return of Kings, April 24, 2013, <u>https://web.archive.org/web/20201208145534/https://www.returnofkings.com/9932/the-15-magical-years-of-womanhood</u>, archived December 8, 2020.

¹³³⁷ Roosh V, The Best of Roosh: Volume One, 149.

- "In the seventies, the government, media and education imposed quotas that gave lots of incompetent Feminazis jobs evolutionarily suited for men."¹³³⁸
- "The Feminazis fabricated the psychological illusion of the 'strong and independent female' capable of bettering men in a man's occupation in order to supplant evolutionarily correct roles for females."¹³³⁹
- "Feminist propaganda claims that except for some mounds of flesh and 'gender' organs, there's basically no difference between guys and girls. They say females can do virtually anything men can. Perhaps, but can they do the tasks evolutionarily suited for men as well as men? Not in the real world they can't!"¹³⁴⁰

Roy den Hollander certainly represents an example of the most rabid sexism found in the manosphere and cannot be taken as representative of all Men's Rights Activists. He was even kicked from mainstream MRA organizations such as the National Coalition for Men.¹³⁴¹ Yet, he illustrates how "nature" or "evolution" are sometimes used to lambast feminist reforms and cultural changes. In fact, he issued a grim threat to feminists about meddling with nature: "Reasonable men can accept the limitations of Mother Nature's engineering, but the Feminazis can't. The Feminists should be careful in their meddling with nature. There are 300 million firearms in this country, and most of them are owned by guys."¹³⁴² Here, the moral authority of nature is clearly weaponized against feminism. As explained above, these claims are normative judgments which could never be derived from empirical science itself. The idea that there are "evolutionarily correct roles for females," or that nature could be a ground to determine the "only acceptable duty for the human female" cannot be derived from scientific findings themselves, but only from preexisting values— in that case, sexist and patriarchal attitudes.

As shown in this section, there are two different versions of this patriarchal narrative. In the most elaborate blackpill and Red Pill narratives, feminism has unleashed hypergamy and female nature. In that framework, manospherians see themselves as fighting on the side of culture and civilization, against a feminism which "has succeeded in removing the cultural controls" on hypergamy (MGTOW, 2015). In more male supremacist and misogynistic types of narratives, feminism is seen as completely unnatural and going against the natural order of male domination and female submission. In that framework, manospherians are firmly on the side of nature. In both cases, these narratives are based on simplistic accounts of human history, lack of empirical data

¹³³⁸ Roy Den Hollander, *Stupid Frigging Fool Part VI*, <u>https://web.archive.org/web/20200720231850/http://been-scammed.com/main/SFF/7.f.StupidFriggingFool Pt6.pdf</u>, archived July 20, 2020, 37.

¹³³⁹ Ibid., 110.

¹³⁴⁰ Roy Den Hollander, "Some Differences: Males v. Females,"

https://web.archive.org/web/20210616231711/http://www.roydenhollander.com/main/articles.htm#act_together, archived June 16, 2021.

¹³⁴¹Wiki4men,"RoyDenHollander,"https://web.archive.org/web/20231210045454/https://wiki4men.com/wiki/RoyDenHollander,archivedDecember10, 2023.1342RoyDenHollander,EvolutionarilyCorrectCyclopedia,https://web.archive.org/web/20220327081540/http://www.roydenhollander.com/main/Writings/CyclopediaUpdate2.

<u>20.19.pdf</u>, archived March 27, 2022, 45.

and evidence, and a declinist view of the West as expressed by MGTOW YouTuber Sandman: "Ever since patriarchy started declining in Western societies, so is our culture."¹³⁴³ This declinist worldview in fact leads some of them to project Darwinian evolution in the future, often leading to apocalyptic scenarios.

2.d. Prospective Evolution in the Manosphere: Darwinian Science-Fiction

19th-century evolutionists embedded Darwinian selection in a grand ideal of human progress.¹³⁴⁴ 21st-century manospherians, on the other hand, have a declinist, if not apocalyptic philosophy of history. This is revealed by their speculations about the evolutionary future of humanity. As a rule, evolutionary scientists look backwards. Whether it is geneticists identifying ancient migratory patterns through genomic studies, paleontologist scrutinizing the fossil record, or evolutionary psychologists hypothesizing about the evolution of emotions, the past allows to understand the present and vice versa. However, projecting into the future is a much riskier endeavor. As reminded by paleontologist Stephen Jay Gould, the evolution of human life was first and foremost a matter of chance:

"Humans arose, rather, as a fortuitous and contingent outcome of thousands of linked events, any one of which could have occurred differently and sent history on an alternative pathway that would not have led to consciousness. To cite just four among a multitude: (1) If our inconspicuous and fragile lineage had not been among the few survivors of the initial radiation of multicellular animal life in the Cambrian explosion 530 million years ago, then no vertebrates would have inhabited the earth at all. [...] (2) If a small and unpromising group of lobe-finned fishes had not evolved fin bones with a strong central axis capable of bearing weight on land, then vertebrates might never have become terrestrial. (3) If a large extraterrestrial body had not struck the earth 65 million years ago, then dinosaurs would still be dominant and mammals insignificant (the situation that had prevailed for 100 million years previously). (4) If a small lineage of primates had not evolved upright posture on the drying African savannas just two to four million years ago, then our ancestry might have ended in a line of apes that, like the chimpanzee and gorilla today, would have become ecologically marginal and probably doomed to extinction despite their remarkable behavioral complexity."¹³⁴⁵

Here, Gould argues that there is no necessity in evolutionary history, no general tendency towards progress or complexity, but just a messy, chaotic, contingent process which is shaped by complex and unpredictable interactions between organisms, climate, geology, and even celestial bodies. As such, a tacit rule of the field is to be extremely cautious regarding prospective evolution as there are just too many parameters at play to reliably predict how life will continue to evolve. Manospherians are not bound by such qualms. Some of those enthusiastic Darwinians therefore do not hesitate to speculate about ongoing evolutionary selective pressures and the genetic future of humanity. Consistently with their view of feminism as a deeply detrimental anthropological change

¹³⁴³ Sandman, "Amish Women," YouTube.com, July 2, 2015,

https://web.archive.org/web/20210104171405/https://www.youtube.com/watch?v=A4AJxWbXR7A&t=410s&ab_ch annel=Sandman, archived January 4, 2021.

¹³⁴⁴ Ruse, "Evolution and the Idea of Social Progress."

¹³⁴⁵ Stephen Jay Gould, "The Evolution of Life on the Earth," *Scientific American*, 1994, 85–91, <u>https://doi.org/10.1038/scientificamerican1094-84</u>, 86.

for Western societies, they go further and even envision various kinds of genetic apocalypse scenarios. Those speculations are not grounded in any sort of existing scientific middle-theory or set of hypotheses, but just in the principle of Darwinian selection itself. Our research has shown that manospherians have a relatively accurate understanding of evolution by natural selection, which they use to make sense of history, and on occasion, of the future. In doing so, however, they do little more than create Darwinian science-fiction.

Manospherians often bemoan the state of modern sex and dating, blaming feminism for the "sexual liberation" of women. Some of them think that this will have deep evolutionary consequences, creating new selective pressures on humans:

"I do not think the current reality of endless dating can last. Something must give. Either humans will evolve into different social animals capable of withstanding decades of hookups and fragmentary relationships without turning to the comforts of cats and internet porn, or those people who serially date and delay childbirth will not have enough kids and natural selection will remove them from the gene pool as a failed experiment."¹³⁴⁶

It is hard to know how earnestly manospherians believe in these Darwinian science-fiction stories. Owing to the contingent and unpredictable nature of evolution described by Gould, they can all be dismissed as highly improbable, not to say completely ludicrous. The goal of this section is therefore not to compare those manosphere stories to the (inexistent) scientific state-of-the-art, but to highlight the manosphere-specific ideological and political underpinnings of those stories.

Evolutionary Consequences of Female Sexual Freedom

Since hypergamous female nature is thought to have been unleashed by feminism, we saw how some incels worried about being selected out of the gene pool, while others did not find this to be a very probable scenario: "there is just so many factors involved not just sexual selection alone" (incel, 2022).¹³⁴⁷ With their customary obsession for female mate choice, manospherians envision all sorts of exotic evolutionary scenarios. While hypergamy is already blamed for a lot of social ills in the present, manospherians can let their imagination run even looser when speculating about the future. In typical patriarchal fashion, a MGTOW thus claims that the "crucial role of civilized organization of marriage" was to ensure that "the best and the brightest of society procreate and thus beget productive members of the next generation." However, this function of marriage, he argues, has collapsed, letting female choice run unimpeded:

"When females determine reproductive choice, that decidedly doesn't happen. The best and the brightest are deliberately deleted from the next generation, as evolutionary law destines women to seek the seed of the most animalistic men. [...] That means generational collapse, as every group of children are raised by entitled animal women to be entitled animals themselves. Like a bad DNA code, decay copies itself into every generation with greater frequency. If you think the current state is bad, just wait for a decade or so" (MGTOW, 2014).

In this version of the manosphere's patriarchal reading of history, humanity is not only socially and behaviorally reverting back to more uncivilized times, but it is also genetically

¹³⁴⁶ Heartiste, On Game, 2.

¹³⁴⁷ See Chap. V, C, 251.above on incels' view of feminism as eugenics.

(d)evolving. This is a popular theme in the manosphere, with many declinations. In the most extreme occurrences, unconstrained female mate choice, downfall of patriarchy, and the cultural influence of feminism are seen as conducive to extinction of the species:

"[T]oday, women aren't normal. They have absolutely stopped competing for good men. They go out of their way to devalue them. They freely engage in behaviours that result in the extinction of their lineage. They leave. They refuse to raise their children. They engage in infidelity. They choose disposable partners based on deviant behavior. [...] There is a natural consequence for that...extinction. The children of these women grow up powerless and feral, with increasingly lower status. Eventually, their lines will disappear" (MGTOW, 2019).

These examples showcase the apocalyptic bent of most of these narratives. Some are more hopeful, however. For instance, after having anecdotally remarked that "most of the nasty women of gen x and Y are childless or close to it," a MGTOW wonders whether "women are beginning to evolve," with the "nastiest" (read "feminist") attitudes being selected out of the gene pool (MGTOW, 2019). In a similar vein, a MRA suggests that "[p]erhaps all these feminazi waves will aid human evolution." If undesirable women "become lesbians or such a shrieking anti male that they fail to reproduce," this would stop the "vast majority of pathological genes" which are "contributed by the female side," he muses.¹³⁴⁸ Our analyses have repeatedly shown how flexible evolutionary reasoning is, and how easy it is to make assertions about past evolution without empirical grounding. As regards the prospective evolutionary narratives of Darwinian science-fiction, all limits are off. There is no (pre)historical record to stick to and imagination can run unfettered, a leitmotiv of these unbridled speculations being that of decline, extinction, deevolution.

2.e. Alt-Right Conspiracies, Hormones, and the Feminization of Men

In the manosphere, Darwinian science-fiction sometimes predicts the emergence of a genetic rift between two groups, sometimes leading to full-blown speciation:

"To say that evolution is slowing down because less selection factors I disagree, the selection factors are less obvious and far more complicated then before. Ultimately I clearly see a division happening as social inequality increases; to simplify a immensely complex situation there will be seclusive environments: upper class and lower class> 2 populations> over enough time 2 separate species.(my theory)" (PUA, 2014).

This type of evolutionary speculation can easily be superimposed on narratives about the decline of the West, often embracing the globally circulating Alt-Right tropes of the "Great Replacement" or "White Genocide," which contend that white people are progressively being ousted by nonwhite immigrants and their offspring.¹³⁴⁹ Whether they are based on race, IQ, or moral character, such scenarios are a discreet presence in manosphere spaces, and are often given a Darwinian veneer. Some for example predict that "the ugly, poor and impulsive will breed the

¹³⁴⁸ Jan Deichmohle, "Female Choice and Feminism – Part 1," A Voice For Men, November 23, 2015, <u>https://web.archive.org/web/20230922092806/https://avoiceformen.com/featured/female-choice-and-feminism-part-</u> <u>1/</u>, archived September 22, 2023.

¹³⁴⁹ For exploration of these conspiracy theories, see Gabriele Cosentino, *Social Media and the Post-Truth World Order: The Global Dynamics of Disinformation* (Cham: Palgrave Macmillan, 2020), 73-78.

most" and thus be naturally selected (incel, 2020). A comment on Roosh V's website best illustrates this: "Blacks and Muslims are taking over. Feminized populations are going extinct. Evolution continues" (PUA, 2015). In the most extreme fringes of the manosphere, in particular among incels, one finds conspiracy theories in which Western men are being hormonally feminized by a nebulous global liberal-Jewish-feminist elite. This is both a reflection of broader patterns in US politics, and of specific features of the manosphere.

The Politicization of Sex Hormones in the United States

On April 15, 2022, conservative Fox News host Tucker Carlson released a trailer for a new documentary entitled "The End of Men," bemoaning the loss of physical fitness in American men, and their drop in T levels.¹³⁵⁰ Over shots of muscular men exercising, the voice-over explains that strong men will be needed to "reestablish order" in a chaotic world. In the polarized context of American politics, testosterone and estrogens have become increasingly politicized, with Republicans proclaiming their T-induced virility and disparaging that of their opponents. In a 2020 senatorial campaign event, Donald Trump, Jr. jested, "In my next life, I want to come back as a Democrat, but I'm not sure I can get my testosterone that low" to a cheering and laughing crowd.¹³⁵¹ And while the right-wing *American Spectator* denounced the "low-testosterone, dilettantish strain of conservatism that has overdeveloped in the 'mainstream media," lambasting the moderate Republicans who did not endorse Donald Trump's campaign,¹³⁵² a piece in the left-wing *Huffington Post* feared that Trump's presidency was "testosterone-fueled" and could lead the country to war and disaster.¹³⁵³

This partisan and symbolic use of hormones is not limited to the media and has spread widely on the Internet. If conservatives are associated with virility and testosterone, liberals are associated with weakness, effeminacy, and estrogens through the "soy" trope. Here is incel.wiki's explanation of the trope:

"**Soyboy** (also spelled **soy boy, soi-boi**, or other variants) is a term used by masculinists to disparage someone for not being masculine enough. The use of the word 'soy' in this sense implies that the man in question has possibly been feminized by consuming a lot of soy products. This

¹³⁵⁰ For an accessible version of the documentary, see Mars, "O Fim dos Homens – The End of Men," YouTube.com, January 5, 2023,

https://web.archive.org/web/20240603121050/https://www.youtube.com/watch?v=r97O7u2x8aU&t=860s, archived June 3, 2024.

¹³⁵¹ The Hill, "Trump Jr. MOCKS TESTOSTERONE LEVELS of Democratic Men," YouTube.com, December 19, 2020,

https://web.archive.org/web/20240603121535/https://www.youtube.com/watch?v=jd82LFFGVdU&ab_channel=The Hill, archived June 3, 2024.

¹³⁵² Emerald Robinson, "The Collapse of the Never-Trump Conservatives," *The American Spectator*, June 29, 2018. <u>https://web.archive.org/web/20220915094720/https://spectator.org/the-collapse-of-the-never-trump-conservatives-2/</u>, archived September 15, 2022.

¹³⁵³ Neal Gabler, "The Testosterone-Fueled Presidency," *The Huffington Post*, August 16, 2017. <u>https://web.archive.org/web/20220915095100/https://www.huffpost.com/entry/the-testosterone-fueled-presidency_b_59949cd3e4b056a2b0ef029c</u>, archived September 15, 2022.

stereotype partly derives from the fact that soy contains compounds that weakly mimic the effects of estrogen, known as isoflavones $[...]^{n1354}$

Journalists have coined this the Alt-Right's "new favorite insult."¹³⁵⁵ A quick search on a Donald Trump supporters' forum highlights its popularity:

- "It was a different World then, Soy Boys could not build this today" (Pro-Trump Forum, 2022).
- "The soy has made the cuckites weak and helpless. They're ready to be conquered" (Pro-Trump Forum, 2022).
- "Philadelphia must be hiring some soy boys to be cops. Look how weak they appear running an arresting a teenager starting at 0:46 in this video" (Pro-Trump Forum, 2022).
- "Hey google, will eating soy lower my testosterone levels?" (Pro-Trump Forum, 2022).

While this is based on a myth (soy has not been proved to have feminizing effects),¹³⁵⁶ it is now a very common way to refer to liberals and pro-feminist men feminism on the Internet. The manosphere is not exempt from this, and even though incels often complain about not fitting masculine stereotypes themselves, they make an abundant use of the "soy" trope.

Incel Conspiracy Theories on Hormones

Among incels, the soy myth is often conflated and confused with a current hot-button topic in endocrinology and public health issue: endocrine-disrupting chemicals (EDCs), which are exogenous substances that can alter the regular functioning of the endocrine system when present in the environment. These range from pesticides to plastic materials, metals, or contraceptive pharmaceuticals, and have deleterious effects on the wildlife.¹³⁵⁷ Estrogen-based pharmaceuticals have been detected in public drinking water, "suggesting that low-level environmental exposures to human populations are also likely," exposures that can cause fertility and reproductive issues, among many others.¹³⁵⁸

Incels seem to be particularly concerned about the presence of estrogens from contraceptive pharmaceuticals in drinking water, as illustrated by the several forum threads on the matter:

Incels.wiki,

"Soyboy,"

¹³⁵⁴

https://web.archive.org/web/20220915100936/https://incels.wiki/w/Soyboy#Femininzation_due_to_soy_phytoestrog

¹³⁵⁵ Jay Hathaway, "Soy boys' is the far-right's newest favorite insult," *The Daily Dot*, October 27, 2017. <u>https://web.archive.org/web/20220519051251/https://www.dailydot.com/unclick/soy-boy-alt-right-insult/</u>, archived May 19, 2022; Chris Caesar, "How 'soy boy' became the alt-right's favorite new insult," *Mic*, October 27, 2017, <u>https://web.archive.org/web/20220915103051/https://www.mic.com/articles/185572/soy-boy-explained-alt-right-masculinity-new-insult</u>, archived September 15, 2022.

¹³⁵⁶ A recent meta-analysis of the clinical evidence has concluded that concerns about "feminizing" effects of soy were unfounded, Katharine Reed et al., "Neither Soy nor Isoflavone Intake Affects Male Reproductive Hormones: An Expanded and Updated Meta-Analysis of Clinical Studies," *Reproductive Toxicology* 100 (2021): 60–67, https://doi.org/10.1016/j.reprotox.2020.12.019.

¹³⁵⁷ Laura Vandenberg, "Endocrine Disruptors and Other Environmental Influences on Hormone Action," in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford (New York: Oxford University Press, 2019), 87–106. ¹³⁵⁸ Ibid., 91.

- "Birth Control pill causing our water that we drink on daily basis contamined with estrogen even wild animal especially the aquatic one affected" (incel, 2022).
- "Estrogen in our water is caused by women who take birth control pills" (incel, 2022).
- "should we buy water filters to filter out birth control pill hormones from water?" (incel, 2022).

These discussions are usually similar with those on the effects of soy, and the original posts often contain endocrinological research. But the reactions to them take on signature incel traits, such as fatalistic exaggeration and misogyny. Indeed, women are reviled for taking contraceptives, which end up polluting water:

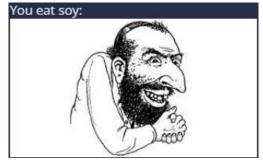
- "Disgusting. foids are basically committing chemical warfare against men. They are our enemies, don't show any mercy" (incel, 2022).
- "We literally drink estrogen when drinking water, which fucks up our manhood, just because some whores want to have sex with Chad without getting pregnant" (incel, 2022).
- o "Can't even get clean water due to disgusting foids" (incel, 2022).

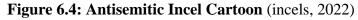
Beyond those typical responses from incels, one finds the influence of Alt-Right conspiracy theories as well. Indeed, soy and EDCs are seen as a weapon used by the elites to feminize men, sap their virility, and thus render them compliant and subservient, as in this comment from a post entitled "The NWO [New World Order] faggot wants to effiminate all man in this world by encouraging soy based food":

"If only it was just soy Masculinity is attacked from all angles, from the tap water you drink full of birth control pills, your food (most plants and herbs are phytoestrogens) and all the crap in the plastics (bisphenol A, etc) with estrogen mimetics.

This is a good thing for the rulers, feminized men are easier to control, less likely to revolt when something bad is done to them and better consumers. Porn and marvel movies will keep them pacified even more" (incel, 2022).

Echoing the Alt-Right's "White Genocide" conspiracy theory, which blames "Jewish elites for allegedly masterminding the plot" of Western decline,¹³⁵⁹ incels often add antisemitic panic to this conspiracy theory:





¹³⁵⁹ Cosentino, Social Media and the Post-Truth World Order, 75.

- "You better shut the fuck up goyim and eat your soy and work harder so my stocks go up" (incel, 2022).¹³⁶⁰

As revealed by these examples, in the manosphere, life sciences such as endocrinology or Darwinism itself are often embedded in grand political meta-narratives, often with a declinist, racist, antisemitic, or conspiratorial bent. The few scientific findings invoked in that context are inevitably exaggerated and interpreted in accordance with the overarching narrative. Ultimately, most science is descriptive, trying to assess the state of reality as best as possible. But when it comes to the prescriptive and normative, values and interests cannot help but come into play. For instance, while for most people (including scientists), the obvious solution to the issue of estrogenic chemicals in water is their detection and removal, incels have another take on the matter. After all, they are a group of sexless men who do not benefit from contraceptive pharmaceuticals but might be harmed by their deleterious environmental effects. Hence this very simple solution proposed to great acclaim by one of them: "make birth control illegal," (incel, 2022) or, in its most extreme version, "Fuck sex havers, gas all whores" (incel, 2022).

In manosphere science, values are always latent, and empirical research is appropriated when supporting these values. When it does not, however, this does not prevent manospherians from making unfounded empirical claims, as shown by the popularity of Briffault's Law, the soy myth, or various Alt-Right conspiracy theories. Over and beyond this question of empirical validity and political distortions of reality, it seems that for some manospherians, evolutionary science is a source of personal meaning and identity.

B.3. When Science Becomes Personal

From her ethnographic exploration of the London Pickup-Artist community, sociologist Rachel O'Neill concluded that "evolutionary imperatives come to be experienced by heterosexual men as deeply felt and embodied truths."¹³⁶¹ Her interviews reveal the power of evolutionary explanations, which end up providing aspiring PUAs with rationales for their behavior, as well as giving them a sense of purpose. In a similar argument, feminist scholar Martha McCaughey argues that evolutionary psychology and its popular renditions form a "caveman mystique," which influences men's sense of self and becomes a "lived ideology."¹³⁶² In keeping with their analyses, this section highlights the ways in which evolutionary sciences constitute a rich narrative repertoire from which manospherians draw inspiration, motivation, practical guidance, or a sense of purpose and identity.

¹³⁶⁰ "Goyim" is the Hebrew and Yiddish term for non-Jewish people or "gentiles."

¹³⁶¹ Rachel O'Neill, *Seduction: Men, Masculinity, and Mediated Intimacy* (New York: John Wiley & Sons, 2018), e-book location 58%.

¹³⁶² She uses a variety of concept to describe this dynamic, describing this caveman mystique as a "popular embedded ethos of manhood," a "narrative of meaning," or a Bourdieusian habitus, McCaughey, *The Caveman Mystique*.

3.a. Evolution As a Motivational Narrative

Darwinism is sometimes used as a powerful motivational narrative. Indeed, Pickup-Artists try to convince men to adopt their seduction methods by grounding their argument in evolution. Mystery's canonical seduction guide thus opened with a grim reminder: "Nature will unapologetically weed your genes out of existence if you don't take action and learn how to attract women now."¹³⁶³ Since PUAs advise men on how to achieve sexual success, and since every single person is descended from an uninterrupted line of ancestors who successfully reproduced, this compels men to avoid being "evolutionary failures" and ending their lineages:

"YOU are a descendent from a family line that came from all that time ago. That ancestor was powerful and strong enough to survive in a world with conditions against him. He was strong and smart enough to survive and find a woman/women to reproduce with. He is the reason you are here. EVERY SINGLE ONE of your ancestors all the way back from that caveman through all the eras till now have had a child who grew up to have a child and so on to bring you into this world." (PUA, 2006)

The same idea is carried in this meme, using the image of the wolf to motivate men to become alpha males:

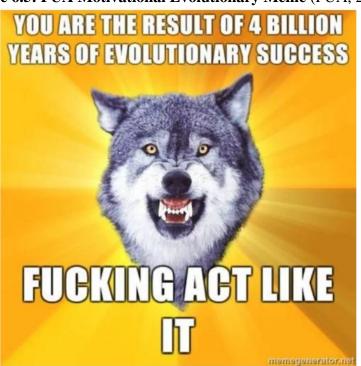


Figure 6.5: PUA Motivational Evolutionary Meme (PUA, 2011)

From a purely scientific point of view, the fact that one is descended from a long line of successfully reproductive ancestors does not entail anything normative. In fact, some of the PUAs

¹³⁶³ Mystery, The Venusian Arts Handbook, viii.

make fun of this meme by saying that its message also holds true for slugs, people with "birth defects and genetic diseases," and just about every one of the "other nearly 7 billion people. not a very good motivational to be honest" (PUA, 2011). Underlying this "end of the lineage" trope are familiar manosphere sexist double standards. Being an alpha male is seen as a successful reproductive strategy ("strong and smart enough to survive"), which is lauded and encouraged. On the other hand, when women are framed as being the product of eons of evolution, the successful reproductive strategies of their ancestors are painted in the worst possible light:

"Only the horniest, disloyal, most manipulative, most merciless, most beautiful uncaring cunts through out countless millenniums were the ones that made it through bottle-neck extinction events, natural predators, conquered and massacred tribes etc. Only a ruthless bitch that still puts out in-20F after her husband just got speared in the head by a savage ... that is the sort of woman whose GENES survived in 22,000 BCE. And you know what? Her great great great grand daughter also survived when the entire village was pillaged and burned and EVERYONE was killed by Vikings, but she lived! Why? Because she is sexy and has blue eyes, nice breasts, and a great ass. These are the type of women that mothered humans into the 20th century.

When you understand WHY women look the way they look, and WHY they act the way they act, in an evolutionary sense, it ALL MAKES SENSE" (MGTOW, 2020).

For blackpilled incels, who see themselves as sexually doomed, the "end of the lineage" trope is more conducive to despair than hope. In fact, many of them seem to ground their identity in the notion that they are evolutionary "failures," as recalled in "Confessions of a Reformed Incel," a testimony from an incel turned Red Piller:

"i was an evolutionary failure. With so much FAIL, my body began to realize it was not going to fulfill it's primary biological function of reproduction and had begun to contemplate ways of me to expedite my removal from the gene pool. Death felt like my only answer" (TRP, 2012).

3.b. Incels and Genetics: Biology as Identity

Many incel forum members use a pseudonym which mentions their genetics. As explored earlier, genetic determinism is a central tenet of the blackpill.¹³⁶⁴ It is therefore unsurprising that incels should ground their sense of self in their genetics. Thus, when reflecting on their physique or personality, they usually do so in terms of genetics:

- "I really can't stand my dad, he's a childish subhuman who gave me shitty genes (glasses, shortness, high facial fat)" (incel, 2018).
- "Eating was always a pain in the ass for me until puppetry [puberty?] and it's probably the main cause, beside of my subhuman genes why my limbs are build very weak" (incel, 2020).

¹³⁶⁴ See V, C, 248.

Nonwhite incels living in the West attribute their celibacy to their minority status. In doing so, they draw on social scientific research showing the particular difficulties encountered by ethnic minorities in their dating and sex lives.¹³⁶⁵ However, they depart from usual antiracist and sociological accounts of race and ethnicity by grounding their identity in their genetics. In the blackpill worldview, where looks are paramount, incels' conception of race does not emphasize how identities are socially constructed, performed, or imposed and policed, but focuses on the physical, i.e., on the genetically heritable physical traits such as height or skin color that are usually associated with race. Usually, this is accompanied with profound racial self-loathing, as those "ethnicels" deplore being born with the "wrong" genetics:

- "[Answering a question on living in Scandinavia:] It's nice to live here if you're white, but it's over for ethnics. I just lost the genetic lottery in terms of looks and ethnicity" (incel, 2018).
- "I'm from SEA [Southeast Asia] and I unfortunately have subhuman curry genes from my dad's side (his father has curry genes). My moms side (her father and her male siblings) are tall and I got the shitty curry height genes" (incel, 2020).
- "I will command my personal CRISPR [gene-editing technology] bot to turn me into nordid, I am sick of my East Europid-Turanid-Persid mixed appearance" (incel, 2018).

As those examples reveal, many incels seem to ground their sense of self in genetics. This is not limited to questions of identity however, as this also gives them a common lens through which to explain their life events. In an incel forum thread entitled "Where Did it All Go so Wrong?," a participant reflects on his life trajectory, including experience of bullying and lack of friends and romantic partners. Although he self-describes as good-looking and high-IQ, he attributes this to gene-based mental defectiveness: "In my case it's genetic, I have multiple family members who are also schizophrenic or some other flavour of mental case" (incel, 2021). It is of course impossible to assess the veracity of such statements. The traits incels are referring to might or might not have a genetic basis. Genetics research is mostly correlational and far from advanced enough to make causal claims on the impact of genes on complex traits and behavioral outcomes. What is true, however, is that incels see the world, including themselves, through the lens of DNA. Yet, nothing in biology really dictates this. After all, this incel could also construe himself as a primate, an ape, a vertebrate, a mammal, or as a collection of cells, atoms, or molecules, as a complex system of interrelated organs coordinated by a brain, or as an organism hosting a microbiome composed of multitudinous micro-organisms. But the gene holds a particular fascination, something which is not limited to incels, as investigated by sociologists of science

¹³⁶⁵ See the "Race" section in, Incels.wiki, "The Scientific Blackpill," <u>https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific Blackpill</u>, archived December 25, 2023.

Dorothy Nelkin and Susan Lindee in *The DNA Mystique: The Gene as a Cultural Icon*.¹³⁶⁶ In blackpilled spaces, where looks and genetic determinism are primary concerns, biology is both identity and destiny, echoing O'Neill's and McCaughey's work on science as a lived and embodied ideology.

3.c. Evolutionary Psychology as a Guide to Life

Given the nature of its research questions, this dissertation mostly focuses on discourse and knowledge. However, another adjacent empirical question looms beyond: in what ways does manosphere science influence the everyday behavior of its proponents? In order to answer such questions, fieldwork is required, which has been extremely rare in manosphere research. In her ethnography of the London PUA community, Rachel O'Neill did reveal that the aspiring PUAs she interviewed and followed during dating seminars were profoundly influenced by the evolutionary narrative.¹³⁶⁷ Analysis of my manosphere discourse corpus also brings some partial evidence that evolution is experienced by some as a "lived" or "embodied" ideology. In the Pickup-Artist community in particular, where knowledge is an instrumental means to an end, knowledge and practice are intimately interwoven. As shown above, evolution provides a powerful motivational narrative for aspiring PUAs. However, this motivational discourse is based on the fallacy that maximizing one's Darwinian's fitness is an "imperative," the true "purpose" of all living things. PUA celebrity Roosh V, who has now turned to Orthodox Christianity and embraced creationism, ended up renouncing this fallacy.¹³⁶⁸ His case is a perfect illustration of how manospherians (mis)use evolution to rationalize and orient their behaviors. He recalls adhering to the "biological imperative" trope in his youth:

"When I was in my early 20's, all I wanted to do was have sex. Since I was a firm believer in evolution at the time, I easily concluded that having sex with a lot of women was compatible with evolution since my seed was being spread to as many women as possible [...]"¹³⁶⁹

Here, Roosh V was apparently justifying his lifestyle by a fallacious understanding of evolution, "where the purpose of humanity is to survive and reproduce up to the limits of the food supply."¹³⁷⁰ He believed that a life of unending casual sex would bring him happiness by fulfilling his biological imperative, and ended up being disappointed by this shallow routine:

"This brought out a lot of confusion for me, because evolutionary I was supposed to have the most amount of resources to reproduce, which was simulated at least partly by stacking a lot of cash and sleeping with many girls, but doing those above my true need was leading me to burn out or simply

¹³⁶⁶ This book investigates the cultural influence of the gene in US culture, which went far beyond the realm of genetics research to impact other domains of society such as the arts, politics, and business, Dorothy Nelkin and Susan Lindee, *The DNA Mystique: The Gene as a Cultural Icon* (Ann Arbor: University of Michigan Press, 2004).

¹³⁶⁷ O'Neill, Seduction: Men, Masculinity, and Mediated Intimacy.

¹³⁶⁸ For more on Roosh V's creationism and conversion, see Chap. IV, A, 183.

¹³⁶⁹ Roosh V, "Are We Alive to Only Survive and Reproduce?," November 4, 2015, <u>https://web.archive.org/web/20220623033400/https://www.rooshv.com/are-we-alive-to-only-survive-and-reproduce</u>, archived June 23, 2022.

¹³⁷⁰ For a scientific critique of this view of evolution, see IV, B, 193-195.

lose interest. If you are able to lose interest in something that is deemed a scientific and biological purpose of your life then how can it possibly be a true purpose? There had to be something else."¹³⁷¹

This disillusionment, he claims, was a major step on his path towards leaving the manosphere and embracing creationism. This example shows that some manospherians do embrace evolution as a guide to life. In Roosh V's case, however, the understanding of evolution was faulty in several regards. It was firstly a very crude and simplistic understanding of evolutionary theory, where maximizing reproduction is the biological imperative, and where Dawkins's "selfish gene" metaphor is understood as a "selfish theor[y] of human behavior."¹³⁷² But the main issue with Roosh V's interpretation of Darwinian evolution was the naturalistic fallacy, as pointed out to him by a more scientifically savvy PUA criticizing the article in the comments: "There is also of course your recurring mistake of 'appealing to nature', that is, assuming that whatever our genes 'want' is automatically the purpose of our life or 'should' be" (PUA, 2015). This poster recognizes that evolutionary theory makes a poor guide to behavior: "Just figure out what makes you happy short and long term, use evolution only as a source of information and predictions (always to be taken with a grain of salt) of what that might be, not a rigid dictator of your 'purpose'" (PUA, 2015).

There are several testimonies on PUA subreddits and forums revealing the variety of ways in which manospherians can lead their lives "according to" evolutionary theory. Not all of them commit the naturalistic fallacy, but they all seem to contain some form of biased understanding of evolutionary theory—for example, this young man who interprets evolutionary psychology as a reminder that "the Darwinian-Nietzschean struggle for existence means ear or be eaten, kill or be killed, harm or be harmed" (PUA, 2010). He reports experiencing deep anguish because of this, and retreating into solitude as a means of escaping what he perceives as the cutthroat nature of humans:

"I don't know for me it is pretty hellish to live in a world where all men are sadists and all women are masochists.

According to PUA science male physical attractiveness barely matters at all, the only thing women find attractive is brute domination and sadism.

For the last year I've completely cut myself off from humanity. Who wants to live in a world of pure evil? Only evil is rewarded! Cruelty is the only virtue" (PUA, 2010).

This example shows the danger of the Red Pill model of antagonistic Darwinism described above. While some men get drawn into this misogynistic reading of evolutionary psychology and buy into the alpha male myth, others despair at this cynical worldview. This forum poster deplores the fact that "[e]vopsych says getting a girlfriend comes down to demonstrating cruelty, domination, brutality, and sadism" (PUA, 2010). Yet, he has internalized the truth-status of "PUA science" so deeply that he cannot seem to criticize it. Significantly, he uses it interchangeably with

¹³⁷¹ Roosh V. "Are We Alive Only Survive and Reproduce?," November 4. 2015. to https://web.archive.org/web/20220623033400/https://www.rooshv.com/are-we-alive-to-only-survive-and-reproduce, archived June 23, 2022.

¹³⁷² Ibid.

"evopsych," although no evolutionary psychologist would subscribe to such an antagonistic vision of human mating.

In the example above, it is clear that the simplistic PUA brand of Darwinism, although meant to be motivational, can have the reverse effect. Survey research would be needed to assess the consequences of endorsing this worldview on men's self-esteem, motivation, mental health, and misogyny. Anecdotal evidence comes from Neil Strauss's *The Game*, where he narrates his life and times with Mystery, the main theoretician of modern game. In the case of Mystery, there seemed to be an obsessive focus on evolution in daily life, which he would resort to when trying to explain adverse life events, such as a romantic mishap: "And then Mystery's heart would twist and his face would fall and his eyes would leak and his legs would give out from under him and he'd make some bizarre evolutionary justification for it all. 'It's selfish genes,' he'd say."¹³⁷³ Here as well, this worldview did not seem conducive to mental health, as he used evolutionary "justification" to dismiss his friends' attempts to get him into therapy:

"Mystery sulked through the trash-strewn house in his robe, telling anyone who would listen about the former student who was stealing his business and the bitch who ruined his life. Any attempt to get him into therapy was dismissed with a long-winded explanation of how his emotions and actions were evolutionarily justified."¹³⁷⁴

Time and time again, those examples reveal the naturalistic fallacy, as some manospherians believe that evolutionary theory "justifies" some actions rather than others in their daily lives. To better evaluate the prevalence of this fallacy among manospherians, two relevant distractors were seeded in the science quiz, e.g., "Since evolutionary psychology reveals the innate propensities of each sex, it can show men and women which activities are personally more suited for them" (NF2).¹³⁷⁵ In table 6.5 below is a breakdown of the prevalence of the naturalistic fallacy misconception among survey responses, along with the rate of respondents who picked the correct answer on the associated multiple-choice questions (item success).

Distractor	Manosphere (n=148)	Item Success	Counterpart (n=151)	Item Success
NF1	12.8%	35.8%	27.8%	13.9%
NF2	4.7%	85.8%	9.3%	76.8%

Table 6.5: Naturalistic Fallacy Answers on the Life Sciences Quiz

Manospherians were twice less likely than the counterpart group to select the fallacious distractors.¹³⁷⁶ Most enthusiasts of evolutionary behavioral sciences have presumably read about the naturalistic fallacy, as it is addressed in almost every popular science book in the field. As shown by the critical comments on Roosh V's article, manospherians are aware of this pitfall, as

¹³⁷³ Strauss, *The Game*, 341-342.

¹³⁷⁴ Ibid., 405.

¹³⁷⁵ For complete list of misconceptions and associated distractors in the questionnaire, see Appendix 14, 524.

 $^{^{1376}}$ 2x4 chi-square test run on the answer counts between both groups, X²=12.44, p < .01.

are contributors to incels.wiki.¹³⁷⁷ Yet, there is also evidence suggesting that some influential manospherians, such as Mystery, see the adaptationist scenarios of evolutionary psychology as a literal guide to behavior.

Another way to live one's life according to evolutionary theory is that of trying to reproduce some elements of the ancestral lifestyle of our ancestors. For instance, the human body has not had time to adapt to modern living conditions, in particular the abundance of processed foods and sugarand-fat-rich diets, causing widespread health issues such as obesity, cardiovascular problems, etc. Therefore, some evolutionary psychologists recommend adopting the "paleo" diet, i.e., avoiding all foods which humans presumably did not have access to over most of their evolutionary history, as in this testimony from evolutionary psychologist Glenn Geher:

"I had my annual checkup with my doctor. He politely called me fat—and that was it! As an evolutionist, I knew exactly what do. From that point, I changed my diet immediately and fully to an all-natural set of foods: fruits, vegetables, and meat. In 3 months, I got back to my high school weight, and I have remained there ever since. Want to lose weight? Consider the evolutionary history of the human body."¹³⁷⁸

There is a thin line between this type of approach and the naturalistic fallacy. Isn't Dr Geher saying that people should eat what is "natural"? That we should act like our hunter-gatherer ancestors? In the case of nutrition, he surely does. But this is based on examination of the actual evolved physiology of nutrition. Understanding the environment in which human food tastes and digestion evolved is certainly an important way to understand our bodies. But the reason he recommends the paleo diet is not because it is "natural" *per se*. It is, he claims, because it is simply healthier (for ultimate evolutionary reasons, but also regardless of them). Some manospherians do subscribe to the paleo diet approach.¹³⁷⁹ A more extreme case is this PUA redditor who went on a paleo diet and successfully got rid of his acne. Then, still wanting to emulate the lifestyle of hunter-gatherers, he claims he switched jobs to find one with more physical activity and thus got rid of his neck and back pain. Having allegedly solved these issues, he thinks that his "one fatal weakness now is game with women" (PUA, 2016). Therefore, he turns towards the hunter-gatherer lifestyle for guidance: "So I want to know from an evolutionary perspective how did young men successfully have sex 60,000 years ago in small 40-50 people tribes?":

"In this dynamic how did a horny 22 year old engage in sex? Theres no dates you can take these girls out on, no Saturday nights, no bars/pubs, no tinder, you get the point. [...]

¹³⁷⁷ After proposing a just-so story: "However, such adaptations are difficult to prove scientifically and may fall victim of the naturalistic fallacy," Incels.wiki, "Marriage," https://web.archive.org/web/20210107152223/https://incels.wiki/w/Marriage, archived January 7, 2021.

¹³⁷⁸ Glenn Geher and Nicole Wedberg, *Positive Evolutionary Psychology: Darwin's Guide to Living a Richer Life* (New York: Oxford University Press USA, 2019), 35. The same diet is also recommended by evolutionary psychologist Geoffrey Miller in his book, Tucker Max and Geoffrey Miller, *Mate: Become the Man Women Want* (New York: Little, Brown and Company, 2015), 88-91.

¹³⁷⁹ E.g., "Part health plan and part primitivist philosophy, the paleo diet is just manlier, its proponents say, than slurping down a pasta-laden Lean Cuisine with the girls in the breakroom at lunch," see Ironwood, *The Manosphere*, e-book location 24%.

So you find one girl attractive, how would you flirt/engage with her? Did these guys straight up tell these chicks I want to fuck you? [...]

The reason Im asking is because Im practically autistic when it comes to engaging with women with the intent of sex ie. flirting, escalation, etc." (PUA, 2016).

This is a prime example of what sociologist Martha McCaughey calls the "caveman mystique," drawn from evolutionary psychology, or the idea that male EP enthusiasts start to think of themselves as cavemen and projecting their daily lives into ancestral environments. She writes:

"I recognize the lure of this narrative. After all, it provides an explanation for patterns we do see and for how men do feel in contemporary society, tells men that they are beings who are the way they are for a specific reason, offers them an answer about what motivates them, and carries the authority of scientific investigation about their biological makeup. Plus, it's fun: thinking of the reasons you might feel a certain way because such feelings might have been necessary for your ancestors to survive a hostile environment back in the Pleistocene epoch can be a satisfying intellectual exercise."¹³⁸⁰

However, she questions how useful or applicable such a grand narrative can be for contemporary men. Notably, it implies that male nature is uniform, that some techniques could work for anyone in any context, and that contemporary cultural developments have no relevance. Whatever the usefulness of such appropriations of EP, there is evidence that evolutionary theory, and in particular evolutionary psychology, provide some manospherians with more than an explanatory framework to think about life. Having convincing explanations for reality can make reality easier to grapple with, as in the case of this MGTOW who says that "after listening to these evolutionary psychology videos, i understand why i can't control some things in my head and why i've had a hard time controlling my body under stress" (MGTOW, 2015). Beyond a better understanding and acceptance of reality, evolutionary theory also provides a powerful narrative repertoire from which manospherians sometimes draw motivation, practical guidance, or even a sense of identity and purpose. Science can get personal, as people use biology to make sense of themselves. This calls for continued scrutiny of popular misconceptions and misunderstandings of science, as the present research strives to do. But this calls above all for reminding the old adage that science cannot dictate values, and just provides information on what is, not on what should be.

Conclusion

Epistemologically, it is extremely difficult to describe "manosphere science" as a whole: Is it all pseudoscience? Politically motivated readings of legitimate science? A scientific veneer on old sexist stereotypes? Pure Darwinian science-fiction? Folk Darwinism? All of these labels have a kernel of truth. Our thorough investigation of the content of manosphere science revealed its many distinct elements. The author of the *Masculine Principle*, for example, goes seamlessly from basic Darwinian principles to patriarchal philosophy of history, with a sprinkling of old misogynistic philosophers and mentions to the outdated Briffault's Law. It takes considerable energy for a critical reader to disentangle all this and identify where empirical research is

¹³⁸⁰ McCaughey, *The Caveman Mystique*, 17.

ideologically twisted, where its findings are made to fit an existing philosophy of history and politics, and what is pure manosphere speculation and fabrication. By pointing out common patterns and identifying certain biases and myths, this dissertation can provide a guide for critiques of manosphere science, as well as for manospherians who care to critically assess their beliefs and compare "manosphere science" to its academic sources.

However, one key dimension is still missing from the analysis. So far, manosphere science has been treated as a fixed and static entity. Yet, this body of knowledge was not built overnight, nor did it appear in a vacuum. It necessarily emerged from decades of transmission, and modification of scientific knowledge by manospherians. For instance, we saw how the male disposability concept originated from MRAs but was later painted with Darwinian colors and percolated to most of the manosphere. When considering this aspect of the phenomenon, many questions emerge: Where do manospherians get their scientific knowledge from? How does it turn into "manosphere science" and propagate? Do evolutionary psychologists play a role in this? This dissertation's next chapter is an exploratory investigation of the circulation and acquisition of scientific knowledge in the manosphere.

CHAPTER VII: SCIENTIFIC KNOWLEDGE ACQUISITION AND CIRCULATION

Exploring the Emergence and Online Propagation of Manosphere Science "Things I would rather do with my time than engage with women:

Build my camper, ski, meditate, play board games with friends, listen to music, roll Jiu Jitsu, camping, hiking, kayaking, psychedelics, study evolutionary psychology, stoicism.

A passion of mine is understanding human psychological traits, from a evolutionary psychological perspective. Every week, I read 3 or so studies to obtain an increase of knowledge and awareness of the human mind and its behaviors" (MGTOW, 2019).

Introduction:

When introducing himself to fellow forum members, the MGTOW quoted above put a strong emphasis on his passion for evolutionary psychology. Like many other manospherians, he claims getting his science directly from academic literature. However, as was shown in the previous three chapters, manosphere science is quite distinct from its academic counterpart. So far, we have attributed this discrepancy to personal and ideological factors, such as negative attitudes towards women, or pursuing a specific political agenda. But the underlying mechanisms behind the emergence and circulation of manosphere science remain unclear. Dynamic online phenomena such as this are difficult to study without the help of algorithmic data analysis techniques, a difficulty which is compounded by the ownership of much of the data by private social media and tech companies. However, with the materials collected for this dissertation-manosphere discourse, interviews, and survey results-, I explore this phenomenon and formulate hypotheses which could help guide further inquiry into the mechanisms behind the popularization of manosphere science, as well as shed light on public understanding of science among Internet communities.¹³⁸¹ Behind the emergence and circulation of manosphere science are several overlapping processes, such as popularization by a few key public manosphere ideologues and highly active anonymous community members, as well as a collaborative knowledge-sharing and curating process, often inscribed in manosphere platforms' very architecture. Lately, with the rise of the manosphere on social media, evolutionary scientists working on sex and mating sometimes have no choice but to interact with manosphere enthusiasts, which adds another layer of complexity to the process.

Section A examines the sources of scientific knowledge in the manosphere, from the original roots of manosphere science in the 1990s to the contemporary digital media landscape. Section B explores the circulation of scientific knowledge in the manosphere, both as a product of the online architecture of manosphere platforms and as the sum of all individual knowledge-sharing practices. Section C is an attempt at disentangling the complex relationship between scientific knowledge acquisition and media scientific literacy. Directions for further inquiry are then sketched. Lastly, section D briefly reviews the role of evolutionary scientists themselves in this process, both in their contacts with the manosphere and their positions on manosphere science. This raises the question of potential interventions for concerned scholars, which is addressed in the dissertation's conclusion.

¹³⁸¹ I am currently collaborating with a team of quantitative researchers under the lead of AI expert Keith Burghardt at the University of Southern California (USC), which investigates the mechanics of manosphere science circulation with AI-driven computational techniques.

A. SCIENTIFIC KNOWLEDGE SOURCES IN THE MANOSPHERE

A.1. The Root Source of Manosphere Science

How and when did Darwinian evolution become so popular in the manosphere? To answer this question, the origins of the manosphere must be reviewed. As explained in Chapter I, the early Men's Rights movement (late 1970s-1980s) was still firmly steeped in the gender constructionist perspective inherited from 1970s Men's Liberation.¹³⁸² In 1993, when Warren Farrell wrote the *Myth of Male Power*, Darwinism was barely mentioned, although biology and genetics started featuring as potential explanations for gender dynamics.¹³⁸³ Around the same time, the PUA community produced its first classic seduction book: Ross Jeffries' 1992 *How to Get the Women You Desire into Bed*.¹³⁸⁴ Although the PUAs of the 2000s became widely associated with the use of evolutionary theory, there was none to be found in Jeffries' early writings. In the mid-to-late-1990s, the PUA community thus witnessed a transformation, from NLP-inspired techniques to evolutionary psychology—a transformation that was to have lasting consequences on the manosphere, as explained by PUA blogger Heartiste:

"The wheels were set in motion, yet the Sexual Revolution 2.0 didn't kick into high gear until the mid 1990s when some very astute and horny guys found in the teachings of darwinistic evolutionary psychology the blueprint for getting what they wanted from women. A shortcut had been discovered. Now, instead of toiling for years as a cog in the machine, giving til it hurt, to win the heart of a marriageable woman in a socially-approved manner, men were, in effect, mimicking the traditional alpha male through a process of data compression."¹³⁸⁵

The man behind this "revolution" was presumably the most influential PUA of that period: Erik von Markovik aka "Mystery." Unfortunately, I was not able to interview Mystery or Neil Strauss to validate this hypothesis.¹³⁸⁶ However, there is substantial evidence to claim that Mystery was a precursor in importing evolutionary psychology to the manosphere. I have already discussed at length the evolutionary underpinnings of his 2007 *Venusian Arts Handbook* and even shown how his everyday life seemed to be suffused with a crude reading of evolutionary theory.¹³⁸⁷ In *The Game*, Strauss describes the required readings for those in the entourage of Mystery:

"Among the required reading for all PUAs were books on evolutionary theory: *The Red Queen* by Matt Ridley, *The Selfish Gene* by Richard Dawkins, *Sperm Wars* by Robin Baker. You read them, and you understand why women tend to like jerks, why men want so many sexual partners, and why so many people cheat on their spouses."¹³⁸⁸

Those are all well-known popular evolutionary science books. Dawkins's 1976 *Selfish Gene* remains to this day the classic introduction to the Modern Synthesis of evolutionary theory and genetics and was even listed the most influential science book of all time in a 2016 Royal

¹³⁸² See Chap. I, A, 47.

¹³⁸³ See Chap. V, A, 230.

¹³⁸⁴ Jeffries, How to Get the Women You Desire into Bed.

¹³⁸⁵ Heartiste, *On Game*, 370.

¹³⁸⁶ The two men are still famous and wealthy entrepreneurs who are quite hard to reach for interviews.

¹³⁸⁷ See Chap. VI, B, 343.

¹³⁸⁸ Neil Strauss, The Game: Penetrating the Secret Society of Pickup Artists (New York: Regan Books, 2005), 234.

Society poll.¹³⁸⁹ Notably, *Sperm Wars* and *The Red Queen* were both published in the 1990s,¹³⁹⁰ which is the time when evolutionary psychology really established itself as its own field, and started influencing popular culture, in particular around gender, relationships, and sex.¹³⁹¹ Just as NLP was a fad of the 1980s, EP seems to have captured the minds of aspiring PUAs in the 1990s-2000s. It was popularized in no small part by a flourishing industry of popular evolutionary science books, in which gifted writers shared scientific discoveries with an eager public. To this day, popular science books remain one of the key media through which laypeople acquire scientific knowledge, and thus feature prominently in this chapter. While I do not know how Mystery became acquainted with evolutionary theory, it is certain that the influx of popular evolutionary science books in the 1990s was instrumental in spreading this knowledge to the manosphere.

The use of evolutionary theory seems to explain part of Mystery's fame and success in the seduction community. As recalled by a PUA in 2014, linking seduction to Darwinism was what made Mystery's "brand" of dating advice more convincing than others: "Mystery have a lot of fillers in his speeches but he was really integrating concepts of evolutionary psychology in his system. Its what made me think that there is something tangible behind pickup" (PUA, 2014). In fact, his role in "importing" evolution is sometimes acknowledged in the PUA community: "Remember: Mystery was the first to elucidate upon the evolutionary path which has created the hardwiring circuits in our brains which act beyond conscious control. All PUA methods act on this in one form or another," a Redditor claims (PUA, 2012).

While many young men presumably discovered the evolutionary behavioral sciences through PUA content in the 2000s, this does not imply that Mystery is at the root of all manosphere science. He might have been the first writer to popularize evolutionary psychological reasoning to manosphere audiences, but there is evidence that many pundits after him independently went to academic research, which can also explain the diversity of manosphere science. For example, Ian Ironwood describes how his fellow manosphere blogger Athol Kay researched love and relationships before starting his own Red Pill blog:

"He began by starting with the Hite Report, one of the original and seminal scientific examinations of modern sexuality, then went to the work of Biological Anthropologist **Dr. Helen Fisher**, an author and Rutgers professor who is also the chief scientific officer at the dating site **Chemistry.com**. If anyone knew about how two people were attracted to each other, after all, it would be the person whose job it was to match them up. She explained the neuropsychiatry of desire and led him to the realm of evolutionary psychology."¹³⁹²

In fact, Ironwood himself recalls how he was offered an editing deal to write a seduction guide in a single month, which led him to interview local PUAs, but also to "research evolutionary

¹³⁸⁹ Claire Armitstead, "Dawkins Sees off Darwin in Vote for Most Influential Science Book," *The Guardian*, July 20, 2017,

https://web.archive.org/web/20240604085806/https://www.theguardian.com/books/booksblog/2017/jul/20/dawkins-sees-off-darwin-in-vote-for-most-influential-science-book, archived June 4, 2024.

¹³⁹⁰ Matt Ridley, *The Red Queen: Sex and the Evolution of Human Nature* (New York: Viking Books, 1993); Robin Baker, *Sperm Wars: The Science of Sex* (New York: Basic Books, 1996).

¹³⁹¹ This is documented in McCaughey, *The Caveman Mystique*.

¹³⁹² Ironwood, *The Manosphere*, e-book location 79%.

biology."¹³⁹³ Would all these manospherians have defaulted to researching evolutionary science if Mystery had not popularized it? This is impossible to know. What is certain, however, is that some manospherians have discovered evolutionary science directly from the academic literature, while others have discovered it secondhand through manosphere content. In order to investigate this further, I asked manosphere survey respondents two questions about their scientific knowledge acquisition.¹³⁹⁴

A.2. Science Learning in the Manosphere

2.a. Sources of Scientific Knowledge

The first of these questions (Source) asked manospherians to rate their favorite sources of scientific content from a list of eight options, on a 0-6 Likert Scale, as shown below:

Figure 7.1: Survey Question on Scientific Knowledge Acquisition (Source)

	Not at all		Occasionally		ly	A great deal	
	0	1	2	3	4	5	6
Discussions on the Internet (e.g., social media, reddit, forums, discord).	-			I			
Research articles published in scientific journals (e.g. found on Google Scholar, SAGE, Springer).	-						
Science and evolution related books (e.g. by Richard Dawkins, David Buss, Steven Pinker).	-						
Manosphere content (e.g. Incels.wiki, A Voice for Men, The Rational Male, CS MGTOW, The Mistery Method).							
TV science shows and nature documentaries (e.g. PBS/Nova, Discovery, National Geographic).	-						
Science videos (e.g. TED, science YouTubers, recorded conferences and classes).	-						
Press articles reporting on science findings (e.g. Psychology Today, Huffington Post, NBC News)	-						
Wikipedia and other educative/encyclopedia websites.							

Do you learn about science through:

The US respondents' counterpart group was asked the same question for comparison, minus the "manosphere content" option. Figure 7.2 provides a breakdown of the two groups' answers:

¹³⁹³ Ibid., 10.

¹³⁹⁴ Those are survey items Source and BestSource. Full survey materials are reproduced in Appendix 14, 524. For methodological details on the survey, see Chapter III, B, 146.

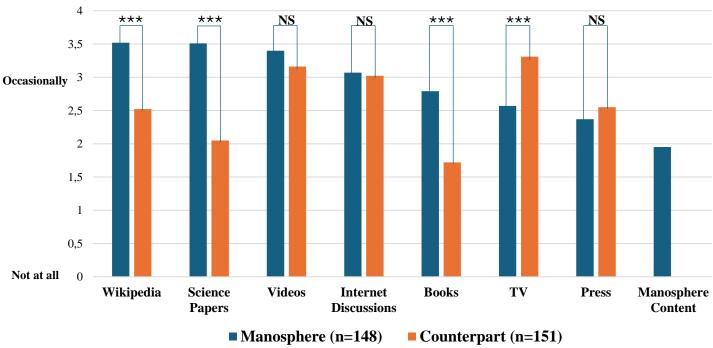


Figure 7.2: Answers on the Scientific Knowledge Acquisition Question (Source)

"Do you learn about science through"

The first general finding from this comparison is that, overall, manospherians tended to give higher ratings than counterpart respondents.¹³⁹⁵ Examining the correlations between ratings revealed that they were almost always positive.¹³⁹⁶ This means that, on average, the more someone reported consuming some form of scientific content (e.g., videos), the more likely they were to also consume other forms of scientific content (e.g., TV). Given this positive relationship between different sources of scientific content, and manospherians' overall higher scores on the science quiz, it seems safe to assume that they tend to consume more scientific content than the general public. When considering specific sources, a few findings are particularly salient.

2.b. Science Papers

Scientific papers were tied for favorite scientific manosphere source with Wikipedia and other online encyclopedias among manospherians. Peer-reviewed journals, which were traditionally confined to libraries or sent to members of scholarly societies, are now massively available online. Although they are often protected by paywalls, there has been a move towards open-access publishing in academia, allowing laypeople as well as professionals to access the

p < .05 = *; p < .01 = **; p < .001 = ***

¹³⁹⁵ To measure whether differences between the two groups were significant, the nonparametric Mann-Whitney U Test was run between groups for the ordinal distributions on each variable, significance levels are reported on figure 7.2.

¹³⁹⁶ For the full correlation matrices, see Appendix 22, 545.

research.¹³⁹⁷ As for paywalls, they have been made easy to bypass thanks to illicit third-party websites, chief among which is Sci-Hub, which has been shown to give access to around 85% of all paywall-protected papers, allowing unprecedented direct access to academic research, as summarized by the data scientists behind this finding: "For the first time, nearly all scholarly literature is available gratis to anyone with an Internet connection."¹³⁹⁸

Direct references to scientific papers have been a recurring feature of our analyses in Chapters IV, V, and VI. Our survey results support the idea that manospherians routinely engage firsthand with research published in peer-reviewed journals, and, in doing so, they are undoubtedly greatly assisted by Sci-Hub. In a Red Pill forum discussion on science, one of the posters, who claims to hold a "PhD in tech," thus strongly recommends learning about science from academic journals:

"You almost never have direct access to science results, no matter what you see in the news. It's always through a website, a magazine, a news channel. Those middle-men always simplify and distort the science results for their benefit, to the point of sometimes stating completely opposite results than the actual scientists. You want to read the truth? go to the source: The actual article" (TRP, 2022).

His point is enthusiastically greeted by others, one of whom teaches fellow Red Pillers how to use the illicit website:

"If you want to read most any published STEM paper ever put out, you can find it at:

Scihubtw. tw

(without the spaces)

Find the DOI handle of the academic paper you want to read (by finding the paper online and copying the DOI identifier from the abstract), and paste it into the search bar at the above website. You will have your paper to read" (TRP, 2022).

As for the incel r/BlackPillScience subreddit, its mission statement claims that "**peer-reviewed science is the primary aim of this subreddit**" and its homepage indicates that "Fulltext articles may be acquired via unpaywall.org or sci-hub."¹³⁹⁹ There is a world of difference between contemporary access to scientific research for laypeople and that of the 1990s, when Mystery and his friends began investigating evolutionary science. In those days, popular science books were their go-to reference, as there were very few alternative options—remember how a young Ross Jeffries allegedly stumbled into NLP by wandering into a bookstore.¹⁴⁰⁰

¹³⁹⁷ Recent empirical investigations have documented that a growing proportion of scientific publishing is open-access, Heather Piwowar et al., "The State of OA: A Large-Scale Analysis of the Prevalence and Impact of Open Access Articles," *PeerJ* 6 (2018): e4375, <u>https://doi.org/10.7717/peerj.4375</u>.

¹³⁹⁸ Daniel Himmelstein et al., "Sci-Hub Provides Access to Nearly All Scholarly Literature," *eLife* 7 (2018): e32822, <u>https://doi.org/10.7554/eLife.32822</u>. There is even evidence of a "Sci-Hub effect," where academic articles available on Sci-Hub have been found to be cited more than the ones who are not, Juan Correa et al., "The Sci-Hub Effect on Papers' Citations," *Scientometrics* 127, no. 1 (2022): 99–126, <u>https://doi.org/10.1007/s11192-020-03806-w</u>.

¹³⁹⁹ R/BlackPillScience, <u>https://web.archive.org/web/20230208103545/https://www.reddit.com/r/BlackPillScience/</u>, archived February 8, 2023. For more on this type of subreddit, see VII, B, 356 below.

¹⁴⁰⁰ Chap. VI, B, 320.

2.c. Other Sources of Scientific Knowledge

Manospherians' other reported top sources of scientific content were simply unavailable before the advent of the Internet, with Wikipedia in first position, followed by science videos in third and internet/social media discussions in fourth. For the manospherians who took this survey, which was only advertised online, it makes little doubt that the Internet is by far the dominant medium for scientific content acquisition. In fact, the only media which were more popular for scientific knowledge acquisition among Prolific respondents were TV and the press, two traditional outlets which predate the Internet. A last notable finding from this survey item pertains to manosphere content. Although this was a survey of manospherians, advertised on manosphere platforms, this was their least favorite reported source of scientific knowledge. This chapter therefore presents ample qualitative evidence that manospherians do access scientific knowledge through a variety of "mainstream" sources, including science books, papers, Wikipedia, or podcasts and YouTube videos. As such, we can safely discard the idea that their only contact with scientific research would be through second or thirdhand manosphere renditions thereof.

To better understand the particulars of the manosphere's preferred scientific sources, I included an open-ended question in the questionnaire (BestSource): "Was there any resource (book, YouTube video, article, course, etc.) on evolution, biology, and natural sciences that was particularly instructional for you?" If they answered "Yes," respondents were then asked to "Please specify, try to be as precise as you can (3 items maximum)." Overall, 40 out of the 148 manosphere respondents decided to answer this open-ended question. I reclassified their answers into the eight categories above, as well as a ninth to include college courses, which some respondents mentioned.¹⁴⁰¹ As mentioned earlier, manosphere content did not feature prominently, with only seven individual sources of content listed out of 65. On the other hand, a majority of listed sources were popular science books (33). This is unsurprising, as science books cover topics in depth and are presumably more likely to make a lasting impression than a Wikipedia page or a short science paper. With eight mentions, Richard Dawkins's Selfish Gene is by far the most cited, confirming its status as one of the most influential science books of all time.¹⁴⁰² In fact, the British biologist was also mentioned by other manospherians who were influenced by his other books The Magic of Reality, and The Blind Watchmaker.¹⁴⁰³ As a tireless advocate for the science of Darwinian evolution, Dawkins-whose nickname is "Darwin's rottweiler"-has also been at the forefront of the fight against religious creationism, which a MRA respondent recalls being instrumental in abandoning his creationist beliefs: "Dawkins and Bill Nye in debates were especially helpful in convincing me that the young earth views I was raised with were completely false."¹⁴⁰⁴ In the counterpart group as well, Richard Dawkins was the most listed by respondents (3 mentions), ahead of Bill Nye (2 mentions). In keeping with their much lower ratings for books on the Source

¹⁴⁰¹ See exhaustive list of answers in Appendix 21, 541.

¹⁴⁰² It must be noted, however, that Dawkins's name was mentioned as an example of science books in the Source question, maybe prompting people to recall reading his work. However, other authors were mentioned as well (David Buss and Steven Pinker) but were not overrepresented in the open-ended survey answers (one mention of Buss).

¹⁴⁰³ Richard Dawkins, *The Blind Watchmaker* (New York: Norton, 1986); Richard Dawkins, *The Magic of Reality* (London: Bantam Press, 2011).

¹⁴⁰⁴ Bill Nye (born 1955) is a famous US science communicator and host of popular science TV shows.

question, counterpart group respondents mentioned fewer books in the BestSource survey item: out of the 31 respondents who answered the open-ended questions, only five mentioned them.

B. HOW DOES SCIENTIFIC KNOWLEDGE CIRCULATE?

B.1. Specific Spaces Dedicated to Sharing Scientific Research

Survey results indicate that manospherians engage with a wide variety of scientific content outside of manosphere spaces. However, this content might have been accessed through a hyperlink which was itself shared on a manosphere platform, or it might be a book which was cited or recommended on a manosphere forum or subreddit. Given the limitations of the data collected for this dissertation, it is impossible to assess the prevalence of different potential pipelines in accessing scientific content. However, there is evidence that many manosphere online spaces are specifically designed to propagate scientific knowledge.

1.a. Online Encyclopedias

Incels.wiki has been a recurring feature of this dissertation's analyses. With more than 1,400 entries, this incel-maintained encyclopedia serves many purposes for the community.¹⁴⁰⁵ As argued by a 2023 report of the Institute for Strategic Dialogue, it is used "to educate outsiders on incel concepts, advocate for the accuracy of the incel worldview, foster a shared sense of incel identity, and push back on perceived misrepresentations."¹⁴⁰⁶ This report also provides invaluable data to assess the website's traffic, showing that incels.wiki received around half a million visits each month between August and October 2022, representing 285,718 unique monthly users, who consulted an average of six pages during their visit, for an average duration of 3 minutes and 41 seconds.¹⁴⁰⁷ While some entries on the encyclopedia have relatively few sources, others provide citations towards dozens, if not hundreds of peer-reviewed science papers.¹⁴⁰⁸ This is relatively similar to what can be found on Wikipedia itself. However, incels.wiki sometimes goes further than Wikipedia in foregrounding academic research, dedicating entire entries to paraphrasing and interpreting research papers, i.e., the "Scientific Blackpill" and its supplemental page, which have

¹⁴⁰⁵ Number of entries as of June 5, 2024.

¹⁴⁰⁶ Meg Roser, Charlotte Chalker, and Tim Squirrell, "Spitting out the Blackpill: Evaluating How Incels Present Themselves in Their Own Words on the Incel Wiki" (London: Institute for Strategic Dialogue, 2023), 7. The ISD is a UK-based nonprofit think tank aimed at producing research and providing policy solutions against "extremism, hate and disinformation," <u>https://web.archive.org/web/20240605103728/https://www.isdglobal.org/</u>, archived June 5, 2024.

¹⁴⁰⁷ Ibid., 8.

¹⁴⁰⁸ For a page without any academic references, see Incels.wiki, "Gymcel," <u>https://web.archive.org/web/20210107152129/https://incels.wiki/w/Gymcel;</u> for a page with hundreds, see incels.wiki, "The Scientific Blackpill," <u>https://web.archive.org/web/20210107145413/https://incels.wiki/w/Scientific_Blackpill</u>, both archived January 7, 2021.

been examined at length in this dissertation.¹⁴⁰⁹ The most cited journal in this entry is *Evolution and Human Behavior*, the most prestigious journal in the evolutionary behavioral sciences.¹⁴¹⁰

Wiki4Men is a MRA encyclopedia with 1,316 entries, but seems to be less central to the community than incels.wiki is among incels.¹⁴¹¹ Its entries tend to be shorter, sometimes pasted from Wikipedia, and they cite much less academic research than incels.wiki. In both those wikis, very few links redirect to other manosphere websites, providing evidence that a pipeline exists from manosphere platforms to mainstream Wikipedia, press, or scientific content.

1.b. Subreddits Dedicated to Sharing Research Papers

On Reddit alone, there are no less than six forums dedicated to sharing academic research papers congruent with manosphere ideologies: r/mensrightslinks (MRA), r/MensRightsScience (MRA), r/Male Studies (MRA), r/puascience (PUA), r/redpillscience (TRP), and r/BlackPillScience (incels). While our research has particularly focused on appropriations of evolutionary theory and evolutionary scientific research by manospherians, those subreddits reveal much more diversity, as manospherians are wont to share research from medicine, law, or social psychology. These subreddits are explicitly designed as spaces solely dedicated to sharing academic research. The rules of the r/Male_Studies subreddit even prohibit debating: "This is NOT a debate sub. Normal posts are designed for disseminating research, asking questions about particular studies and offering conjecture as to where a study fits within the larger body of research on a given topic."1412 Much as Reddit was first conceived as a news aggregator ("the front page of the Internet"), those manosphere subreddits allow thousands of manospherians to keep up with the scientific research relevant to their ideology, interests, and grievances. They have, to my knowledge, never been studied together, yet they could provide fascinating insights on the circulation of academic research among online activist communities.

1.c. Science Sections and Tags on Manosphere Platforms

On large manosphere platforms which are not exclusively dedicated to science, there are sometimes sections dedicated to sharing and discussing academic research. On forums, this can be a subsection, and on Reddit, a suite of tags called "flairs" allows posters to indicate the theme of their posts. Each subreddit has its own set of flairs, which provide insight into the interests and focuses of a given community.¹⁴¹³ Relevant to our interests, the r/TheRedPill subreddit has a "Science" flair, while the main MRA website A Voice For Men has a tag for "Sociobiology." On

¹⁴⁰⁹ E.g., on pages 173-174; 190-191; and 246-247.

¹⁴¹⁰ Out of all the evolutionary behavioral science journals listed on page 119 above, *Evolution and Human Behavior* had the highest h-index (125) as of June 5, 2024, as indexed on the specialized website Scimagojr.com, <u>https://web.archive.org/web/20240605180534/https://www.scimagojr.com/</u>, archived June 5, 2024.

¹⁴¹¹ Number of entries as of June 5, 2024, <u>https://web.archive.org/web/20240605180726/https://wiki4men.com/wiki/Category:Featured Articles</u>, archived June 5, 2024.

¹⁴¹² r/Male_Studies, <u>https://web.archive.org/web/20230208104704/https://www.reddit.com/r/Male_Studies/</u>, archived February 8, 2023.

¹⁴¹³ Flairs can thus help researchers select the most relevant content for their analysis of Reddit communities, e.g., Meghan Sit et al., "Youth Mental Health Help-Seeking Information Needs and Experiences: A Thematic Analysis of Reddit Posts," *Youth & Society* 56, no. 1 (2024): 24–41, <u>https://doi.org/10.1177/0044118X221129642</u>.

the main incel forum, incels.is, several tags can signal posts directing to scientific research, such as "Blackpill" or "Theory," often accompanied by "[Study]" in the thread title. Even if a website does not specifically include a science section or tag in its architecture, users can spontaneously generate posts aiming at sharing scientific research or at asking others for scholarly recommendations. This calls for analysis at the individual level: what online practices do manospherians engage in to share scientific knowledge and learn from their peers?

B.2. Individual Practices

2.a. Asking for Academic Reading Recommendations

On manosphere forums or subreddits, users sometimes ask others for reading recommendations to learn about a topic in-depth. Oftentimes, academic research is specifically sought as a trustworthy source of information:

"I'm interested to know where I can find evidence-based research on 'facial attractiveness' and getting laid?" (MGTOW, 2019).¹⁴¹⁴

On PUA platforms for instance, one finds many threads created by curious members asking for evolutionary psychology reading advice:

- "What's a good source for evolutionary psychology and survival and reproduction value? These are concepts that I've just come to accept because they sound true, but I don't know of any academic books that talk about this and would like to find a decent source" (PUA, 2009).
- "What are some good evolutionary psychology books? I know recommended reading include Sperm Wars, The Red Queen, and the Selfish Gene. What else would you add to this list?" (PUA, 2009).
- "Has anyone here studied evolutionary psychology/ behavioral science?" (PUA, 2012).
- "Hello. I am bookworm. What academic textbook/ online courses, are best for getting background information for deeper understanding PUA and related topics. So far I have read "Human Evolutionary Psychology" by Dunbar et al. It was nice, but I want more wide knowledge" (PUA, 2015).

Those requests are always met favorably by redditors, who share their favorite recommendations. On PUA platforms, those sometimes come from the seduction community itself, e.g., "If you can find early versions of The Venusian Arts Manual by Mystery (it's out of print but still circulating) it goes into evo psych in detail. And every system created since the Mystery Method is based on that system in some way" (PUA, 2016). However, most of the recommendations are academic research. In fact, one of the posters who explicitly asked for academic sources politely declined a redditor's suggestion of PUA resources: "I will look at other

¹⁴¹⁴ In response to the query, another MGTOW redditor posted a link towards this paper: Krzysztof Kościński, "Life History of Female Preferences for Male Faces," *Human Nature* 22, no. 4 (2011): 416–38, https://doi.org/10.1007/s12110-011-9123-7.

things, but it is not exactly what I had in mind. I wanted more of something like undergraduate/graduate-level textbooks, interesting papers, and so on" (PUA, 2015). Some users evidently take great pains to provide detailed answers and help their fellow manospherians access quality academic research, as in this following example:

"The Selfish Gene – Richard Dawkins. As I understand it, this book more or less kicked off the resurgence of interest in the whole idea of "sexual selection" and kinda jump started the field of evopsych.

The Red Queen – Matt Ridley

Sperm Wars – Robin Baker

The Evolution of Desire – David Buss

The Mating Mind – Geoffrey Miller

The Moral Animal – Robert Wright

How The Mind Works – Steven Pinker

(all of Pinker's other books would probably be of interest as well. It's 5 total books, making up two trilogies: that is, book 5 is the 3rd book of 2 separate trilogies. They're not all strictly about evolutionary psychology, but it all sort of ties together)

Evolutionary Psychology: The New Science of the Mind: David Buss

The Handbook of Evolutionary Psychology: David Buss

Natural Selection and Social Theory: Selected Papers of Robert L. Trivers: Robert Trivers

Also, the Wikipedia Page on EvoPsych has some good information on it.

There is also David Buss's homepage @ The University of Texas

and this "evolutionary psychology primer" by Leda Cosmides & John Tooby

And lot of other great information from the UCSB Center for Evolutionary Psychology (home of Leda Cosmides, one of the key figures in EvoPsych research)

Edit: add a couple of other links

The evolutionary psychology subreddit

The Evolution of Cooperation" (PUA, 2009).

While this level of detail is not typical of the manosphere, it showcases the willingness of some to spend time in helping others access scientific content—as is the case of the wiki curators

too.¹⁴¹⁵ It also demonstrates that some manospherians have a thorough knowledge of the academic literature, as this poster's list features the luminaries of the field of EP one could have expected to find in such a list fifteen years ago (Tooby, Cosmides, Buss, Pinker, as well as sociobiology/evolutionary biology forebears Dawkins and Trivers), with the PUAs' usual focus on sex and mating research (Baker, Miller). Two preliminary conclusions can be drawn. Firstly, knowledge is routinely shared on manosphere platforms through users' exchanging content. Whether on forums or reddit, a collaborative spirit prevails and requests for reading materials are always met favorably. Secondly, a minority of very active users, or "supersharers," such as the one cited above, might possibly be responsible for the majority of the information and hyperlink sharing. This is a likely possibility, as such patterns have been found in fake news dissemination on social media,¹⁴¹⁶ or amateur genealogy websites.¹⁴¹⁷ This highlights the importance of looking at individuals who share scientific knowledge and their practices, as is the focus of the next section.

2.b. Sharing Scientific Research Online: The Case of Paper Repositories

On manosphere forums, a user sometimes creates a thread to share scientific research congruent with the community's beliefs, calling for others to do the same. Those threads tend to become quite popular, gathering a lot of attention from other members, who contribute with their own hyperlinks towards academic research. Those forum threads reveal many dynamics of knowledge sharing among manosphere communities. Firstly, they confirm the regularity with which science papers get accessed and shared by manospherians. There seems to be a tacit understanding that those threads are meant for sharing primary scientific research, as there are remarkably few secondary scientific sources shared (such as YouTube popularization videos, Wikipedia articles, or press articles). In the incel thread called "Post here the most blackpilled studies/paper you know of, let's compile them," the forum community was explicitly trying to create its own repository of congenial research. When a user remarked that "Half of these already is on the scientific blackpill thread in incel inside wiki" (incel, 2020), he was promptly chastised by another member: "You Mr. Genius we want to post them and compile them here!" (incel, 2020). As in the Scientific Blackpill wiki page, which does not just link to scientific papers but also summarizes and interprets them, posters do not solely post hyperlinks. They often summarize the findings or extract some charts and graphs for others to read. If such data were readily available, it would be interesting to study if members actually click those links and engage with the research firsthand, or whether they just read the brief summaries of their peers.

Another dynamic which appears on those threads is "supersharing": of the 199 hyperlinks shared on this forum thread, 158 were shared by a single user, 33 by another one, and the remaining eight links by six different users. In order to assess the prevalence of scientific knowledge sharing in the manosphere, respondents on the survey were presented with a 0-6 Likert scale and asked the

¹⁴¹⁵ This was much appreciated by the poster who had asked for recommendations, and who commented back: "Wow thanks for all the good book recommends. I swear to god this is the best subreddit of the bunch" (PUA, 2009).

¹⁴¹⁶ Sahar Baribi-Bartov, Briony Swire-Thompson, and Nir Grinberg, "Supersharers of Fake News on Twitter," *Science* 384, no. 6699 (2024): 979–82, <u>https://doi.org/10.1126/science.adl4435</u>.

¹⁴¹⁷ Heather Willever-Farr, Lisl Zach, and Andrea Forte, "Tell Me about My Family: A Study of Cooperative Research on Ancestry.Com," in *Proceedings of the 2012 iConference* (New York: Association for Computing Machinery, 2012), 303–10, <u>https://doi.org/10.1145/2132176.2132215</u>.

following question: "How often do you engage in the following activities: - Sharing scientific content on social media, forums, reddit" (OnlineActivity).

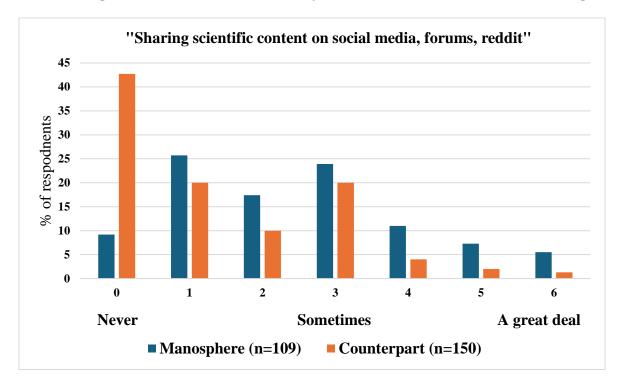


Figure 7.3: Answers on the Survey Item About Scientific Content Sharing

There is a striking difference between manosphere and counterpart respondents, 42.7% of whom reported never sharing scientific content, against only 9.2% of manospherians. This is conclusive evidence that this practice is overall much more common in the manosphere than in other online spaces.¹⁴¹⁸ However, this measure does not really allow to identify potential supersharers. This is a limitation of the survey design. Indeed, respondents who said they shared "a great deal" of scientific content might do it at twice the rate of those responding "sometimes," or they may be doing it a hundred times more. However, given the very skewed participation rates in previous studies of manosphere forums, with 0.5% of super-posters producing half the content on the main MGTOW forum for example, it seems likely that at least some of these respondents are super-sharers.¹⁴¹⁹ This calls for more research into the phenomenon, especially since it is not limited to the manosphere. Indeed, Alt-Right and white supremacist online communities have also been found to maintain similar "informal journal clubs," where they gather and dissect the latest papers in population genetics, their discipline of choice.¹⁴²⁰

¹⁴¹⁸ A nonparametric Mann-Whitney U-Test was run to compare the two ordinal distributions, U = 11454.5, p < .001.
 ¹⁴¹⁹ Wright, Trott, and Jones, "The Pussy Ain't Worth It, Bro': Assessing the Discourse and Structure of MGTOW," *Information, Communication & Society* 23, no. 6 (2020): 908–25, <u>https://doi.org/10.1080/1369118X.2020.1751867</u>.
 ¹⁴²⁰ Michael Price, "It's a Toxic Place.' How the Online World of White Nationalists Distorts Population Genetics," *Science News*, May 22, 2018, https://doi.org/doi: 10.1126/science.aau2571.

2.c. Citing Academic Research in Online Debates

In manosphere communities, citing academic research is regarded as the most authoritative way to back up empirical claims. Therefore, when people disagree on forum or Reddit discussions, as is commonplace in such environments, research can be cited by one or both sides of the argument to win the day. For example, after a poster claimed that "your sperm count increases when you watch porn. It increases the most if it's porn with one woman and two or more men fucking her" (PUA, 2009), another one cast doubts on this assertion: "[T]his is a thread about scientific facts vs myths and junkscience. Got an article to back this one up? Sounds a bit stretched to me, especially the second part" (PUA, 2009). After citing an article on the matter, the first PUA immediately convinced the other one who courteously conceded being wrong: " big bad and I was sure u were being sarcastic" (PUA, 2009).¹⁴²¹ Unsurprisingly, research is mostly cited in debates about empirical issues, such as "Doesn't teeth whitening hurt your teeth in the long run?" (TRP, 2014). The tone of these discussions is usually rather courteous, with some users even citing research proving their opponent right:

- Poster 1: "Apes and almost all other mammals, show their teeth as a sign of aggression [...]
- Poster 2: "Wrong. Apes show teeth as submission. Many other animals show teeth as aggression but apes and Homo sapiens are different. There are countless studies to back this up."
- Poster 1: "My mistake. It seems you are correct. Source: <u>http://primate.uchicago.edu/1999JCP.pdf</u>" (TRP, 2014).

Sometimes however, debates get more heated and scientific research can be cited in order to aggressively dismiss opposing viewpoints. Before incel communities were banned from Reddit, they drew crowds of curious "normies," which often resulted in lengthy debates. When women tried to argue with incels about blackpill generalizations on female nature, they were told to "post studies" (incel, 2018). A male "normie" arguing against the blackpill worldview was also met with the same attitude: "I gave you studies and you refuse to accept them" (incel, 2018). When describing her own romantic preferences to contradict an incel, a woman saw her experience dismissed. She claimed not to be attracted to conventionally beautiful "Chad" faces and took her own boyfriend as proof. The incel retorted with the dual mating hypothesis and cited a study in *Evolution and Human Behavior*:

"It's well documented that women's preference for facial masculinity increases when they ovulate. This leads people to conclude that this is part of women's dual mating strategy, in which they may have a safe less masculine partner to take care of them, and a very masculine partner to impregnate them.

https://web.archive.org/web/20240414063356/https://www.sciencedirect.com/science/article/abs/ pii/S1090513899000331" (incel, 2018).¹⁴²²

¹⁴²¹ The cited article was the following: Judy Skatssoon, "Porn Makes Sperm Better Swimmers," *News in Science*, June 8, 2005,

https://web.archive.org/web/20231225170725/https://www.abc.net.au/science/news/stories/s1386177.htm, archived December 25, 2023.

¹⁴²² The cited paper was the following: Ian Penton-Voak and David Perrett, "Female Preference for Male Faces Changes Cyclically: Further Evidence," *Evolution and Human Behavior* 21, no. 1 (2000): 39–48, https://doi.org/10.1016/S1090-5138(99)00033-1.

Weary of seeing her subjective experience ignored through generalizations drawn from scientific research, the woman replied:

"Ok, let me try again. I DO NOT FIND CHADS ANY. MORE ATTRACTIVE THAN ANYONE ELSE AND IF ANYTHING I WOULD AVOID THEM AT ALL COSTS. NOT BECAUSE OF MY SELF ESTEEM. BECAUSE I DON'T CARE ABOUT LOOKS I WANT SOMEONE WHO TREATS ME LIKE AN EQUAL" (female poster on incel platform, 2018).

About the ovulatory shifts in mate preference, she adds that she "never experienced this when I'm ovulating," and that during her period, she becomes "aggressively horny and I am all over my boyfriend as soon as I see him, not all over chads" (female poster on incel platform, 2018). However, in incel spaces, it seems that anecdotal evidence provided by women is never taken seriously. As avid consumers of scientific research on female sexual and romantic behavior, incels position themselves as authorities on the matter, and weaponize research to disregard individual female experiences contradicting their worldview. This echoes recurring patterns from our analyses: firstly, the focus on explaining female behavior through scientific research; secondly, the tendency to mistake statistical trends for absolute categorical truths about female nature. Thus, even when this woman above claims to contradict the tendency, she is not trusted: "I just don't have any reason to believe you when the evidence contradicts you" (incel, 2018). Yet, just as an anecdotal observation cannot refute a correlation, a correlation cannot be used to dismiss an individual data point such as this woman's testimony. Here, although scientific research is highly prized by incels, its findings are exaggerated and weaponized to enforce a rigid incel worldview.

Whether in a polite spirit of collaborative inquiry or as a confrontational debating technique, academic research is often produced in the course of online manosphere discussions. Since these debates are public, this is presumably also a common way by which academic research spreads online. Survey respondents were therefore asked how often they engaged in this online activity: "Citing scientific content and data to prove your points." (OnlineActivity)

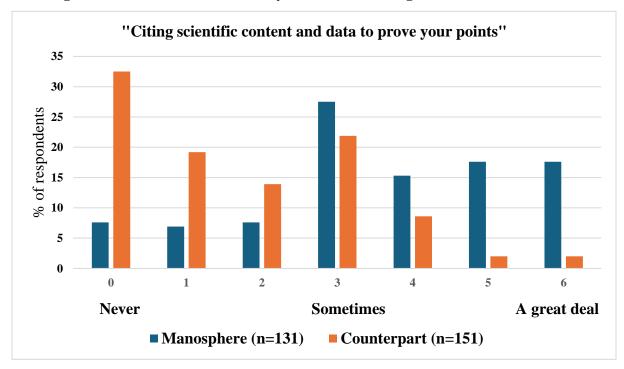


Figure 7.4: Answers on the Survey Item About Citing Research in Online Debates

Those answers follow a pattern very similar to those on online science sharing. Manospherians reported citing scientific content at much higher levels than the counterpart group.¹⁴²³ This seems to be deeply ingrained in the culture of the manosphere. There are indications that some manospherians do click the links and sometimes get swayed by relevant scientific citations. For instance, at the end of a debate between Red Pillers, one told the other: "Yet, you provide no links to prove your point. Without this, There can be no check-mate" (TRP, 2020). The other replied "Yes, I accept my loss. It's not worth investing that much of my time – and in the end no one changes his mind" (TRP, 2020), to which the other answered that he does in fact change his mind when confronted with convincing evidence:

"I cannot speaking for the ability of other's minds to be changed.

However, I can confirm that at present, your lack of links has failed to change mine.

FWIW [For What It's Worth], I score high in trait Openness. Some others reading your posts on the Internet may be also. We're the type that click the link" (TRP, 2020).

Many discussion topics in the manosphere revolve around empirical issues: what is the impact of endocrine-disrupting chemicals on organisms? What drives female mate choice? What are the side effects of anabolic steroids? As such, some of the most popular forum or reddit threads deal with issues that are undergoing scientific inquiry. While some posts share scientific research to prove their points, most do not, which calls for investigation into the individual differences

 $^{^{1423}}$ A nonparametric Mann-Whitney U-Test was run to compare the two ordinal distributions, U = 15437.5, p < .001.

underlying online behavior. In the next section, I provide analyses survey answers and sketch some directions for future investigations of this complex phenomenon.

C. EXPLORING SCIENTIFIC KNOWLEDGE ACQUISITION AND LITERACY IN THE MANOSPHERE

As exemplified by the concept of super-sharers, there is immense variability in levels of engagement in online communities. For some people, such as content producers and pundits, the manosphere is a full-time job, while for others, it is a more of a hobby. With discourse analysis alone, it is difficult to understand the individual differences behind those different profiles. In my manosphere survey, I have collected both people's stated favorite sources of scientific content and their answers on a science quiz seeded with distractors. This allows to address a crucial, albeit thorny question: can we assess if some sources of scientific content make for a better understanding of science? Are some media particularly conducive to specific misconceptions?

C.1. Sources of Scientific Content and Misconceptions

My analyses have highlighted several potential misconceptions of the life sciences, which were addressed in the previous chapters, such as the intentionalistic fallacy or extreme biological determinism.¹⁴²⁴ Overall, misconception levels were lower in the manosphere than in the counterpart group, since manospherians tended to select correct answers much more often. However, regardless of respondents' group, we might observe that some sources of scientific content were more conducive to committing specific misconceptions. In order to assess this, each respondent was granted a misconception score, corresponding to the number of distractors selected for each misconception. For more statistical robustness, I only computed such scores for misconceptions which had no less than three distractors.¹⁴²⁵ Lastly, each of these scores was computed into a total misconception score as well (i.e., someone who selected two group selectionist distractors would have a Group Selection score of two). It was now possible to examine whether answers on the Source question correlated with specific misconceptions. The correlation matrices are presented below in tables 7.1, 7.2, and 7.3. Since the media rating variables are ordinal, these correlations are Kendall rank correlation coefficients, which can be interpreted similarly to Spearman's correlation coefficients for continuous variables. Since these matrixes contain multiple tests, there is a risk of false positive. In order to account for that, I ran the Benjamini-Hochberg procedure, with a false discovery rate of five percent. Significant correlation coefficients which are below this threshold are highlighted in green and italicized in tables 7.1, 7.2, and 7.3.

The first observation to make is that most significant correlations are negative. This means that the more someone learns about science, regardless of the media source, the fewer misconceptions they commit. There are just two exceptions to this pattern. Firstly, people who learn about science from TV were more prone to select group selectionist distractors (tables 7.1

¹⁴²⁴ See respectively Chap. V, E, 263-265; Chap. IV, B, 188.

¹⁴²⁵ Those are extreme environmentalism (Blank Slate), extreme biological determinism, intentionalistic fallacy, sex differentialism, and group selection. For details of all misconceptions and their associated distractors, see Appendix 14, 524.

and 7.3). I hypothesize that this might be due to nature and wildlife documentaries, which might simplify animal behavior by framing it through its role "for the good of the species," and not as a result of gene-level evolutionary processes.¹⁴²⁶ Secondly, learning about science from manosphere content was correlated with higher rates of committing the intentionalistic fallacy (table 7.1). This is congruent with our identification of this fallacy in manosphere science.¹⁴²⁷

	Extreme Environmentalism	Extreme Biological Determinism	Intentionalistic Fallacy	Sex Differentialism	Group Selection	Misconceptions Total
Social	-0.12	0.11	0.10	-0.02	0.06	0.06
Media						
Papers	-013	-0.11	0.11	-0.03	0.00	-0.03
Books	-0.14	-0.14	-0.08	0.02	-0.14	-0.18**
TV	0.04	-0.04	-0.04	0.11	0.16*	0.07
Videos	-0.07	0.05	0.04	0.09	-0.01	0.05
Press	-0.14	-0.02	0.00	0.06	-0.03	-0.03
Wikis	-0.07	-0.07	-0.01	0.00	0.02	-0.05
Manosphere	-0.11	0.08	0.22**	0.06	-0.02	0.08
Content						

Table 7.1: Media and Misconceptions among Manosphere Respondents (n=148)

p < .05 = *; p < .01 = **; p < .001 = ***

	Extreme Environmentalism	Extreme Biological Determinism	Intentionalistic Fallacy	Sex Differentialism	Group Selection	Misconceptions Total
Social	-0.13	-0.07	0.00	-0.04	-0.01	-0.08
Media						
Papers	-0.17*	0.09	-0.12	-0.07	0.07	-0.10
Books	-0.24***	-0.02	0.02	-0.01	-0.02	-0.12
TV	-0.08	0.07	-0.01	-0.04	0.09	-0.01
Videos	-0.21**	-0.13	0.03	-0.02	0.08	-0.10
Press	-0.12	-0.07	0.08	-0.03	0.04	-0.06
Wikis	-0.13	0.04	-0.12	-0.08	0.10	-0.04

p < .05 = *; p < .01 = **; p < .001 = ***

¹⁴²⁶ This has to my knowledge never been studied. However, a study did find that the framing of evolution in wildlife documentaries was more teleological than the one of evolutionary biologists. My survey results might indicate that this is the case for crude group/species selectionism too, Meryl Aldridge and Robert Dingwall, "Teleology on Television?: Implicit Models of Evolution in Broadcast Wildlife and Nature Programmes," *European Journal of Communication* 18, no. 4 (2003): 435–53, <u>https://doi.org/10.1177/0267323103184001</u>.

¹⁴²⁷ For exploration of the intentionalistic fallacy in manosphere science, see Chap. V, E, 263-265.

Extreme	Extreme	Intentionalistic	Sex Differentializm	Group Selection	Misconceptions
Environmentalism	Determinism	Fanacy	Differentialism	Selection	Total
-0,13*	0,02	0,05	-0,03	0,02	0,00
-0,23***	-0,04	0,01	-0,09	0,00	-0,14**
-0,25***	-0,11*	0,00	-0,03	-0,09	-0,19***
0,03	0,04	-0,04	0,07	0,14**	0,06
-0,16**	-0,05	0,04	0,02	0,04	-0,04
-0,11*	-0,04	0,04	0,02	0,02	-0,03
-0,15**	-0,05	-0,05	-0,09	0,03	-0,10*
	Environmentalism -0,13* -0,23*** -0,25*** 0,03 -0,16** -0,11*	Environmentalism Biological Determinism -0,13* 0,02 -0,23*** -0,04 -0,25*** -0,11* 0,03 0,04 -0,16** -0,05 -0,11* -0,04	Environmentalism Biological Determinism Fallacy -0,13* 0,02 0,05 -0,23*** -0,04 0,01 -0,25*** -0,11* 0,00 0,03 0,04 -0,04 -0,16** -0,05 0,04 -0,11* 0,004 -0,04	Environmentalism Biological Determinism Fallacy Differentialism -0,13* 0,02 0,05 -0,03 -0,23*** -0,04 0,01 -0,09 -0,25*** -0,11* 0,00 -0,03 0,03 0,04 -0,04 0,07 -0,16** -0,05 0,04 0,02 -0,11* -0,04 0,02 0,02	Environmentalism Biological Determinism Fallacy Differentialism Selection -0,13* 0,02 0,05 -0,03 0,02 -0,23*** -0,04 0,01 -0,09 0,00 -0,25*** -0,11* 0,00 -0,03 -0,09 0,03 0,04 -0,04 0,07 0,14** -0,16** -0,05 0,04 0,02 0,02 -0,11* 0,004 0,02 0,04

 Table 7.3: Media and Misconceptions in Both Samples (n=299)

p < .05 = *; p < .01 = **; p < .001 = ***

In most cases, correlations were negative, indicating that some media sources might be effective at reducing misconceptions of evolutionary science.¹⁴²⁸ Overall and across the two samples, science books had the strongest impact, followed by science papers and Wikipedia (table 7.3).¹⁴²⁹ Interestingly, the misconception which seems the most liable to be addressed by scientific sources was extreme environmentalism or the "blank slate" view of human nature. In the wake of Steven Pinker's influential *The Blank Slate*, this has indeed become a key issue for evolutionary scientists, who strive to underline the influence of biological factors on human behavior and to defend the relevance of their disciplines.¹⁴³⁰ These results indicate however that scientific publication and popularization are currently less efficient at dispelling extremely deterministic views of human behavior, maybe because this bias is simply addressed less frequently. While virtually all scientists agree on an interactionist framework to make sense of the nature/nurture conundrum, evolutionary psychologists have been very active in upholding the importance of "nature," and could thus do more to also combat simplistic genetic deterministim as found among incel communities.

C.2. Takeaways and Future Directions

Using discourse analysis and survey results, this chapter attempts to explain how scientific knowledge is acquired and propagated by manospherians. This analysis has two main limitations. Firstly, it studies a dynamic process: people click on hyperlinks, engage with content, decide to share or discuss it online, etc. In order to better understand those dynamics, some other data would need to be analyzed through algorithmic techniques.¹⁴³¹ Secondly, there is no theoretical model

¹⁴²⁸ These are correlational data, so there might not be any causal link. However, it seems reasonable to assume that there is a direct causal link between sources of scientific knowledge acquisition and understanding of science. I am therefore using causal language throughout this section.

¹⁴²⁹ Although the effect size of these correlations is rather small, respectively -0.19; -0.14; and -0.10.

¹⁴³⁰ Steven Pinker, The Blank Slate: The Modern Denial of Human Nature (New York: Penguin Books, 2002).

¹⁴³¹ An example of such fruitful research approach is the observation of potential algorithmic radicalization pathways on YouTube, Manoel Horta Ribeiro et al., "Auditing Radicalization Pathways on YouTube," *Proceedings of the 2020*

that allows to make sense of the phenomenon as a whole. On the one hand, it is linked to science learning and science knowledge acquisition, which is a well-trodden question in education sciences.¹⁴³² On the other hand, understanding the manosphere implies factoring in political factors, as well as the functioning of social media algorithms, which requires drawing on sociology and political science, as well as computer science, and media studies. To boot, very little is yet known about the sociodemographic profile of manospherians.

As such, this chapter does not claim to be developing a comprehensive model for the emergence and propagation of manosphere science. However, it has revealed several key elements. Firstly, the initial interest for evolutionary science in the manosphere seems to have come from the PUA community in the late 1990s-early 2000s. These original popularizers had a rather crude understanding of evolutionary psychology, and never directly cited scientific research. At the beginning, popular science books such as Richard Dawkins's *Selfish Gene*, Robin Baker's *Sperm Wars*, or Matt Riddley's *The Red Queen* were instrumental, as Internet science learning was in its infancy—Wikipedia was created in 2003, YouTube in 2005. Today, manospherians report learning about science from a variety of sources, chief among which are Wikipedia, science papers, and science videos. Significantly, manosphere.

It is therefore clear that manospherians do not acquire their scientific knowledge mostly from the manosphere. So how is manosphere science built and by whom? From manosphere wikis to paper repositories and debates on reddit and forums, scientific research is a prized epistemic currency, which people often share. In this collaborative process of knowledge circulation, two elements require further investigation. Firstly, there is a collective selection and curation process, by which research congruent to the community's ideology is shared and commented on. This process could be studied using algorithmic tools, for example by examining what content features make specific papers more likely to be shared in the manosphere, or what types of hyperlinks towards scientific content receive more clicks and engagement (as measured by time spent browsing the web page for instance).

Secondly, I hypothesized that this seemingly collaborative process was in fact driven substantially by a minority of supersharers. This should firstly be quantitatively assessed on a large scale by studying patterns of science hyperlink sharing across manosphere communities. If this proves to be true, more needs to be known about those supersharers: What is their interest in science? What is their involvement in the manosphere? Their sociodemographic profile? This is of course extremely difficult, as social media users are often anonymous. However, a recent groundbreaking study has allowed to identify the profile of supersharers of fake news on US social media, finding that those were more likely to be older white Republican women, originating from Texas, Florida, and Arizona.¹⁴³³ The authors acknowledge that little is yet known about those

Conference on Fairness, Accountability, and Transparency (2020): 131–41, https://doi.org/10.1145/3351095.3372879.

¹⁴³² See Chap. II, B, 127 for a review of research on evolutionary scientific literacy and knowledge-acquisition.

¹⁴³³ Baribi-Bartov, Swire-Thompson, and Grinberg, "Supersharers of Fake News on Twitter," this result was obtained by linking US voter registration databases to the individual Twitter accounts of the people in the database (using first

supersharers' motives: "We do not know whether supersharers' actions are a form of political activism, unintentional, or an intentional attempt to misinform others," they write.¹⁴³⁴ Reaching out to the individual accounts of those supersharers and conducting qualitative interviews with them would allow to get insights into their intentions, for a thorough understanding of the phenomenon at both the structural and individual levels. A similar mixed-methods research process could be applied to manosphere supersharers, about which virtually nothing is known at the moment.

There is however a paradigmatic profile of supersharer, which is the manosphere writer, blogger, or YouTuber. As revealed by the case of Mystery or by Rollo Tomassi, who was a recurring character in my analyses, a few high-profile public individuals can have a tremendous influence on manosphere science. Given the amount of autobiographical content in their writings, it is easier to know more about their sociodemographic profile and personal trajectories. However, interviews should ideally be conducted to better assess motives and engagement with science of key manosphere figures like Mystery, whose role in building manosphere science was instrumental. For example, in my interview with Warren Farrell, I saw how his focus had changed since his feminist writings of the 1970s, as he now strives to integrate more biology into his understanding of gender dynamics, and referred to alpha males, mating behavior among elks, or testosterone levels in the course of our conversation.¹⁴³⁵

Furthermore, the manosphere has no border, and English is far from being its only language. Even though this research has focused on English-speaking communities, the emergence and propagation of manosphere science also crosses linguistic and national barriers and is undoubtedly a global phenomenon. Is manosphere science simply translated from English to other contexts, or are there geographic variations? This is not something that the data used in this dissertation can shed light on, yet there is anecdotal evidence that translation does occur, for instance in this comment on A Voice For Men, where a reader spontaneously offers to translate an article—"I'm translating this great article to Spanish. How can I contribute with that to AVFM en Español," to which the website administrators answer favorably and gratefully (MRA, 2014). This is a phenomenon which has never been studied yet and would require multi-linguistic collaboration between scholars.¹⁴³⁶

Lastly, one cannot overstate the diversity of trajectories and profiles in such a loose worldwide conglomerate as the manosphere. Statistical analyses have however revealed some regularities in those complex phenomena: for example, people who learn about science from TV

and last names and geographic data), allowing to correlate the sociodemographic information in the administrative records and the accounts' Twitter activity with algorithmic techniques.

¹⁴³⁴ Ibid., 982. Similarly, the materials used for this dissertation—science quiz survey results and discourse analysis do not allow to draw conclusions on intent, which is why we have remained extremely cautious about not attributing motives to the manospherians we were studying, since there is likely to be a variety of motives for engaging with those communities.

¹⁴³⁵ Apart from Warren Farrell, I was unsuccessful in reaching out to other key manosphere public figures, such as Mystery.

¹⁴³⁶ Such collaborations are rare in manosphere research, however, a Norwegian and a Turkish scholar have recently published a comparative study of the Men's Rights Movement in their respective countries, Hande Eslen-Ziya and Margunn Bjørnholt, "Men's Rights Activism and Anti-Feminist Resistance in Turkey and Norway," *Social Politics: International Studies in Gender, State & Society* 30, no. 1 (2022): 213–38, <u>https://doi.org/10.1093/sp/jxac011</u>.

also learn from videos, revealing individual media-driven preferences for visual content.¹⁴³⁷ Likewise, there was a correlation between knowledge acquisition from science books and science papers.¹⁴³⁸ Underlying these findings are the limitations of our survey, which needs to be replicated on a broader scale before making stronger claims on these complex phenomena.

Before concluding this dissertation, I address one major dimension of the phenomenon which has been purposefully set aside thus far: the role of evolutionary psychologists themselves. Do they directly contribute to fostering manosphere science or is this just a by-product of their science communication endeavors? Have they been having direct contacts with the manosphere, and lastly, what stance can the academic community adopt towards the embarrassing Darwinian enthusiasm of Internet misogynists? This was not my main research focus. It is an extremely complex issue which mobilizes the sociology and politics of academia, as well as philosophical questions on the role of science and scientists in society. The next section should thus be considered a preliminary step for further inquiry.

D. EVOLUTIONARY PSYCHOLOGISTS AND MANOSPHERE SCIENCE

This dissertation opened with Rollo Tomassi's Amazon biography claiming that he is a popularizer of evolutionary psychology. Tomassi acknowledges his enthusiasm for UCLA evolutionary psychologist Martie Haselton and her research. In fact, Dr Haselton told me that Tomassi had sent her a copy of *The Rational Male*, showing that manospherians sometimes reach out to the scientists whose works they read and admire.¹⁴³⁹ This section details the few occasions in which evolutionary psychologists directly intervened on manosphere platforms and media. It then reviews more generally the attitudes of evolutionary psychologists towards the manosphere.

D.1. Direct Contacts with the Manosphere

There are few occurrences of direct intervention by evolutionary scholars on manosphere platforms, media, and events. This section reviews those interventions, which exhibit the whole spectrum of attitudes towards antifeminism, from sympathetic to critical—a diversity which reflects that of evolutionary scientists more generally.

1.a. Sympathetic Encounters

At the 2020 International Conference on Men's Issues (ICMI), the Men's Rights movement's yearly global conference, several speakers based their presentations on evolutionary psychology.¹⁴⁴⁰ Some of them were manosphere pundits and writers such as Greta Aurora, whose

 $^{^{1437}}$ Correlation coefficient T=0.32, p < .001 for the manosphere, T=0.35, p < .001 for the counterpart group. See full correlation matrices in Appendix 22, 545.

¹⁴³⁸ Correlation coefficient T=0.21, p < .01 for the manosphere, T=0.45, p < .001 for the counterpart group. See full correlation matrices in Appendix 22, 545.

¹⁴³⁹ Martie Haselton, November 2022, personal communication.

¹⁴⁴⁰ For the roster of speakers and presentations, see the ICMI 2020 website, <u>https://web.archive.org/web/20240617152115/https://icmi2020.icmi.info/?page_id=27</u>, archived June 17, 2024.

presenter biography stated: "Evolutionary psychology is one of her main interests."¹⁴⁴¹ Others were EP enthusiasts, such as Johan Nayar, a filmmaker with a master's degree in EP, whose presentation centered solely on evolutionary psychology. Another case is that of Steve Moxon, a far-right polemicist who has written books such as *The Great Immigration Scandal* and *The Woman Racket: The New Science Explaining How the Sexes Relate at Work, at Play, and in Society*, and is now an independent evolutionary researcher.¹⁴⁴² He is for example a staunch defender of the male disposability just-so story, which he defended in his 2020 ICMI presentation. With a BSc in psychology, he has managed to publish articles in several peer-reviewed journals such as *Medical Hypotheses* and the *Journal of Aggression, Conflict and Peace Research*.¹⁴⁴³ Nowadays, his articles are only published in *New Male Studies*, an MRA-friendly journal whose editorial board includes Warren Farrell and Moxon himself.¹⁴⁴⁴ This shows the difficulty of classifying people adjacent to scientific research himself (his pieces are only theoretical), Moxon does not seem to belong to the evolutionary research community *per se*, although he has published some studies.

However, there were two *bona fide* evolutionary psychologists present at ICMI 2020: Tania Reynolds and Rebecca Owens. Those two female researchers respectively from the universities of New Mexico (US) and Sunderland (UK) work on competitive behavior and mating from an evolutionary perspective. Lastly, William Costello was finishing his MSc in Evolution and Culture at Brunel University in 2020 when he gave an ICMI presentation advocating for a more compassionate view of incels and formulating solutions to address their profound illbeing. He was invited again for the next edition and has since become one of the most active researchers on incels, whose surveys are cited recurrently in the present dissertation. He is now a PhD student in David Buss's evolutionary psychology laboratory at the University of Texas at Austin.¹⁴⁴⁵

Those scholars are sympathetic to men's issues, and to some of the diagnoses of the manosphere on a contemporary masculinity crisis, male mental health, or male difficulties in contemporary sex and dating. They are in fact not the first evolutionary researchers to take position on those issues. Lionel Tiger (born 1937) is an evolutionary anthropologist who started researching

¹⁴⁴¹ Ibid. Greta Aurora is a MRA pundit and enthusiastic Darwinian who contributes notably to the AVFM website.

¹⁴⁴² Steve Moxon, *The Great Immigration Scandal* (Exeter: Imprint Academic, 2004); Steve Moxon, *The Woman Racket: The New Science Explaining How the Sexes Relate at Work, at Play and in Society* (Exeter: Imprint Academic, 2008). See his independent researcher website at <u>https://web.archive.org/web/20240525094427/https://stevemoxon.co.uk/</u>, archived May 25, 2024. He is also a contributor to the A Voice For Men MRA website.

¹⁴⁴³ Steve Moxon, "Dominance as Adaptive Stressing and Ranking of Males, Serving to Allocate Reproduction by Differential Self-Suppressed Fertility: Towards a Fully Biological Understanding of Social Systems," *Medical Hypotheses* 73, no. 1 (2009): 5–14, <u>https://doi.org/10.1016/j.mehy.2009.02.011</u>; Steve Moxon, "Beyond Staged Retreat behind Virtual 'Gender Paradigm' Barricades: The Rise and Fall of the Misrepresentation of Partner-violence, and Its Eclipse by an Understanding of Mate-guarding," *Journal of Aggression, Conflict and Peace Research* 3, no. 1 (2011): 45–54, <u>https://doi.org/10.5042/jacpr.2011.0021</u>. *Medical Hypotheses* is a ScienceDirect journal, created in 1975, and the *Journal of Aggression, Conflict and Peace Research* is an Emerald Publishing Journal created in 2009 in association with the University of Central Lancashire and Ashworth Research Centre (UK).

¹⁴⁴⁴ See the *New Male Studies* editorial board page at, <u>https://web.archive.org/web/20240617153118/https://www.newmalestudies.com/OJS/index.php/nms/about/editorial</u> <u>Team</u>, archived June 17, 2024.

¹⁴⁴⁵ For more on his position towards incels, see page 378-379 below.

male sociality in the early days of sociobiology and published an influential book called *Men in Groups* in 1969.¹⁴⁴⁶ In the *Myth of Male Power*, Warren Farrell acknowledges Tiger's influence on his ideas, as they were shifting from the gender constructionist only approach of the 1970s to more biology-oriented approaches. In 1999, Tiger published a book called *The Decline of Males*, in which he rang the alarm bell on contemporary changes in sexual dynamics caused by broad access to effective female contraception, which he argued was responsible for a decline of men in society.¹⁴⁴⁷ Throughout the book, he also criticized feminist scholarship and bemoaned the influence of feminism in academia.¹⁴⁴⁸

The last example is that of Michael Mills, an associate professor of evolutionary psychology at Loyola Marymount University in Los Angeles who teaches sex differences from an evolutionary perspective and was a recurrent guest on popular MGTOW YouTube channels CS MGTOW and Stardusk (also known as The Thinking Ape, whose imagery is that of a gorilla reading Charles Darwin's *Origins of Species*).¹⁴⁴⁹ In those videos, he appears to be quite sympathetic towards the manosphere science of his MGTOW hosts. When confronted with typical elements of manosphere science such as hypergamy or the male disposability hypothesis, he never really pushed back against those. He also repeatedly cites Warren Farrell's writings, which is not common among evolutionary psychologists.

To better understand his position, I interviewed Dr Mills to ask him about manosphere science.¹⁴⁵⁰ He argued that: "What I would say in general is that the manosphere, the incels, may take some findings from evolutionary psychology that are true. And then catastrophize from

¹⁴⁴⁶ Lionel Tiger, *Men in Groups* (New York: Random House, 1969). Tiger's work never ceased to be controversial, drawing feminist protests as soon as the late 1960s, and still drew crowds of protesters forty years later when invited for a talk on campus, see Rise Up! A Digital Archive of Feminism, "Protest over Lionel Tiger Article in Maclean's," https://web.archive.org/web/20240224162152/https://riseupfeministarchive.ca/culture/photos/macleans-lioneltiger-

protest-toronto-1969-2/, archived February 24, 2024; for more recent protests, see Glenn Geher and Daniel Gambacorta, "Evolution Is Not Relevant to Sex Differences in Humans Because I Want It That Way! Evidence for the Politicization of Human Evolutionary Psychology," *EvoS Journal: The Journal of the Evolutionary Studies Consortium* 2, no. 1 (2010): 32–47, 33–34.

¹⁴⁴⁷ Lionel Tiger, *The Decline of Males* (New York: Golden Books, 1999). By a decline of males, Tiger refers to declining income and employment levels for men, as well as declining educational success relative to women, but his main focus is on men's role in reproduction, which he thinks is threatened by a rise in IVF, adoption, or surrogate motherhood, and hampered by a decline in male fertility levels.

¹⁴⁴⁸ Calling feminism "the modern-day equivalent of the communist internationale," he bemoans its influence in academia: "It is very difficult to discuss males in a robust manner in an academic context because to do so suggests opposition to feminism. This is no help to young scholars seeking university posts. There has been for several decades self-censorship by people interested in these matters and whose views of them may depart from ambient sentimentality," Ibid., 249; 268.

¹⁴⁴⁹ Appearing on three occasions: Thinking-Ape, "MGTOW Talks: Professor Mills On Aetherism And Feminist
Academia,"YouTube.com,August4,2015,

https://web.archive.org/web/20210611151814/https://www.youtube.com/watch?v=hdm76drqzs0&t=315s;

[&]quot;MGTOW Talks: Professor Mills on Evolutionary Psychology and Free Will," YouTube.com, July 14, 2015, <u>https://web.archive.org/web/20240617160314/https://www.youtube.com/watch?v=vS83cewe2KM&t=26s&ab_chann</u> <u>el=Thinking-Ape;</u> CSM Archives, "The Evolutionary Psychology of Human Sex and Gender MGTOW," YouTube.com, November 23, 2018, <u>https://web.archive.org/web/20240617163203/https://www.youtube.com/watch?v=PvPEJRR6q6Q&t=1020s&ab_channel=CSMArchives</u>, all links archived June 17, 2024.

¹⁴⁵⁰ For details on the interview, see Chap. III, C, 161.

that."¹⁴⁵¹ Throughout the conversation, he equated the manosphere with feminism: "you know, the manosphere is, you know, they're grinding certain axes and then in the femosphere, you know, are grinding certain axes."¹⁴⁵² He thinks it is "sad when males join the MGTOW movement" as well as when women "give up" on men and "become cat ladies or whatever."¹⁴⁵³ He did not seem to be very concerned about potential misrepresentations of evolutionary science in the manosphere:

"[Y]ou get crazy people on the Internet about everything. And this group can really exaggerate that, misunderstand to some extent overemphasize things from evolutionary psychology that, you know, as I said before, evolutionary psychologists would not endorse. But I would also say that on the other end of the spectrum, with feminists, you know, they're attributing everything to, you know, misogyny, discrimination, patriarchy."¹⁴⁵⁴

Dr Mills is also an outspoken critic of what he sees as feminist academia, claiming that it has hampered academic freedom of speech and inquiry: "feminism in academia has become really an arm of the feminist movement. And to some extent, it's considered a political movement within a university where only certain types of thought are acceptable."¹⁴⁵⁵ His concern is partly theoretical, as he believes that a fully constructionist perspective (i.e., "the blank slate," which he calls "Aetherism") is theoretically wrong. Echoing Griet Vandermassen's accusation of "biophobia" within feminist scholarship, he believes that "for most women's studies departments, anything to do with biology is often very frequently rejected."¹⁴⁵⁶ However, beyond this opposition to extremely environmentalist positions which is quite commonplace among evolutionary scientists, he also embraces MRA political narratives about feminism:

"[W]hat I have found most disconcerting about the feminist movement, other than its theoretical foundation not being correct, the social constructionism, is that there's kind of a sense of a lack of humanism in the sense that the women's problems are somehow more salient, the importance to deserve to be addressed than men's problems, so we don't need to worry about men because men are the oppressor class, kind of a Marxist kind of interpretation."¹⁴⁵⁷

These positions echo Warren Farrell's, as when Mills claims: "I think the pendulum has swung quite far in the opposite direction to the point where many feminists apparently don't care too much about the problems of men because we are the privileged class or privileged sex."¹⁴⁵⁸ In

¹⁴⁵¹ Michael Mills, June 2023, interview with the author.

¹⁴⁵² Ibid.

¹⁴⁵³ Ibid.

¹⁴⁵⁴ Ibid.

¹⁴⁵⁵ Michael Mills in Thinking-Ape, "MGTOW Talks:Professor Mills On Aetherism And Feminist
Academia,"YouTube.com,
YouTube.com,August4,2015,https://web.archive.org/web/20210611151814/https://www.youtube.com/watch?v=hdm76drqzs0&t=315s,
June 17, 2024.archived

¹⁴⁵⁶ Ibid.

¹⁴⁵⁷ Michael Mills in Thinking-Ape, "MGTOW Talks: Professor Mills on Evolutionary Psychology and Free Will," YouTube.com, July 14, 2015, <u>https://web.archive.org/web/20240617160314/https://www.youtube.com/watch?v=vS83cewe2KM&t=26s&ab chann</u> <u>el=Thinking-Ape</u>, archived June 17, 2024.
¹⁴⁵⁸ Michael Mills in Thinking-Ape, "MGTOW Talks: Professor Mills On Aetherism And Feminist Academia," YouTube.com, August 4, 2015,

fact, in our interview, Dr Mills said that he had personally advised Farrell to incorporate more evolution and biology in his writings after reading the *Myth of Male Power* in the 1990s, which is a rare occurrence of an evolutionary psychologist's directly influencing manosphere ideology. As made clear in his quotation, Dr Mills's ideas espouse the core tenet of MRA ideology described in chapter I: There is no systemic oppression of women by men. Men face their own set of hardships and disadvantages in modern Western society. These should be given the same attention and consideration as those experienced by women.¹⁴⁵⁹ As such, he certainly seems resentful of the presence of women and gender studies in academia, which he considers as theoretically flawed and as biased towards ignoring male-specific issues.

1.b. Neutral Encounters

In 2018, another evolutionary psychologist, Dr Glenn Geher from the State University of New York (SUNY) at New Paltz, was invited on a show by MGTOW podcaster CS MGTOW.¹⁴⁶⁰ To Geher, evolutionary psychology is an extremely flexible and broad paradigm and he deplores the fact that it is often reduced to sex difference research. As such, he has been shying away from studying evolved behavioral sex differences, which he thinks are too controversial and thus detrimental to the field's reputation: "There's been this idea that somehow the idea of evolved behavioral sex differences is counter any feminist perspective. [...] I think that's been largely the point of friction that has made it hard for evolutionary psychologists to really advance within an academic context."¹⁴⁶¹ Yet, Geher is also a founding member of the Feminist Evolutionary Psychology Society, which would seem to indicate that he does not share Mills's antifeminist sympathies.¹⁴⁶²

I interviewed him to understand his participation on the MGTOW podcast and his position on manosphere science.¹⁴⁶³ Dr Geher is not very familiar with manosphere science and had for example never heard about the term "hypergamy." Although he noticed that MGTOW was a misogynistic group, they reached out to him and he consented to intervene in their podcast in the name of constructive dialogue:

"I researched them very mildly [...] I'm a big fan, and not every academic does this, I'm a big fan of, even if someone that I disagree with strongly or politically, having a conversation, and making the conversation public advances you know...I probably have something to learn from these people, these people hopefully have something to learn from me, and other people hopefully have something

¹⁴⁶³ For details on the interview, see Chap. III, C, 161.

https://web.archive.org/web/20210611151814/https://www.youtube.com/watch?v=hdm76drqzs0&t=315s, archived June 17, 2024.

¹⁴⁵⁹ Chapter I, B, 53.

 ¹⁴⁶⁰ Glenn Geher in CSM Archives, "Evolutionary Psychology 2 0 with Glenn Geher PhD MGTOW," YouTube.com, November
 23, 2018,

¹⁴⁶¹ Ibid.

¹⁴⁶² See Glenn Geher, "The Launching of the Feminist Evolutionary Psychology Society: FEPS," The Evolutionary Studies Consortium, July 18, 2009, <u>https://web.archive.org/web/20240421173931/https://evostudies.org/2009/07/the-launching-of-the-feminist-evolutionary-psychology-society-feps/</u>, archived April 21, 2024.

to learn from hearing discourse from me. So when I did see kind of who they were, what they were. Okay this is kind of exclusively misogynistic in their statement, in their mission statement, I could see that. Then I thought, well maybe they're exactly the people I need to talk to."¹⁴⁶⁴

And in fact, the conversation between him and the host was very courteous. As a manosphere EP aficionado, CS MGTOW seemed delighted to have an evolutionary psychologist on the show, and the discussions were less controversial and political than with Dr Mills, as Dr Geher purposefully applies EP to other domains than sex differences, which he thinks have been a massive "PR problem" for the field.¹⁴⁶⁵

1.c. Critical Encounters

Lately, contacts have become more frequent between academics and manospherians because of social media. Indeed, many academics now have Twitter accounts, where they share and popularize research. For those working on areas related to sex, dating, and relationships from an evolutionary perspective, there is overlap with manosphere focuses and grievances. As such, those academics have been drawn into online debates with tenants of manosphere science. This is notably the case of Alexander, an anonymous science blogger, neuroscience graduate student, and independent researcher who founded the datepsychology blog and Twitter account, where he conducts his own online studies and shares scientific findings.¹⁴⁶⁶ By dint of seeing incels and Red Pillers commenting on his content, he has started addressing their positions with data-driven critiques of manosphere science such as "Why AWALT Will be Wrong Most Of The Time," and "What the Manosphere Gets Wrong About Alphas and Betas."¹⁴⁶⁷

Another such social media evolutionary science popularizer is Macken Murphy, a PhD student at the University of Melbourne's Evolution Lab. His research focuses on dating and relationships, about which he has been sharing short videos on TikTok, YouTube and Instagram.¹⁴⁶⁸ This has led him to critically engage with manospherians. I interviewed him to understand how this process happened.¹⁴⁶⁹ Murphy recalls not being initially very familiar with the

¹⁴⁶⁴ Glenn Geher, June 2023, interview with the author.

¹⁴⁶⁵ Ibid. Unfortunately, the interview was relatively short, and Dr Geher did not remember his passage on the MGTOW channel that well.

¹⁴⁶⁶ Datepsychology.com, <u>https://web.archive.org/web/20240602230140/https://datepsychology.com/</u>, archived June 18, 2024.

¹⁴⁶⁷ Alexander, "Why AWALT Will be Wrong Most Of The Time," Date Psychology, July 15, 2022, https://web.archive.org/web/20231208161628/https://datepsychology.com/why-awalt-will-be-wrong-most-of-the-

time/, archived December 8, 2023; Alexander, "What the Manosphere Gets Wrong About Alphas and Betas," June 8, 2022, <u>https://web.archive.org/web/20240224130901/https://datepsychology.com/what-the-manosphere-gets-wrong-about-alphas-and-betas/</u>, archived February 24, 2024. I reached out to Alexander, who consented to be interviewed, but unfortunately never made it to the interview.

¹⁴⁶⁸SeehisTikTokandYouTubechannelsrespectivelyathttps://web.archive.org/web/20230905044820/https://www.tiktok.com/@mackenmurphy?lang=fr,archivedSeptember5,2023;https://web.archive.org/web/20231207104259/https://www.youtube.com/@murphymacken,archived December7,2023.

¹⁴⁶⁹ For details on the interview, see Chap. III, C, 161.

manosphere. Yet, as a dating and relationship scientist online today, manosphere ideas are almost impossible to escape:

"I was making videos that were close ups on my own face where I'm speaking to the camera about research. Never mentioned the manosphere. Never mentioned manosphere related topics until I got invited onto a few podcasts, and then when I would go on those podcasts, they would ask me questions that basically that either came from a manosphere perspective, or they were basically looking for me to challenge a manosphere talking point."¹⁴⁷⁰

Murphy therefore started challenging Red Pill narratives and his videos went viral:

"And so that was kind of the first time, I started kind of butting heads with those guys and then clips of me talking about that concept went really, really viral, like, millions of views. And so part of what I became known for, despite it being a very small percentage of my output. Part of what I became known for was just kind of talking back to these guys with the same research that they were citing, just with a more balanced reading of it."¹⁴⁷¹

This says a lot about the online ubiquity of manosphere tropes around issues of sex, dating, and relationships. In fact, the manosphere is such an entrenched and influential part of the Internet on these topics that algorithms incentivize scholars to engage with manospherians and their talking points, which brought Murphy unprecedented exposure by having him broach controversial and viral manosphere narratives:

"It's interesting because my circulation was primarily non manosphere, and the only reason that I know that is that most of the views were from women—who probably aren't in the manosphere. So what I think kind of happens is that if you're interested in the incentive structure of it, it's like the manosphere goes viral saying very negative things about women. And so there's an opportunity to, you know, do what some kind of people do, which is they just kind of agree with the manosphere and then they pick up views within it. But you can also get a lot of views by pushing against it. Right? Because women and men see this stuff and they disagree with it, and no one's pushing back."¹⁴⁷²

This led him to intervene on two live manosphere podcasts to debate Red Pill and blackpill pundits.¹⁴⁷³ This is the first occurrence of an evolutionary researcher directly engaging critically with manospherians on their own platforms. However, reflecting back on those experiences, Murphy does not consider them to have been very fruitful:

"My motives were definitely... I wanted the truth. So, I was like, oh, these guys are wrong. They say lots of sexist things, and if I can correct them, that'll make things better, right? But now I think

¹⁴⁷⁰ Macken Murphy, May 2024, interview with the author.

¹⁴⁷¹ Ibid.

¹⁴⁷² Ibid.

¹⁴⁷³ Entrepreneurs in Cars, "PTW # 91 – Macken Murphy – Data Driven Advice," YouTube.com, August 25, 2023, <u>https://web.archive.org/web/20240604074905/https://www.youtube.com/watch?v=Puydi dMuyc</u>, archived June 4, 2024; hoe_math, "SEX FIGHT: Macken Murphy vs hoe_math," YouTube.com, November 3, 2023, <u>https://web.archive.org/web/20240605085044/https://www.youtube.com/watch?v=GDSsqNDjENs</u>, archived June 5, 2024.

that's naive. I also think that, truthfully, it's such a dirty part of the internet that just even getting involved to debunk can kind of get some filth on you as a result, because you end up talking about unseemly things you end up considering, you know, unseemly ideas, even if only to dismiss them. Right? And so, from my perspective, if I could go back, I wouldn't. I wouldn't get involved. [...]

It is also worth pointing out that, although he personally does not seem affected by it, his interaction with the manosphere has resulted in "tons of online abuse," a phenomenon which would only be stronger for female academics willing to critically engage with manospherians. These interactions between academics and the manosphere call for even more complexity in my analysis. Indeed, academia and the manosphere are not fully insulated from each other, and they are both set against the same political, cultural, and technological backdrop. In order to understand this broader scientific-*cum*-ideological configuration, the next section briefly categorizes the three types of positions on the manosphere found in the field of evolutionary behavioral sciences so far.

D.2. Different Positions Towards Manosphere Science: A Divided Field 2.a. Dating Scientists

As shown throughout this dissertation, many evolutionary scientists research sex and mating. As such, they are the most likely to have seen their research appropriated by the manosphere. This was the case of Geoffrey Miller, who recalled this experience in a 2013 article for the *Wired* magazine:

"Scientists engaged with the media quickly learn that they can't control how their research is used. A few years ago I was astonished to find that many members of the 'seduction community' had read my book *The Mating Mind*, about how sexual choices shaped our evolution. In their acronym-heavy quest for sexual self-transformation by becoming 'pick-up artists' (PUAs), these men had become avid consumers of my field, evolutionary psychology (EP)."¹⁴⁷⁴

After briefly explaining how PUAs use evolutionary psychology, Miller concluded his article with a stern injunction: "With such high stakes, we EP researchers had better get the science right." To him, the most important issue was scientific accuracy, and making sure that laypeople got the science right. Two years later, he co-wrote a dating guide called *Mate: Become the Man Woman Want* with popular writer Tucker Max.¹⁴⁷⁵ In the introduction, the book is presented as a data-driven manual to help young heterosexual men have successful sex lives, in opposition to the "twisted ideological agenda" of "religious zealots, gender feminists, or manosphere misogynists."¹⁴⁷⁶

¹⁴⁷⁴ Geoffrey Miller, "Geoffrey Miller: 'Why the Seduction Crowd Picked up on My Work," *Wired*, May 14, 2013, <u>https://web.archive.org/web/20240526013438/https://www.wired.com/story/why-the-seduction-crowd-picked-up-on-my-work/</u>, archived May 26, 2024.

¹⁴⁷⁵ Tucker Max and Geoffrey Miller, *Mate: Become the Man Women Want* (New York: Little, Brown and Company, 2015).

¹⁴⁷⁶ Ibid., 5.

The book is critical of Pickup-Artists ("exploitative marketers trying to sell manipulative strategies").¹⁴⁷⁷ Using psychology research, Miller questions the efficacy of their quick and easy "seduction techniques," advocating instead for a more comprehensive self-help agenda to become a better man. He also criticizes some of their techniques more vocally, such as the way PUAs "escalate" physical touch to foster sexual desire: "[t]his is terrible, creepy bullshit that psychopathic sexual predators do because they are too ashamed of themselves and their desires to honestly own them," he writes.¹⁴⁷⁸ Although the book contains many indictments and criticisms of PUA "science," as the present dissertation does, it is resolutely sympathetic towards the plight of young sexless men who turn towards PUA and the manosphere. Provided that they clearly define their goals and ethically communicate those to women, Miller tells young men that their sexual desire is nothing to be ashamed of: it is after all the product of evolution. The book's dust jacket thus also promises to offer "no moralizing." This is targeted at feminists, who are accused of demonizing male sexuality and desire. As a sympathetic male figure, shrouded in the authority of science, Miller therefore sees his book as an alternative to what he describes as the counterproductive "battle of the sexes" promoted by both the manosphere and "gender feminism":

"In sexual politics, feminism's gain is patriarchy's loss. This zero-sum way of thinking assumes a perpetual 'battle of the sexes,' and sadly, it is common in both gender feminism and the manosphere. This 'battle of the sexes' view is totally, completely wrong. It is counterproductive, counterintuitive, and counter to thousands of generations of evolution."¹⁴⁷⁹

That trope of ending the "battle of the sexes" is also a favorite of David Buss, the leading evolutionary psychologist and expert on all aspects of human mating.¹⁴⁸⁰ To him, a better understanding of male and female mating psychologies is essential to reducing instances of sexual conflict such as jealousy, infidelity, or sexual coercion:

"Although it would be naive to believe that all human conflict can be eliminated, an evolutionary psychological analysis provides several paths toward producing greater harmony between the sexes. To use a physiological metaphor, we have evolved callous-producing mechanisms, but we can design our environments to be relatively free of friction, thus preventing the development of callouses. Analogously, men and women have evolved mating mechanisms that, when activated, produce psychological strife, but in principle, with enough knowledge, we could design environments that are more free of conflict."¹⁴⁸¹

Like Miller, David Buss has decided to use his knowledge of sex research to improve men's dating and sex lives. In 2022, this leading scholar launched The First Date Course, a training program specifically designed to "Learn How To Attract The Women You Want And

¹⁴⁷⁷ Ibid.

¹⁴⁷⁸ Ibid.

¹⁴⁷⁹ Ibid., 11.

¹⁴⁸⁰ David Buss, "Sexual Conflict: Evolutionary Insights into Feminism and the 'Battle of the Sexes,'" in *Sex, Power, Conflict: Evolutionary and Feminist Perspectives*, ed. David Buss and Neil Malamuth (New York: Oxford University Press, 1996), 296–318.

¹⁴⁸¹ Ibid., 314-315.

Have Incredible Dates."¹⁴⁸² Flaunting Buss's impressive credentials, the website explains that this video course "backed by science" will allow men to have "more success with high-value women." The seminar offered the help of "a team of 50 beautiful women from around the world" who shared their experiences, including a "former Miss Universe." The instructor team also included three female evolutionary psychologists: Drs Martie Haselton, Carin Perilloux, and Madeleine Fugère.¹⁴⁸³ With a price tag over 1,000 USD, this course was presented as the best on the market: "Unlike programs and courses by random 'dating gurus,' *The First Date Course* instructors are true experts. They have taught psychology at Harvard and other Universities. They are the best of the best. The systems and strategies you'll learn from them are all backed by science," the website claimed.

This is highly reminiscent of PUA advertising. A key difference is the following caveat, which is aligned with Miller's position in *Mate*:

"The First Date Course is NOT for you if...

- You don't respect women.
- You're looking to mislead or deceive women into liking you or sleeping with you.
- You're expecting us to give you a few magic words that will make supermodels instantly fall in love with you."¹⁴⁸⁴

As actual dating science experts, evolutionary psychologists like David Buss and Geoffrey Miller criticize PUAs for their lack of research expertise. However, they never address the underlying antifeminist politics of the manosphere, simply urging men to remain nice and honest towards women. William Costello—David Buss's PhD student at the University of Texas at Austin—has been a pioneer in incel survey research. He believes that evolutionary psychologists are uniquely equipped to combat blackpill ideology: "We're mating psychology experts. If there's a generation of young men so disaffected by modern mating that they become incels (with all the ugliness that entails) then we have an obligation to do the dirty work of trying to use our expertise to plan interventions," he recently wrote on social media.¹⁴⁸⁵ And the interventions he suggests involve dating coaching too:

"Interventions could include, e.g., help incels create more effective dating app profiles and acumen. [...]

Ultimately, the dating market is a fierce contest that you get thrown into when you become a teenager, without any preparation or training.

¹⁴⁸² The First Date Course, <u>https://web.archive.org/web/20220121223719/https://firstdatecourse.com/</u>, archived January 21, 2022.

¹⁴⁸³ These three evolutionary psychologists study human mating respectively at the University of California, Los Angeles, Eastern Connecticut State University, and Southwestern University.

¹⁴⁸⁴ The First Date Course, <u>https://web.archive.org/web/20220121223719/https://firstdatecourse.com/</u>, archived January 21, 2022.

¹⁴⁸⁵ William Costello, Twitter, May 21, 2024, <u>https://archive.is/rOjqT</u>, archived June 20, 2024.

If we don't offer some guidance, young men (many of whom have autism) are vulnerable to pickup artists and manosphere influencers."¹⁴⁸⁶

Although they are not very numerous, these evolutionary psychologists are the most involved in manosphere research. While they try to combat some of the misconceptions and exaggerations of manosphere science, they also broadly agree with some of the manosphere's social diagnoses: dating and relationships are hard for contemporary Western men, and young men are lacking guidance, models, and training in those areas. As researchers on those issues, they see themselves as uniquely poised to help those men. And just like PUA coaches, they believe that this ultimately boils down to misunderstandings between male and female psychology, which can be solved with evolutionary psychology research.

Yet, there are also clear commercial incentives for evolutionary psychologists to engage with manospherians. As recalled by dating science popularizer Macken Murphy, as soon as he started posting videos which addressed manosphere tropes, he picked up unprecedented online exposure: "I think there's tremendous economic incentive to look at sex, mating and other culturally, hot topics," he explained during our interview.¹⁴⁸⁷ And the price tag on David Buss's course illustrates the commercial incentives for those scholars too. Likewise, dating guides written by evolutionary psychologists are also commercially published. The most recent is *Hack Your Mating: An Evolutionary Psychologist's Guide to a Life of Sexual Abundance*, written by Antonios Vakirtzis.¹⁴⁸⁸ Like Miller and Buss, this researcher clearly advertises his scientific credentials to sell his popular dating guide for heterosexual men. He also distances himself from the "shady pickup artists and gurus of the seduction industry,"¹⁴⁸⁹ and his dating guide is heavily footnoted and contains an abundance of graphs extracted from scientific research about human mating. Yet, the book's advertising is not any less crude than that of actual PUAs, with the cover promising a "life of sexual abundance," illustrated with a caveman abducting a cavewoman.

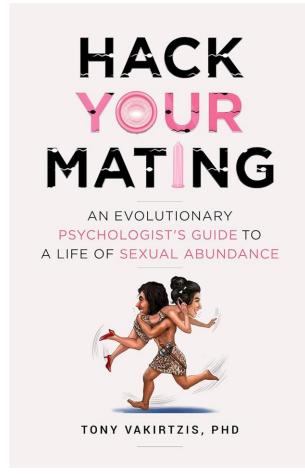
¹⁴⁸⁶ Ibid.

¹⁴⁸⁷ Macken Murphy, May 2024, interview with the author.

¹⁴⁸⁸ Tony Vakirtzis, *Hack Your Mating: An Evolutionary Psychologist's Guide to a Life of Sexual Abundance* (Old Marston Press, 2018). After a PhD at the University of Liverpool in 2012, Antonios Vakirtzis worked at the University of Oxford for a while. I tried to reach out to him for an interview, and contacted his past academic affiliations, but he seems to have left academia.

¹⁴⁸⁹ Ibid., e-book location 27%.

Figure 7.9: *Hack Your Mating* Cover Illustration Source: Hack Your Mating¹⁴⁹⁰



For any academic concerned with the public reputation of the field, this is the worst possible kind of advertising. As evolutionary psychology is routinely accused of sexism by its feminist critics, a seduction guide targeted exclusively at heterosexual men which reproduces the "mystique" of the sexually insatiable caveman is terrible press.¹⁴⁹¹ Nor does it ever mention misogyny and the gender politics underlying the manosphere. In short, some evolutionary psychologists appear to capitalize on the same market niche as Pickup-Artists coaches, without much concern for reputation of the field. Some are even somewhat sympathetic towards the manosphere, such as Geoffrey Miller, who was asked about his thoughts on the manosphere on a popular podcast and answered: "I have mixed feelings about it but largely positive."¹⁴⁹² These few academics usually belong to the broader category presented below.

¹⁴⁹⁰ Ibid.

¹⁴⁹¹ For exploration of that mystique in popular discourse around male sexuality, see McCaughey, *The Caveman Mystique*.

¹⁴⁹² Chris Williamson, "An Evolutionary Psychologist's Opinion On The Manosphere," YouTube.com, March 25, 2022, <u>https://web.archive.org/web/20230319031139/https://www.youtube.com/watch?v=nhQMqwv6OIM</u>, archived June 19, 2024.

2.b. Academic Freedom Watchdogs

Given the long history of feminist opposition to sociobiology and later evolutionary psychology, many evolutionary scientists are very involved in the defense of academic freedom and freedom of inquiry, and claim to want to keep politics out of scientific research (although this is in itself a political position).¹⁴⁹³ The most high-profile of these is undoubtedly Harvard psychologist Steven Pinker, whose book *The Blank Slate* remains the classic indictment of politically motivated left-wing (i.e., Communist, feminist, or postmodernist) attacks on evolutionary science from scholars in the social sciences and the humanities.¹⁴⁹⁴ In his wake, many evolutionary scientists have been fighting to retain their freedom of inquiry, at a time when issues of sex and gender are as controversial as ever. This is for instance the case of Carole Hooven, the Harvard testosterone expert who resigned from her position after a controversy raised by her defense of the relevance of the biological sex binary, as opposed to more constructionist non-binary notions of gender.¹⁴⁹⁵

For those academics, the immediate danger to the field comes from left-wing attacks on science. They have been advocating for the relevance of the evolutionary approach to human behavior against widespread reticence and misunderstanding among the public and other branches of academia.¹⁴⁹⁶ They are thus usually very defensive about potential critiques of the field which they strive so hard to establish and defend. As such, potential misogynistic appropriations of evolutionary psychology do not rank very high in their concerns. In my interview with Michael Mills on manosphere science, he kept coming back to feminist attacks on the field, which he was much more preoccupied about. Likewise, when I presented my research to the late John Tooby,

¹⁴⁹³ For the best accounts and analyses of those political debates around contemporary human evolutionary behavioral sciences, see Ullica Segerstråle, *Defenders of the Truth: The Sociobiology Debate* (Oxford: Oxford University Press, 2000); Alice Dreger, *Galileo's Middle Finger* (New York: Penguin Press, 2015).

¹⁴⁹⁴ Pinker, The Blank Slate.

¹⁴⁹⁵ Carole Hooven, "Academic Freedom Is Social Justice: Sex, Gender, and Cancel Culture on Campus," Archives of Sexual Behavior 52, no. 1 (2023), https://doi.org/10.1007/s10508-022-02467-5. On US campuses, academic freedom of speech has been a central issue in the ongoing polarized culture wars. Harvard in particular has been at the crux of these conflicts, subjected to conservative media campaigns against Black scholars in the fight against diversity, equity, and inclusion (DEI) programs, and national media attention towards student protests against the Israel-Hamas war, which even led to Congressional hearings of Harvard president on December 5, 2023. As a result, the prestigious university has recently decided that it would avoid taking public positions on controversial public policy issues, while a group of professors, including Pinker and Hooven, formed a Council on Academic Freedom at Harvard (CAFH), which issued a statement calling for scholars to be free from fear of reprisal for stating their opinions, as well as unfettered in their research agendas. For the campaign against DEI, see Ryan Quinn, "Black Scholars Face Anonymous Crusade," in Anti-DEI Inside Higher 2024, Accusations Ed. April 1. https://web.archive.org/web/20240620223533/https://www.insidehighered.com/news/diversity/race-

ethnicity/2024/04/01/black-scholars-face-anonymous-accusations-anti-dei-crusade. For the university's policy of neutrality, see Emma Haidar and Cam Kettles, "Harvard Will Refrain From Controversial Statements About Public Policy Issues," *The Harvard Crimson*, May 28, 2024, https://web.archive.org/web/20240702150728/https://www.thecrimson.com/article/2024/5/28/harvard-institutional-

<u>neutrality-report/</u>. For the CAFH statement, see Harvard University, Council on Academic Freedom at Harvard, Statements, <u>https://web.archive.org/web/20240209114940/https://sites.harvard.edu/cafh/statements/</u>, all archived July 10, 2024.

¹⁴⁹⁶ For a history of the opposition between feminist scholars and evolutionary approaches to human behavior, see Chapter II, A, 112; Chap. II, B, 124.

one of the founders of the field, his immediate reaction was to recommend that I also include feminist "misuse and misrepresentation of the scientific literature" in my investigations.¹⁴⁹⁷ To summarize this type of position: those scholars who often work on controversial topics are wary of any infringement on their academic freedom of speech and inquiry. As such, they have been much more vocal about feminist or postmodernist critiques of the field, which come from inside academia, than about exaggerations or appropriations by their enthusiasts in the media or on the Internet, as summarized by Martha McCaughey:

"HBE [Human Behavior and Evolution] scholars like Dawkins neglect to scold men who enthusiastically embrace their work for the ethical implications they presume it has. Indeed, HBE [Human Behavior and Evolution] theorists are not particularly vocal about their enthusiasts' misuses of their work. Instead, they seem to be far more upset about their critics' mischaracterizations of their work [...]"¹⁴⁹⁸

Fifteen years later, the present dissertation answers McCaughey's call, with its exclusive focus on EP lay enthusiasts and their appropriation of the research. However, many evolutionary scientists today still believe that concerns about potential political appropriations of their research are a threat to their freedom of inquiry. For example, in my online survey of evolutionary psychologists, one of them answered in typical fashion: "Overall, researchers have little power over how others interpret or rather misinterpret their research. Concern about the potential of research findings being twisted for nefarious purposes is often used to justify censorship or normative bans on controversial research."¹⁴⁹⁹ However, this type of position is increasingly challenged, as there is a growing recognition that research findings are regularly appropriated and distorted on YouTube or social media, which is worrisome to many scientists whose positions echo that formulated by McCaughey fifteen years ago:

"[S]cientists could pay closer attention to what becomes of scientific work. They could, in short, pay attention to popularization. Scientists cannot hide behind the excuse that 'that's a distortion of my work.' They must begin to notice the political climate of their work, beyond Dawkins' 'don't turn my is into ought' caveat."¹⁵⁰⁰

2.c. Scientists Concerned about Appropriations of Research

As a researcher on manosphere science, I can personally attest that many practitioners of evolutionary behavioral sciences are genuinely concerned about manosphere appropriations of their work. Some deplore that YouTube algorithmic recommendations often lead them and their students down a pipeline from evolutionary psychology to manosphere content, while some have seen their own research appropriated. In 2023, I ran a short survey on evolutionary scientists, which gathered 44 answers.¹⁵⁰¹ Out of these 44 respondents, 9 stated that they had already seen their

¹⁴⁹⁷ John Tooby, November 2022, personal communication. John Tooby (1952-2023) was a US anthropologist who is widely credited for being on the founders of modern evolutionary psychology, along with his wife Leda Cosmides. ¹⁴⁹⁸ McCaughey, *The Caveman Mystique*, 123.

¹⁴⁹⁹ For details on survey methods, see Chap. III, B, 146. Survey materials are fully reproduced in Appendix 12, 507. ¹⁵⁰⁰ McCaughey, *The Caveman Mystique*, 130.

¹⁵⁰¹ For details on survey methods, see Chap. III, B, 146. Survey materials are fully reproduced in Appendix 12, 507.

research interpreted or appropriated for ideological/extra-scientific purposes. Respondents were also asked about their level of concern for potential sexist appropriations of the discipline—as well as racist ones for comparison. Overall, the levels of concerns were relatively high, as shown in figure 7.10 below:

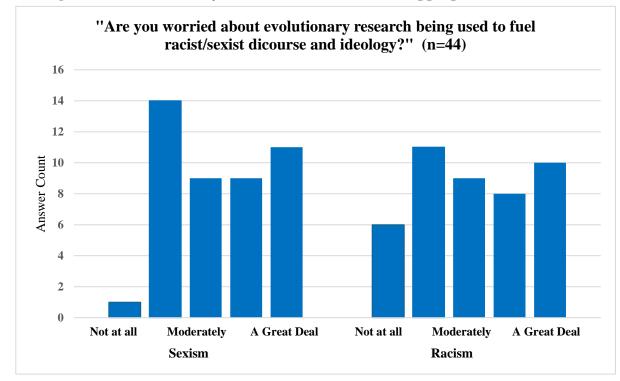


Figure 7.10: Evolutionary Scientists' Concern About Appropriation of Research

For many academics, it seems that indifference towards lay interpretations of science is not a tenable position.¹⁵⁰² One such evolutionary psychologist is Daniel Conroy-Beam, a professor at UC Santa Barbara. In a recent article for *The Boston Globe*, he took a public stand against manosphere science, encouraging his colleagues to do the same. In fact, his column also directly indicted other evolutionary psychologists whom he finds too complacent towards the manosphere—scholars whose attitude reflects the first two types described above:

"I am embarrassed to have ignored the appropriation of my work for so long. My complacency and that of my peers has allowed the manosphere version of our science to fester, grow, and borrow against our field's credibility to suit its own interests. Because of our negligence, our science has a

¹⁵⁰² Although this survey reveals that there is definitely some concern among the research community, which is aligned with my personal observations, the sample size is too small to draw general conclusions about levels of concern in the entire field.

body count. So I'm sticking my neck out. And I'd encourage my level-headed colleagues to do the same. The manosphere and our peers who cater to it don't represent our field."¹⁵⁰³

Predictably, this column which directly attacked other evolutionary psychologists such as Geoffrey Miller spurred debates and controversies between academics on social media. There are various motivations among academics embracing this type of position. Some are concerned about the reputation of the field, as misogynistic appropriations harm public perceptions of their research. Some are feminists who believe that evolutionary sciences must self-critically engage with issues of sexism, heteronormativity, or racism both in their theories and research practices.¹⁵⁰⁴ They think science is always historically and politically situated, and that scientists have a responsibility to reflect on this. Some, like Dan Conroy-Beam, are simply appalled by the manosphere, and do not wish for their research to fuel its ideology.

As the most thorough exploration and critique of manosphere science, my research is of interest to these scholars, and has therefore been warmly received at the 2023 and 2024 EHBEA and HBES conferences.¹⁵⁰⁵ In fact, it is common to get reactions such as the one expressed by this evolutionary psychologist who answered the survey: "Glad you good people are on the job investigating these worrisome developments." There seems to be a rift inside the research community between academics who are willing to critically reflect on the potential sexist impacts and underpinning of their research and those who shy away from these issues in the name of academic freedom. I received an illustration of this rift inside the discipline when submitting the same co-authored article to two different journals. This article ends with recommendations for concerned academics who wish to make their research harder to appropriate by the manosphere.¹⁵⁰⁶ The rejection letter from the editor of the *Evolutionary Psychology* journal categorically refused to recognize any responsibility of scientists regarding lay interpretations and appropriations of their results:

"It certainly is not and should not be the responsibility of EP researchers to moderate the degree to which other (non-scientists) correctly interpret research. Yes, researchers should be clear in their findings and the limitations of their work, and perhaps an argument could be made that researchers are not sufficiently clear on these things at present, but, beyond that, it is unrealistic to expect scientists to police the way in which non-scientists might misconstrue or cherry-pick their results to bolster their own world-view."

¹⁵⁰³ Daniel Conroy-Beam, "How the Incels Warped My Research," *The Boston Globe*, May 16, 2024, <u>https://web.archive.org/web/20240615015137/https://www.bostonglobe.com/2024/05/16/opinion/evolutionary-</u>psychology-incel-manosphere/, archived June 15, 2024.

¹⁵⁰⁴ See for example the *Evolutionary Human Sciences* call for paper which invites scholars to reflect on the role of evolutionary science in scientific racism, Evolutionary Human Science, "Special Collection on Scientific Racism," <u>https://web.archive.org/web/20240529120132/https://www.cambridge.org/core/journals/evolutionary-human-sciences/announcements/call-for-papers/special-collection-on-scientific-racism, archived July 5, 2024.</u>

¹⁵⁰⁵ With my presentation receiving the Best Student Talk award at the EHBEA 2023 conference in London.

¹⁵⁰⁶ Louis Bachaud and Sarah Johns, "The Use and Misuse of Evolutionary Psychology in Online Manosphere Communities: The Case of Female Mating Strategies," *Evolutionary Human Sciences* 5 (2023), <u>https://doi.org/10.1017/ehs.2023.22</u>.

When the same article was then submitted to EHBEA's *Evolutionary Human Sciences*, the reviewers' comments were diametrically opposed, with one stating that "[t]his is a very important topic and underappreciated in the evolutionary psychology literature," and the other that "[t]his paper is timely and much-needed, presenting a clear and accessible account of an important social phenomenon that highlights the ethical risks and responsibilities entailed by evolutionary approaches to human behavior."¹⁵⁰⁷ Clearly, my research had tapped into the deep political divides running inside the field of evolutionary psychology, concerning feminism, academic freedom, and the role and responsibility of science and scientists in society. When starting this research project, I did not envision that I might have an impact on these discussions. Yet, four years later, my own research was the inspiration for Conroy-Beam's *Boston Globe* controversial column.¹⁵⁰⁸ Often, at conferences, concerned academics come and ask me the same question: What should we do? What can we do about manosphere science? These questions are addressed in the dissertation's conclusion.

Conclusion

The manosphere does not exist in a vacuum. Manospherians mostly acquire scientific knowledge from outside academic sources (papers, books), or summaries on Wikipedia or YouTube. From this process, something unique emerges: manosphere science. As revealed by the example of Mystery, this process hinges a lot on the efforts of individual pundits. Given the weight that a single individual's understanding and distortion of evolutionary science can have, this is a key process. However, understanding the underlying motives is extremely difficult: do those pundits sincerely misunderstand the scientific literature and end up exaggerating some elements because of pre-existing ideological biases or limited scientific literacy? Or do they purposefully misrepresent scientific research to suit their ideological or commercial agendas? These are questions on which the present work does not draw any conclusion, as the data it collected does not allow to do so.

Notorious ideologists are just the surface of this phenomenon. There are also anonymous supersharers, who propagate their interpretations of scientific knowledge on the Internet, as well as thousands of curious Internet users who share scientific research in online conversations or ask for reading recommendations from their peers. Manosphere science is the result of all these aggregated processes. Underlying all this is the digital architecture of online forums and social media platforms, as well as the algorithms which steer users towards certain types of content. To further complicate the picture, evolutionary psychologists themselves are not insulated from those dynamics. With the expansion of social media, researchers are more or less willingly confronted with manospherians' appropriations, critiques, and abuse. Algorithms also incentivize them to address manosphere narratives, whether approvingly or critically.

¹⁵⁰⁷ Although reviewers' opinions do not necessary reflect the journal's stance, *Evolutionary Human Sciences* is on the most epistemologically self-critical end of the spectrum (see footnote $n^{\circ}1504$, 384), which happens to match the reviews' content.

¹⁵⁰⁸ With Dr Conroy-Beam crediting me for "opening his eyes" to manosphere appropriations of EP on Twitter right upon publication of his article, Daniel Conroy-Beam, Twitter, May 16, 2024, <u>https://archive.is/SLN9R</u>, archived July 10, 2024.

In a critical article on r/TheRedPill, sociologist Shawn Van Valkenburgh studied the popularity of evolutionary psychology among Red Pillers, claiming without tangible evidence that "a branch of academia is implicated in r/TRP's construction."¹⁵⁰⁹ My interviews and analyses of the phenomenon can allow to nuance those claims. There is no such thing as a unified "branch of academia," as evolutionary academics work in different fields and on different continents and exhibit a broad range of ideological attitudes towards science, feminism, and the manosphere. Contacts between evolutionary scholars and the manosphere are extremely scarce. With the cases of Lionel Tiger and Michael Mills's influence on Warren Farrell, we can indeed say that some sympathetic evolutionary scholars had a direct influence on manosphere thinking. More frequent however is the attitude of Glenn Geher, who spreads his research to any willing audience, regardless of its ideology.

However, many evolutionary psychologists are also committed to combating manosphere science. In his article for the *Boston Globe*, Dan Conroy-Beam writes: "Peering into the manosphere has been like walking through a funhouse mirror version of my science. The manosphere view of evolutionary psychology is distorted, filtered, selective, and embellished."¹⁵¹⁰ These concerned scholars, whom I believe to be the majority of the field (see survey results), seem to have warmly received this research, and I hope that some will read this dissertation and subsequent publications to understand the context and content of manosphere science. In conclusion, I summarize findings and analyses, map out directions for future research, and issue recommendations for those scholars.

 ¹⁵⁰⁹ Van Valkenburgh, "Digesting the Red Pill: Masculinity and Neoliberalism in the Manosphere," 93.
 ¹⁵¹⁰ Daniel Conroy-Beam, "How the Incels Warped My Research," *The Boston Globe*, May 16, 2024, <u>https://web.archive.org/web/20240615015137/https://www.bostonglobe.com/2024/05/16/opinion/evolutionary-psychology-incel-manosphere/</u>, archived June 15, 2024.

CONCLUSION:

Summary, Future Directions, and Recommendations

Why Evolutionary Psychology?

There is nothing inherently sexist in evolutionary psychology. The human mind evolved, and so did the sexes throughout the animal kingdom. As such, there is no reason why Darwinian theory could not shed light on human behavior and sex differences, as it does for other species. Why then is this particular discipline so popular in the manosphere, and not cognitive science or sociology, which are relatively rare in manosphere discourse?

A first obvious answer lies in the areas investigated by evolutionary psychologists, chief among which are sex and mating, domains of human life which are at the core of manosphere grievances and interests. We have seen the sometimes puzzling similarity between manosphere tropes and evolutionary psychology hypotheses, such as for example the popular notion that women settle with stable partners (betas) for their resources while cheating on them with attractive men (alphas), echoing the dual mating strategy hypothesis about the evolution of female infidelity. As for Pickup-Artists, they would be hard pressed to find a discipline with such a strong focus on heterosexual attraction and seduction as evolutionary psychology. Yet not all sex researchers are evolutionary scientists, so why then aren't sexology, or sex and gender scholarship more prominent in the manosphere?

Manospherians seem to view the sexes as diametrically opposed, as coming from Mars or Venus. Evolutionary psychologists follow the heuristic that men and women are psychologically similar in domains where they faced the same selective pressures and survival challenges over history (e.g., sensory faculties), and might differ where they faced different evolutionary challenges. Therefore, sex differences do not feature much in evolutionary research on the evolution of morality, altruism, or tribalism, but they are omnipresent in the study of sex and mating—thus fitting the manosphere's distorted view of behavioral sex differences.

Moreover, evolutionary psychology may be less agenda-driven than some other disciplines, such as economics or medicine. It is fundamental research, which rarely attempts to solve social issues.¹⁵¹¹ By fear of committing the naturalistic fallacy, evolutionary psychologists often shy away from delivering normative or prescriptive judgments on the phenomena they study. By disciplinary tradition too, those researchers are inspired by biology and animal behavior research, which take a non-judgemental view of behavior. On the other hand, sociological research, such as the present one, does not shy away from critical assessment, normative condemnations of inequality, sexism, or racism, or policy recommendations. Somewhat paradoxically, this absence of normative judgments in evolutionary psychology research might make it more amenable to all kinds of interpretations and normative appropriations by third parties.

As remarked by sociologist Ullica Segerstråle: "evolutionary biology is a surprisingly flexible field," that can "be employed to prove almost any point one wishes."¹⁵¹² Moreover, the entry bar to evolutionary psychology is quite low compared to other fields in the life sciences: anyone can forward a just-so story, and manospherians do it on a collective scale. Evolutionary psychologists mostly use the methods and concepts of psychology and anthropology, which are not

¹⁵¹¹ Thanks for Dr Martie Haselton for suggesting this point.

¹⁵¹² Segerstråle, "Implicit and Explicit Customized Science: The Case of Evolutionary Biology," 103.

particularly technical (as opposed to evolutionary genetics for example), making understanding and appropriation by laypeople rather simple.

Evolutionary psychology is not the only field in the evolutionary behavioral sciences. Human behavioral ecology also uses Darwinian theory to explain human behavior. Yet, it is rarely invoked or cited directly by name in the manosphere. Where evolutionary psychologists look for universals in human emotions and cognition, behavioral ecologists focus on behavioral variations in relation to the environment (hence the term "ecology"). As such, human behavioral ecologists tend to make fewer generalities about human nature, and their work is, thus, probably less liable to become appropriated in crude Darwinian narratives which make sweeping statements about our species.

Lastly, scientific disciplines cannot be extracted from their historical and sociological context. Evolutionary science has two specific features which could both partially account for its popularity in the manosphere. Firstly, the field produced many gifted science writers, such as Richard Dawkins, EO Wilson, or Steven Pinker, which popularized the discipline to wide audiences, embarking readers in a compelling quest to understand human nature. Secondly, evolutionary approaches to human behavior have spurred many controversies and opposition by feminists and other social scientists—a sheen of controversy which cannot fail to attract people with antifeminist attitudes to the discipline.

Manosphere Science: A Summary

I have argued that manosphere science is a unique epistemic object, distinct enough from academic research to warrant its own label (although the term of "science" in "manosphere science" is not to be taken literally). This collective body of knowledge revolving around sex differences and gender dynamics is mostly based on Darwinian reasoning and theory. Throughout the dissertation, an obvious starting point was therefore to constantly go back and forth between manosphere science and the state of research in the evolutionary behavioral sciences. These comparisons revealed a host of differences between academic research and its manosphere avatar(s). Several dynamics can account for this discrepancy.

The first one pertains to scientific literacy or public understanding of science. As communities of laypeople engage with scientific research, some of them will inevitably misunderstand part of the research. The survey results revealed that some misconceptions of Darwinian evolution were relatively prevalent among manospherians, such as the intentionalistic fallacy, i.e., the belief that organisms consciously act to maximize their genetic fitness. Likewise, some crude and spurious group selectionist reasoning—according to which traits evolve when they benefit the entire species—persists in the manosphere. However, when compared to a counterpart group of US survey respondents, manospherians had a much more thorough understanding of Darwinian evolution. In fact, they overwhelmingly chose correct answers when confronted with distractors. As such, it is thus impossible to ascribe the specificities of manosphere science to sole misunderstandings of evolutionary research.

Another explanation for the specificities of manosphere science lies in psychological and political biases. Indeed, there is evidence that people tend to intuitively view gene-based causes for

behavior as more deterministic and immutable than sociocultural causes, which is not necessarily true. Among the enthusiastic Darwinians of the manosphere, our analyses have revealed an exaggeratedly deterministic view of instincts, which often omits flexibility and variability, in particular among incels. I have also documented the outgroup homogeneity bias, by which women are perceived as uniformly similar while manospherians never seem to think of themselves in such terms. Another source of bias might be the misinterpretation of quantitative data as I found evidence for the existence of a Men from Mars/Women from Venus bias, by which average sex differences tend to become exaggerated and the two sexes viewed as diametrically opposed. A last type of bias, which is inextricable from ideological biases, includes confirmation biases, and motivated reasoning, i.e., the tendency to selectively consume and believe in ideas and pieces of evidence which are congruent with one's worldview.

This type of dynamic was extremely prevalent throughout my analyses. For instance, manospherians are prone both to dismiss the scientific establishment when they do not agree with its conclusions and to use its legitimacy when it lends credence to their claims, a clear example of "motivated skepticism."¹⁵¹³ In fact, it is evident that manosphere interpretations of evolutionary psychology are highly selective. This was demonstrated in the comparison between Pickup-Artists' and incels' take on evolved mate preferences, with both communities focusing on different aspects of the academic literature based on their respective agendas: motivational and commercial for PUAs, hopelessly deterministic for incels.

The most important source of bias in manosphere science is by far misogyny. Indeed, there is little doubt that manosphere science is a highly gendered reading of evolutionary science, echoing historian Kimberly Hamlin's analysis of 19th-century Darwinian feminism: "As a result of evolutionary theory's implications for gender and sex, responses to it were often highly gendered as readers interpreted Darwinian evolution according to whether or not it supported what they believed to be true, or hoped could be true, about men and women."¹⁵¹⁴ Thus, manosphere discourse tends to exaggerate and extrapolate anything with positive implications for men and masculinity, such as the behavioral impacts of testosterone, while omitting elements which paint a more negative picture of male nature, such as men's higher propensity to commit sexual infidelity or virtually all kinds of violent acts. Conversely, findings about the "dark side" of female nature (female competition, infidelity, manipulation, etc.) tend to be heavily discussed and exaggerated, with a bevy of normative value judgments added on top of the original research.

This misogyny seems to stem in parts from negative life experiences with women, such as romantic rejection for incels, or divorce for MRAs and MGTOW, leading to emotional and normative readings of the scientific literature on related topics. Adaptationist reasoning is inherently so flexible that anyone can create evolutionary hypotheses about the sexes. This leaves free rein for manospherians to devise remarkably creative just-so stories about sex differences, echoing their everyday observations and experiences, such as Roy Den Hollander, the MRA who

¹⁵¹³ I owe this concept of "motivated skepticism" applied to the manosphere to science blogger and critic of the manosphere @datepsych, Alexander, "The Emotional Epistemology of the Red Pill," Date Psychology.com, March 16, 2023 <u>https://web.archive.org/web/20231017165459/https://datepsychology.com/the-emotional-epistemology-of-the-red-pill/</u>, archived October 17, 2023.

¹⁵¹⁴ Hamlin, From Eve to Evolution, 5.

devised JSSs about female infidelity after being cheated on by his wife. Typically, such manosphere just-so stories are not clearly signaled as hypothetical, nor are they substantiated by anything other than anecdotal evidence.

Comparing manosphere science to academic research is insufficient to produce an exhaustive analysis and critique. A thorough deconstruction of the manosphere's Darwinian discourse on sex differences reveals that much of it has little grounding in evolutionary science itself, as exemplified by the popularity of misogynistic thinkers such as Arthur Schopenhauer. This is where attention to the ideological history of the manosphere and the broader political context is necessary. For example, the male disposability concept was coined by Men's Rights Activist Warren Farrell in the 1990s and was later collectively "Darwinized" by manosphere pundits and writers. Moreover, the manosphere does not exist in a vacuum, and thus shows enthusiasm for the pseudoscientific fads of its time (as illustrated by the case of Neuro-Linguistic Programming), or for popular myths such as that of the "reptilian brain." As for its Darwinian-inspired philosophy of history, often verging on declinist conspiracy theories, it can only be understood as a manifestation of antifeminist politics and Alt-Right narratives.

Contributions to the Literature

By highlighting the different sources and processes underlying manosphere science, the present research has shed light on this unique body of knowledge, thus contributing to the academic literature in several areas.

Firstly, in the field of manosphere research (reviewed exhaustively in Chapter I), this work has a threefold interest for other scholars, starting with research ethics, methods, and data. Studying hostile online communities raises issues of informed consent, cybersecurity, and data protection. Yet, there is no comprehensive set of guidelines to help scholars navigate this uncharted and potentially dangerous environment. Manosphere researchers have thus been at the forefront of the methodological and ethical discussions on Internet research, and I hope that the present work will contribute to these discussions. In a paper entitled "Navigating Great Areas: Ethical Issues in Studying Online Antifeminist Communities," I thus detail and justify the methodological choices regarding informed consent and data protection for the manosphere corpus study and give practical advice for researchers in the early stages of such a research project.¹⁵¹⁵

In terms of study design, my manosphere science quiz is the first attempt at conducting a manosphere-wide survey study. Survey dissemination was slow and difficult, owing to suspicion and hostility from manospherians, but I ended up gathering 148 responses on this lengthy questionnaire. By reproducing as appendixes the dissemination materials, the interaction with manosphere community gatekeepers, and listing the websites and platforms where the survey was advertised, this dissertation can help other manosphere researchers conduct surveys, which the literature on non-incel groups is sorely lacking. As I strove to protect my anonymity and

¹⁵¹⁵ Louis Bachaud, "Navigating Grey Areas: Ethical Issues in Studying Online Antifeminist Communities," *Revue Française Des Sciences de l'Information et de La Communication*, no. 25 (2022), <u>https://doi.org/10.4000/rfsic.13374</u>. Since then, I have helped several PhD students in my lab design their own Internet research ethics protocol for Ethical Review Board submission.

cybersecurity when approaching potentially dangerous manosphere communities, I also encountered unforeseen difficulties which greatly hampered the work.¹⁵¹⁶ A future avenue for publication could be to write a reflexive article on the challenges faced during this process to help other researchers administer such surveys on hostile online communities.

The present work aimed at making its methods and the underlying justifications transparent so that they could be reproduced by others. Thus, I provide the full survey materials in the hope that my findings can be replicated or extended to other communities of potential interest (such as Alt-Right or feminist online communities). I cannot publicly share the 9,000 pages of the manosphere discourse corpus, parts of which are treated as protected personal data under EU law. However, when asked, and with the approval if the University of Lille's Data Protection Officer, I was able to share the entire dataset with a team of US Artificial Intelligence researchers I am collaborating with, provided that strict data protection measures were enforced.¹⁵¹⁷

My second area of contribution to manosphere research lies in the contents of Chapter I: History, Sociology, and Ideology of Manosphere Groups. There exists to my knowledge no work on manosphere history *per se*, while forebears such as the Men's Liberation Movement are also rarely studied. Through my analyses of primary sources, I traced in this chapter the ideological genealogy of the contemporary manosphere, starting with pre-Internet movements in the 1970s-1980s.¹⁵¹⁸ My discourse analysis of Men's Liberationist and early MRA sources was supplemented by an interview with Warren Farrell, adding invaluable details and insights by the main protagonist of this story.

Additionally, I provided my own definition of the manosphere in I)B), as well as description, typology, and analysis of all its branches, which should provide a comprehensive introduction for any scholar interested in manosphere research. Furthermore, the exhaustive literature review of manosphere research presented in I)C) is to my knowledge the only one which spans the five communities.¹⁵¹⁹ My last contribution to manosphere research hinges in the content of the analysis chapters (IV-VII), which should allow scholars specifically interested in manosphere science to make sense of this phenomenon ideologically, but also scientifically.¹⁵²⁰

The present dissertation also contributes to scholarship on the history of Darwinism and its political appropriations in the United States (presented in Chapter II). As a grand theory of life on

¹⁵¹⁶ See details above in Chap. III, B, 147-148.

¹⁵¹⁷ The head of the project, Keith Burghardt from the University of Southern California, has pledged to enforce strict data protection procedures, see Appendix 27, 555.

¹⁵¹⁸ I thus published a book chapter in French about the history of Men's Liberation and its subsequent scission leading to the birth of the Men's Rights movement, Louis Bachaud, "Aux Sources Du Masculinisme, Un Mouvement d'hommes Féministes : L'étonnante Trajectoire Du Men's Liberation Movement," in *Genres et Militantismes: Pluralité Des Formes de Mobilisations Féminites et LGBTQ*+, ed. Groupe d'Études Doctorales sur le Genre (GEDoG) (Joinville-le-Pont: Double Ponctuation, 2022), 41–68. This is an original contribution to the history of US activism, which I intend to translate into English for an American studies or history journal.

¹⁵¹⁹ I have therefore published these materials in the introduction of a special French journal issue on the manosphere, Louis Bachaud, "La Manosphère Anglophone : Tour d'Horizon et Revue de la Littérature," *Revue française des sciences de l'information et de la communication*, no. 28 (2024).

¹⁵²⁰ Parts of the analysis on incels have thus been published as a paper in an American Studies journal, Louis Bachaud, "I'll Always Be a Subhuman, I Just Lost the Genetic Lottery': Subaltern Identity-Building in Online Incel Discourse and Ideology," *Nuevo Mundo Mundos Nuevos*, 2024, <u>https://doi.org/10.4000/nuevomundo.95206</u>.

earth, Darwinism has always clashed with established belief systems, notably around issues of sex and gender. I was inspired by the work of historian Kimberly Hamlin on US Gilded Age feminists' appropriations of evolutionary theory in their quest for political rights.¹⁵²¹ I show that a century later, manosphere science is an oddly similar but reverse phenomenon, in which the same Darwinian theories of sexual selection and female choice are weaponized by men's groups with antifeminist agendas.

In terms of public understanding of science, my work sheds light on laypeople's grasp and reception of evolutionary science. This is a topic which has received a lot of attention in the United States, the last bastion of creationism in the Western world. My survey study is the first to evaluate people's knowledge in the evolutionary behavioral sciences, measuring the prevalence of certain misconceptions of Darwinism in the public, with manospherians and US respondents recruited on Prolific. Moreover, it allowed to assess laypeople's favorite sources of scientific content and explored the relationship between those sources and specific misconceptions, highlighting for instance the possible effect of popular science books on reducing misconceptions.¹⁵²²

Lastly, my work has proved of great interest to the evolutionary behavioral science research community itself. Indeed, it explores manosphere science, which evolutionary psychologist Daniel Conroy-Beam has called a "funhouse mirror version" of his own science.¹⁵²³ My work has revealed the epistemology of manosphere science, by comparing it to the state of empirical research and theory, thus highlighting underlying emotional, sexist, and political biases, but also by disentangling established scholarship from just-so stories. As such, I intend to publish my analyses of the manosphere JSS dataset from Chapter IV)C), which should not fail to interest scholars who will see how lay communities of Darwinian aficionados creatively employ adaptationist reasoning on a large scale.¹⁵²⁴ I presented my work at four evolution and human behavior international conferences in 2023 and 2024, and co-authored a paper in the *Evolutionary Human Sciences* journal to review the phenomenon for those scientists who might be concerned, but do not necessarily have the time or career incentives to engage with the phenomenon in depth.¹⁵²⁵ In the paper, we provide recommendations for evolutionary scientists wishing to combat manosphere appropriations of their research, a topic which is now addressed.

Why Should Evolutionary Scientists Care about Manosphere Appropriations of Science?

From the birth of sociobiology to modern evolutionary psychology, evolutionary behavioral sciences have been controversial inside and outside of academia. In the United States, as shown by the examples of Larry Summers or James Damore, publicly forwarding biological explanations on hot-button issues of sex differences can cost one their job.¹⁵²⁶ In that context, evolutionary

¹⁵²¹ Hamlin, *From Eve to Evolution*.

¹⁵²² I intend to get these quantitative results and analyses published in a public understanding of science journal, ideally *Evolution: Education and Outreach*, which is dedicated to evolutionary science.

¹⁵²³ Daniel Conroy-Beam, "How the Incels Warped My Research," *The Boston Globe*, May 16, 2024, <u>https://web.archive.org/web/20240516192651/https://www.bostonglobe.com/2024/05/16/opinion/evolutionary-</u>psychology-incel-manosphere/.

¹⁵²⁴ With evolutionary scientists Sarah Johns and Macken Murphy, who helped me review the dataset, as co-authors. ¹⁵²⁵ Bachaud and Johns, "The Use and Misuse of Evolutionary Psychology in Online Manosphere Communities."

¹⁵²⁶ These controversies are discussed respectively in Introduction, 16; Chap. IV, B, 200.

psychologists have mostly focused their outreach efforts towards establishing their disciplines as rigorous and legitimate scientific fields, against "blank slate" visions of human nature which do not incorporate evolutionary theory. In doing so, they have however neglected to address political appropriation by their enthusiasts.¹⁵²⁷ For that reason, Daniel Conroy-Beam issued a grave warning call to his colleagues in his *Boston Globe* op-ed, writing that because of this negligence, their discipline had "a body count."¹⁵²⁸ Referring to incel mass murders such as the 2014 Isla Vista attacks and the 2024 Bondi Junction stabbings in Sydney (whose links to the manosphere have yet to be established), he implied that evolutionary psychology had a causal influence on manosphere violence, and thus a moral responsibility. This is of course a really difficult claim to prove. In a rebuttal to the article, evolutionary psychologist Diana Fleischman argued that scientists have no responsibility for potentially influencing mass murderes:

"Even if both of these men had murdered their victims while shouting 'evolutionary psychology akbar!', with a bookshelf at home full of Thornhill, Buss, Daly and Wilson, that wouldn't mean that evolutionary psychologists should have to carefully consider what they say in public or how they represent the field so as to not be culpable for violence. In my view, no public intellectual and no science is responsible for how a small minority of mentally ill people interpret their ideas."¹⁵²⁹

Fleischman's arguments come from an abstract, philosophical perspective. In terms of moral responsibility, she argues, one cannot be blamed for inspiring other people. With wide circulation of ideas on the Internet, it is impossible to prevent violent or demented individuals from misunderstanding, misappropriating, or drawing wrong conclusions from your work. These are reasonable points. Indeed, once ideas are in the public realm, they can take on a life of their own, get simplified, modified, translated, until they have little bearing with their originator's intents or arguments—as was shown by the example of the "alpha male" concept, whose original popularizers now regret propagating. As such, an elementary piece of free speech and individual rights protection is to not hold someone responsible for someone else's actions. Accepting this part of her reasoning, we could indeed discard the idea that evolutionary psychologists are all morally responsible for manosphere mass shootings. However, I do not believe that the question of moral responsibility is the crux of the argument.

There is a difference between saying that Nietzsche would be morally responsible for the horrors of Nazism, which occurred decades after his death (a contested proposition), and saying that his ideas had a direct influence on the formation of Nazi ideology (a consensual historical fact, which is true of Darwin as well).¹⁵³⁰ The framing of the issue by Fleischman, i.e., "does

 ¹⁵²⁸ Conroy-Beam, "How the Incels Warped My Research." For the complete quotation, see page 383-384 above.
 ¹⁵²⁹ Diana Fleischman, "Does Evolutionary Psychology Really Cause Mass Shootings?," Dissentient, May 24, 2024, https://web.archive.org/web/20240718082425/https://dissentient.substack.com/p/does-evolutionary-psychology-

¹⁵²⁷ A point which is made by McCaughey, *The Caveman Mystique*, 123.

<u>really</u>, archived July 18, 2024. The authors cited are evolutionary psychologists famous for working on violent behaviors such as homicide or rape from an evolutionary perspective.

¹⁵³⁰ For exploration of this debate, see Kurt Rudolf Fischer, "Nazism as a Nietzschean 'Experiment," in *Nietzche-Studien*, ed. Mazzino Montinari, vol. 6 (Berlin: De Gruyter, 1977), 116–22. For the complex influence of biology on Nazi ideology, see Paul Weindling, "Genetics, Eugenics, and the Holocaust," in *Biology and Ideology: From Descartes to Dawkins*, ed. Denis Alexander and Ronald Numbers (Chicago and London: University of Chicago Press, 2010), 192–214.

evolutionary psychology really cause mass shootings?" appears to be a little disingenuous, and would be the equivalent of asking if "Nietzsche really caused the Holocaust?" It relies on a very simplistic vision of causation, where one single factor can be presumed to account for complex ideological, political, and social events. Ideas do have influence, they shape worldviews, which then influence behavior. And the present work reveals that, indeed, manosphere appropriations of evolutionary science lay the cognitive, emotional, and ideological foundation and justification for acts of discrimination and violence against women.

In her ethnographic work on London Pickup-Artists, sociologist Rachel O'Neill interviewed men involved in the seduction community. She found that narratives about the evolutionary "imperative" of spreading one's seed had a real-life influence on these men and functioned as a potent rationale and justification for their actions: "Those who employed this repertoire were utterly convinced of their own evolutionarily ordained need for sex," she noted, which in turn compelled them "to explain why they and other men must conduct their intimate lives in accordance with such biological dictates."¹⁵³¹ Throughout this dissertation, we have shown the potentially troubling implications of the manosphere's view of women. When Pickup-Artists see female behavior as uniformly hardwired to respond to the same cues, they can end up flouting sexual consent. When Red Pillers construe everything a woman says as a form of "shit test" which should be disregarded, this leads to deceitful and manipulative relationships. Lastly, when incels routinely dehumanize women, this paves the way for the most heinous acts of violence.

Diana Fleischman claims that "there is no evidence that either of these guys [the Santa Barbara and Sydney killers] were influenced by evolutionary psychology."¹⁵³² However, she avowedly only conducted a quick search for the word "evolutionary" throughout Rodger's 137-page manifesto. Had she simply looked at derivatives of the word such as "evolved," she would have found more disturbing passages such as this one:

"Why do women behave like vicious, stupid, cruel animals who take delight in my suffering and starvation? Why do they have a perverted sexual attraction for the most brutish of men instead of gentlemen of intelligence? I concluded that women are flawed. There is something mentally wrong with the way their brains are wired, as if they haven't evolved from animal-like thinking. They are incapable of reason or thinking rationally. They are like animals, completely controlled by their primal, depraved emotions and impulses. That is why they are attracted to barbaric, wild, beast-like men. They are beasts themselves. Beasts should not be able to have any rights in a civilized society."¹⁵³³

This excerpt bears many of the hallmarks of manosphere science highlighted throughout this dissertation: an asymmetric focus on female nature and women's evolution (but not men's), and a uniformization of female behavior through the appeal to women's inflexible evolved "impulses," leading to total dehumanization. This chain of spurious descriptive statements is

¹⁵³² Fleischman, "Does Evolutionary Psychology Really Cause Mass Shootings?"
¹⁵³³ Elliot Rodger, *My Twisted World*, May 23, 2014,

¹⁵³¹ Rachel O'Neill, *Seduction: Men, Masculinity, and Mediated Intimacy* (New York: John Wiley & Sons, 2018), e-book location 58%.

https://web.archive.org/web/20210104142706/https://assets.documentcloud.org/documents/1173619/rodgermanifesto.pdf, archived January 4, 2021, 117.

swiftly followed by a normative call for removing women's rights, illustrating the interweaving of manosphere science and antifeminist politics. Fleischman wants to absolve evolutionary psychologists of all responsibility for this, and I do not believe that holding them directly responsible is indeed justified. However, there is no denying that evolutionary psychology (or at least a distorted version thereof) is playing a central role in contemporary manosphere ideology. I contend that evolutionary psychologists, and all evolutionary behavioral scientists, should care about this for three reasons.

The first one pertains to the reputation of the field. If mass shooters, Alt-Right pundits, or conspiracy theorists keep on peppering their discourse with adaptationist reasoning and evolutionary psychology jargon, we cannot expect the media or the public to ever dissociate the two. Evolutionary approaches to human behavior are already controversial, and often misrepresented and/or misunderstood. As such, the last thing they need is the bad press given by popularizers who customize the science to suit their commercial or political aims. And especially by movements which are predicated upon hostility towards the female half of humankind, and involved in several forms of gendered violence, from day-to-day online misogyny to the deathliest attacks. Fleischman seems to believe that the way to protect the field is to lambast Conroy-Beam's attempt at investigating the roots and consequences of manosphere science. In doing so, she is defending a narrow vision of absolute academic freedom, in which scholars are free to investigate anything they want without any fear of censorship or reprisal. But it is unclear whether she is doing service to the field itself, whose reputation cannot be wholly separated from that of its lay popularizers and enthusiasts. By taking a public stand on manosphere science and calling for his colleagues to do the same, Conroy-Beam at least tried to address this issue of reputation by clearly dissociating academic research from the sexist online avatars which it does not endorse.

Secondly, evolutionary scientists have a professional responsibility to communicate their findings and to promote the public's accurate understanding of the literature. Although the manosphere is home to avid readers of evolutionary psychology research, it also creates its own adaptationist just-so stories, which seamlessly mingle with established evolutionary hypotheses. Some of these online Darwinian folk hypotheses may take a life of their own and spread widely, as was shown by the example of the male disposability or "shit test" JSSs. If evolutionary scientists do not take the time to critically engage with these just-so stories and assess them empirically and theoretically, who can? With their academic expertise, evolutionary scientists are by far the most qualified and legitimate to remind the public about the features of good evolutionary hypothesizing, and to clearly distinguish their research from laypeople's speculations.

Thirdly, scientists are also citizens with their own values. Given the rampant misogyny and dehumanization of women present in the manosphere, as well as the several terror attacks committed by incels, we can expect many evolutionary scholars to be concerned, if not alarmed by the manosphere and its ideology. There is little doubt that evolutionary science plays a major role in this ideology, as shown throughout this dissertation. To go back to the comparison, Nietzsche did not have the possibility of knowing that his ideas would be a direct inspiration for Nazism, which makes it somewhat anachronistic to discuss his moral responsibility for the horrors of World War II. However, evolutionary psychologists, thanks to Conroy-Beam's column or to this present work and its dissemination, do not ignore that their discipline is a direct, though distorted,

inspiration for the manosphere. For the many whose moral and political values conflict with the manosphere, individual or collective effort against manosphere science seems like a self-evident course of action.

What Can Evolutionary Scientists Do About Manosphere Science?

Although my research is analytical, I often get asked about potential interventions against manosphere appropriations of science. Here, I share reflections on this thorny issue.

The most obvious defense against faulty or exaggerated interpretations of research results lies in more accurate and rigorous communication of those results—something that any scientist would probably agree with. Indeed, quantitative scientific results routinely get simplified and distorted by news outlets, or by universities' own press releases.¹⁵³⁴ The standards of academic publishing also contribute to this phenomenon, by having complex research results simplified into catchy one-line paper titles. Even scholars themselves do not always accurately portray the research they cite, with a recent study finding that around 9.5% of academic citations in major psychology journals completely mischaracterize the results from the study they cite.¹⁵³⁵ Taken together, these distortions cannot help but foster misunderstandings of science, calling for ever-increasing standards in clear and accurate science communication.

As discussed in Chapter VI, a statistically significant sex difference might have a small effect size, with massive overlap between men and women, which could be lost to the lay reader if not stated explicitly. Clearly reporting variability in the data and effect sizes of the results (i.e., magnitude of the difference) should be a prerequisite for science communication on these issues. Yet, given their disciplinary emphasis on evolved sex differences, evolutionary psychologists have been accused of overemphasizing sex differences in their science communication, over and beyond what their own empirical results warranted.¹⁵³⁶ In my interview with evolutionary science podcaster and researcher Macken Murphy, we discussed potential avenues to combat misrepresentations of research results. He recently co-published a study on infidelity in Evolution and Human Behavior, with evidence that cheaters found their affair partners to be more physically attractive, and their primary partners to be better parents, a finding consistent with the dual mating strategy hypothesis.¹⁵³⁷ The paper is an example of how scholars who are aware of manosphere science can make their research harder to appropriate. Indeed, even though this is a study on female infidelity, the authors make sure to remind in their introduction that this behavior is more typical of men. Moreover, male participants were also included in the study design and in the graphs, to make sure that female behavior was not discussed in a vacuum, and that graphs from the paper would not become viral in online misogynistic spaces. Theoretically, this means that

¹⁵³⁴ Petroc Sumner et al., "The Association between Exaggeration in Health Related Science News and Academic Press Releases: Retrospective Observational Study," *BMJ* 349 (2014): 1–8, <u>https://doi.org/10.1136/bmj.g7015</u>.

¹⁵³⁵ Cory Cobb et al., "The Problem of Miscitation in Psychological Science: Righting the Ship," *American Psychologist* 79, no. 2 (2024): 299–311, <u>https://doi.org/10.1037/amp0001138</u>.

¹⁵³⁶ Good evidence of this is provided in Andrew Smiler, "Sexual Strategies Theory: Built for the Short Term or the Long Term?," *Sex Roles* 64, no. 9 (2011): 603–12, <u>https://doi.org/10.1007/s11199-010-9817-z</u>, 608.

¹⁵³⁷ Macken Murphy, Caroline Phillips, and Khandis Blake, "Why Women Cheat: Testing Evolutionary Hypotheses for Female Infidelity in a Multinational Sample," *Evolution and Human Behavior* 45, no. 5 (2024): <u>https://doi.org/10.1016/j.evolhumbehav.2024.106595</u>.

manospherians would have a harder time touting this study as proof of females' being "naturalborn cheaters," while also putting a dent in very sex-differentiated accounts of sexual infidelity, since the study found comparable dynamics in both men and women. Here, the research design yielded less straightforward, but more valid results, which should be less liable to be appropriated by the manosphere.

Moreover, when communicating his results, Murphy makes sure not to overemphasize the extent of his findings: "I feel that I have a responsibility to clarify that many people in the sample, for example, did not follow that pattern and that most people don't cheat. So most people aren't exhibiting that strategy," he said in our interview.¹⁵³⁸ In statistical terms, this means communicating variability (not all cases fit the trend) as well as reminding the baseline (most people don't cheat in the first place). As explained by Murphy: "we're talking about a majority of a minority of people, meaning that there's tons of exceptions, meaning that most people will be exceptions."¹⁵³⁹ Such clear explaining and nuancing of quantitative results in layperson's terms is extremely valuable, and Murphy believes this is the way to go for communicating scientific results to the public: "So if you can, write a blog post about your article for *Psychology Today*. Something super searchable. Post a Twitter thread. Get a YouTube video up explaining your research. Make sure to make the primary source content as available as possible," he recommends.¹⁵⁴⁰

Beyond matters of science communication for the public, the present dissertation has shown that laypeople routinely read from peer-reviewed journals. Even though those journals were originally intended as publications for peer-communities of experts, their increased accessibility on the Internet calls for change. Discussing evolution and human behavior requires clearing some popular misconceptions beforehand, such as the naturalistic or intentionalistic fallacies, which is not always the case in evolutionary science articles: "[p]resumably, scholars do not feel the need to restate such obvious things to their esteemed colleagues," we suggest in our paper.¹⁵⁴¹ Textbooks and popular science books usually address common misconceptions, and we call for researchers submitting papers to peer-reviewed journals to do the same, especially since those reminders and caveats usually take no more than a couple sentences. This is in keeping with my finding that reading science books was correlated with the lowest rate of misconceptions in survey respondents across both samples—a finding which should also encourage scholars to write book-length popular accounts of their research.

Another related issue is that of word choices in scientific writing. Thus, in our paper, we recommend that scholars refrain from using the world "cuckoldry," which has a sexist history and is now one of the Alt-Right's favorite insults, in favor of neutral terms from the animal literature such as extra-pair mating or extra-pair paternity.¹⁵⁴² Biological sciences and behavioral sciences often use everyday terms to describe phenomena, and should be careful about making sure that those terms do not carry gendered double standards or value judgments, especially when discussing such sensitive topics as gender and sexuality. By scrutinizing the tropes and language of

¹⁵³⁸ Macken Murphy, May 2024, interview with the author. For details about the interview, see Chap. III, C, 161. ¹⁵³⁹ Ibid.

¹⁵⁴⁰ Ibid.

¹⁵⁴¹ Bachaud and Johns, "The Use and Misuse of Evolutionary Psychology in Online Manosphere Communities." ¹⁵⁴² Ibid.

manosphere science, the present dissertation can hopefully allow concerned scholars to carefully pick their vocabulary. Recently, the "alpha male" term seems to have resurfaced in the evolutionary psychology literature on leadership.¹⁵⁴³ Yet, the phrase is never rigorously defined, and only used in its popular sense with quotation marks. This is a unique example in which a term originated in the evolutionary literature on animal behavior, then seeped into popular culture, before coming back to the scientific literature on humans with modified meaning and associations.¹⁵⁴⁴

The last route for the most concerned scholars consists in directly challenging manosphere appropriations of science. This is the case of the present dissertation, which has mentioned other scholars who chose this path, such as Daniel Conroy-Beam or Alexander @DatePsych. Macken Murphy went even further and debated manosphere pundits live.¹⁵⁴⁵ However, reflecting on this experience in our interview, he was rather pessimistic:

"It's not productive in the way that I hoped it would be. If it was, then I would keep doing it. If I thought that I was reaching hearts and minds and things like that, then I would keep doing it. But I don't think that's what happens when you debate people. I feel like people just get more entrenched in their original positions."¹⁵⁴⁶

Direct participation by scholars on manosphere platforms can be emotionally taxing, and Murphy keeps receiving "tons of online abuse" for appearing there.¹⁵⁴⁷ Ultimately, he argues, there is not much that an individual scientist can do about this collective online phenomenon, and he believes there is a "higher cost from researchers getting distracted, trying to clean up messes that are impossible to clean up."¹⁵⁴⁸

Indeed, the main issue with an individual scientist's conducting outreach efforts to address manosphere science is the lack of career incentives. In the very competitive job market of academia, people are selected on their number of publications in prestigious journals and citations by their peers. This incentive structure perpetuates itself, as new generations entering this career have little choice but to comply. Thus, sharing popularization videos on YouTube and TikTok, or carefully debunking online misuses of science on social media, does not always grant "points" on a résumé or job interview. Relying on a few motivated individuals who thus somewhat hamper their career perspectives is inefficient, as well as unfair to those individuals. Beyond potential opportunity costs in career advancement, scholars who decide to confront the manosphere are also likely to be met

¹⁵⁴³ Adi Wiezel et al., "Stereotypes versus Preferences: Revisiting the Role of Alpha Males in Leadership," *Evolution and Human Behavior* 45, no. 3 (2024): 292–308, <u>https://doi.org/10.1016/j.evolhumbehav.2024.01.001</u>.

¹⁵⁴⁴ This calls for human and nonhuman behavior scholars to collectively decide about the usefulness of the "alpha male" phrase, as it strangely recedes from the wolf literature from which it originated to make its way into human behavior research, by way of having become a popular stereotype—thanks in part to the manosphere.

¹⁵⁴⁵ Entrepreneurs in Cars, "PTW # 91 – Macken Murphy – Data Driven Advice," YouTube.com, August 25, 2023, <u>https://web.archive.org/web/20240604074905/https://www.youtube.com/watch?v=Puydi_dMuyc</u>, archived June 4, 2024; hoe_math, "SEX_FIGHT: Macken Murphy vs hoe_math," YouTube.com, November 3, 2023, <u>https://web.archive.org/web/20240605085044/https://www.youtube.com/watch?v=GDSsqNDjENs</u>, archived June 5, 2024.

¹⁵⁴⁶ Macken Murphy, May 2024, interview with the author. For details about the interview, see Chap III, C, 161. ¹⁵⁴⁷ This is why I have shied away from such interventions so far.

¹⁵⁴⁸ Macken Murphy, May 2024, interview with the author. For details about the interview, see Chap III, C, 161.

with a bevy of cyber-harassment, something from which scholars are still barely protected by their home universities, or by security forces.

Yet, collective action is possible. In 2022, a white supremacist murderer killed 10 Black people in Buffalo, New York. In his manifesto, the shooter replicated graphs from population genetics research, another branch of the evolutionary human sciences. As a result, the genetics research community swiftly had a reckoning about the influence of their research on far-right, white supremacist, and neo-Nazi ideology.¹⁵⁴⁹ Under the auspices of the US National Academies of Sciences, Engineering, and Medicine, a 217-page report was issued in 2023 to provide guidelines for discussing matters of race and ethnicity in genetics research.¹⁵⁵⁰ The Social Science Genetic Association Consortium (SSGAC), a leading research team in the field, provides Frequently Ask Questions (FAQs) along its research papers to explain them in layperson's terms and dispel potential racist interpretations, while scholarly societies also play a part, with the American Association of Biological Anthropologists (AABA) recently organizing a symposium to combat race science.¹⁵⁵¹ These examples show that collective reflection and action is possible on similar issues, and should not be left to individuals' goodwill.

Ultimately, however, there is little empirical evidence yet that such interventions are effective. This leads proponents of unrestrained academic freedom, such as Diana Fleischman, to quip: "Is there any evidence that without some ideas from population genetics, or citations to mainstream journals, the Buffalo shooter would have stayed home reading White Fragility instead? No."¹⁵⁵² She rightly points out that we do not know much yet about the efficacy of interventions by scientists and scientific organizations on public interpretation of their research by radical groups. In fact, she argues that "in disagreeable male-dominated communities like the manosphere or incels, a typical academic's expert opinion has *negative* value," and that debunking by scientists "is unlikely to make any difference."¹⁵⁵³ This echoes Macken Murphy's pessimism regarding such endeavors, when he noticed that his interventions seemed to make manospherians "more entrenched in their original positions."¹⁵⁵⁴ In fact, despite all the precautions taken to ensure that his paper on female infidelity would not be relayed by the manosphere, it soon found itself retweeted by Red Pill godfather Rollo Tomassi as its findings supported the dual mating strategy hypothesis, i.e., "the Red Pill's darling hypothesis." This seems to support Fleischman's main

¹⁵⁴⁹ Jedidiah Carlson et al., "Counter the Weaponization of Genetics Research by Extremists," *Nature* 610, no. 7932 (2022): 444–47, <u>https://doi.org/10.1038/d41586-022-03252-z</u>.

¹⁵⁵⁰ National Academies of Sciences, Engineering, and Medicine, "Using Population Descriptors in Genetics and Genomics Research: A New Framework for an Evolving Field" (DC: The National Academies Press, 2023), <u>https://doi.org/10.17226/26902</u>.

¹⁵⁵¹ See respectively Social Science Genetic Association Consortium, "Frequently Asked Questions," <u>https://web.archive.org/web/20240722142424/https://www.thessgac.org/faqs</u>, archived July 22, 2024; and Michael Price, "Anthropologists Take up Arms against 'Race Science," *Science News*, March 29, 2024, <u>https://doi.org/10.1126/science.z6n7io6</u>.

¹⁵⁵² Diana Fleischman, "Does Evolutionary Psychology Really Cause Mass Shootings?" *White Fragility* by sociologist Robin DiAngelo is taken here as an example of antiracist literature, Robin DiAngelo, *White Fragility: Why It's So Hard for White People to Talk About Racism* (Boston: Beacon Press, 2018).

¹⁵⁵³ Fleischman, "Does Evolutionary Psychology Really Cause Mass Shootings?"

¹⁵⁵⁴ Macken Murphy, May 2024, interview with the author. For details about the interview, see Chap. III, C, 161.

argument: ultimately, researchers cannot always control how people interpret or appropriate their findings.

Researchers could always self-censor if they fear the harmful impacts of their research findings. Moral and political values are personal, and some scientists might individually decide to forsake publication or research altogether depending on those values. Yet, this is a solution which is unlikely to convince many in the research community, with too much self-censorship leading to a net loss in our understanding of human behavior. Should this mean that we should accept Diana Fleischman's fatalistic position? That all attempts at controlling reception of science are doomed from the start? This is also a position that seems untenable. As holders of massive amounts of public funding, public trust, and cultural authority, scientists have a moral responsibility to care about the effects they have on society, as argued by geneticists after the gruesome Buffalo shootings:

"As scientists, we are constantly asked to articulate the positive impacts of our research on society. We reflexively focus on the potential benefits of our research in grant writing, publications and job applications, or when talking to journalists.

To help counter the repeated resurgence of scientific racism, all scientists [...] should be asked — just as routinely — to consider the potential harmful impacts of their work."¹⁵⁵⁵

If someone is not even willing to simply "consider the potential harmful impacts of their work," this does not make them a very conscientious professional. As for potential interventions, Fleischman is right in stating that we do not know yet how to efficiently counter appropriations of science. Yet, while she uses this argument to ridicule existing attempts, I see this as a call for action. Scientists are uniquely equipped to empirically assess the efficacy of their interventions. Writing op-eds and issuing guidelines is not enough. Phenomena like manosphere science or Alt-Right pseudoscientific racism are still relatively uncharted, and the pace of change on the Internet is a challenge for researchers and policymakers. As revealed by the case of Macken Murphy, the Internet and social media created a brand-new landscape for scientists to navigate: to what extent should they popularize their work? Should they push back against exaggerations from cumbersome enthusiasts? How can they protect their wellbeing and privacy when involved in vitriolic online culture wars? These thorny questions are not going away and they call for more work by Internet researchers to rigorously analyze these online dynamics, assess the risks and efficacy of potential interventions, and ultimately strive to promote public understanding of science. To this day, research has mostly focused on combatting "anti-science" movements and attitudes, such as creationism, anti-vaxx, or climate change denialism.¹⁵⁵⁶ It is now time to look more closely at the other side of the coin, as advocated by geneticists in a paper studying far-right appropriations of their work: "the tactics proven to be effective at stemming the spread of science denialism may not

¹⁵⁵⁵ Carlson et al., "Counter the Weaponization of Genetics Research by Extremists."

¹⁵⁵⁶ E.g., Philipp Schmid and Cornelia Betsch, "Effective Strategies for Rebutting Science Denialism in Public Discussions," *Nature Human Behaviour* 3, no. 9 (2019): 931–39, <u>https://doi.org/10.1038/s41562-019-0632-4</u>. Contrary to Fleischman and Murphy's fear of expert interventions' potentially backfiring, this study experimentally found such interventions to be efficient, with no backfiring.

translate well to the task of stopping the spread of science *misappropriation*," they write.¹⁵⁵⁷ If selfavowed science aficionados routinely misinterpret, exaggerate, or fabricate findings, this is also a public understanding of science problem, and one which scientists have both the methodological tools and the professional responsibility to address.

Limitations and Future Research

As explained in the introduction, one of the main challenges of the present research object was its uncertain geographic contours. Not only are Internet communities inherently devoid of material borders, but manospherians are also particularly wary of disclosing their whereabouts. There is very little geographic data on manospherians yet, but a few methods have yielded interesting insights: a EU counter-terrorism report was able to map out the European origins of incels.is forum users by analyzing forum posts, while a Twitter dataset allowed to geolocate US zones with the highest prevalence of tweets containing incel terminology.¹⁵⁵⁸ These studies and methods had not been published when I started the present research project, and I would like to adapt them to my future research designs. Moreover, the US manosphere is just the largest part of a multilingual global online conglomerate. Although research on non-English speaking manosphere communities is starting to blossom, virtually nothing is known yet about the mechanisms of ideological transfers between the English-speaking manosphere and its Italian, Russian, French, Arabic, or Spanish-speaking counterparts. While Alt-Right research has grappled with the transnational aspect of the phenomenon, this remains to be done for the manosphere.¹⁵⁵⁹ As a French native speaker, I am thus ideally situated to conduct comparative research, and would also welcome international collaboration with other scholars.

Moreover, the present work is based on qualitative discourse analysis, and survey data analysis—which is exclusively correlational. Yet, it occasionally ventures into hypothesizing causal mechanisms, for instance when discussing the Men from Mars/Women from Venus bias, whereby people tend to exaggerate sex differences when presented with statistical group differences on two given traits. This can be easily investigated through online vignette experiments, a common way to investigate such biases.¹⁵⁶⁰ This is research I would like to pursue, to shed light on public understanding of quantitative results, and to help scholars communicate their findings about sex differences in a way that avoids triggering stereotype-based cognitive biases.

What Chapter VI and the Conroy-Beam vs Fleischman debate reveal, is that there are also deep political divides running inside the evolutionary scientific community. In the spirit of Ullica Segerstråle's work, which featured in-depth interviews with all the major scientists involved in the

¹⁵⁵⁷ Jedidiah Carlson and Kelley Harris, "Quantifying and Contextualizing the Impact of bioRxiv Preprints through Automated Social Media Audience Segmentation," *PLOS Biology* 18, no. 9 (2020): e3000860, https://doi.org/10.1371/journal.pbio.3000860.

¹⁵⁵⁸ To see the maps, see respectively Radicalisation Awareness Network, "Incels: A First Scan of the Phenomenon (in the EU) and Its Relevance and Challenges for P/CVE" (European Commission, 2021), 13; Robert Brooks, Daniel Russo-Batterham, and Khandis Blake, "Incel Activity on Social Media Linked to Local Mating Ecology," *Psychological Science* 33, no. 2 (2022): 249–58, <u>https://doi.org/10.1177/09567976211036065</u>, 254.

¹⁵⁵⁹ E.g., Hermansson et al., *The International Alt-Right*.

¹⁵⁶⁰ A review of such studies on public understanding and impacts of scientific results is presented in Chapter II, B, 129.

sociobiology controversy, there is much left to investigate about these divides. Indeed, what Segerstråle found is that, beyond politics, different disciplinary traditions, views of science, and moral agendas were found on both sides of the field's bitterest feud.¹⁵⁶¹ Is this the case today? Are these controversies over academic freedom just a manifestation of disagreements between leftwing and right-wing academics in a polarized context? Are positions on these debates correlated with age, race, gender, or sexual orientation? Or do they also stem from diverging values and assumptions about science, objectivity, and ethics? This is a fruitful line of investigation, which I would like to pursue through interviews of protagonists and content analysis of social media and published material.

Additionally, there are several online spaces which would be ideal sites to investigate public understanding and politics of evolutionary science. The first one would be the r/evopsych subreddit, which hosts a community of 14,000 evolutionary psychology fans, and could thus allow to quantitatively compare which science papers get shared and commented online by manosphere communities, and by this nonpolitical counterpart.¹⁵⁶² User circulation between this subreddit and the manosphere could also yield insights into manosphere recruitment pipelines. Furthermore, there is overlap between the Alt-Right and the manosphere, which calls for investigating these spaces together. This was recently done by a team of AI researchers, who showed that participating in one type of "hate subreddit" (misogynistic, racist, or anti-LGBTQ) increased chances of participating in another one, providing concerning evidence that "each type of community could further amplify the growth of the others, as their user bases appeal to each other."¹⁵⁶³

Gendered Polarization, US Politics, and the Manosphere

The present dissertation is a monograph on the circulation and appropriation of science in the manosphere. As with all monographs, there is a risk of overemphasizing the scope of this phenomenon. Not all manosphere conversations revolve around genetics or evolution. In fact, most documents in the 9,000-page corpus did not end up featuring in the analyses therein. Beyond evolutionary thinking, other elements of manosphere ideology have been identified and analyzed elsewhere, such as the Men's Liberationist heritage, Ancient Greek and Roman texts, or contemporary neoliberalism.¹⁵⁶⁴ Evolutionary scientists alone cannot reasonably be expected to

¹⁵⁶¹ Ullica Segerstråle, "Reductionism, 'Bad Science,' and Politics: A Critique of Anti-Reductionist Reasoning," *Politics and the Life Sciences* 11, no. 2 (1992): 199–214, <u>https://doi.org/10.1017/S0730938400015215</u>.

¹⁵⁶² R/evopsych, <u>https://web.archive.org/web/20240723161117/https://www.reddit.com/r/evopsych/</u>, archived July 23, 2024. Membership figure as of writing, July 23, 2024. This subreddit has to my knowledge never been studied.

¹⁵⁶³ Daniel Hickey et al., "The Peripatetic Hater: Predicting Movement Among Hate Subreddits" (arXiv, 2024), <u>https://doi.org/10.48550/arXiv.2405.17410</u>. I am currently collaborating with this team of researcher under the lead of computer scientist Keith Burghardt, from the University of Southern California, to understand the spread of evolutionary psychology in the manosphere. Our research project will complement the present dissertation, and allow to reinforce and further its findings in two regards. Firstly, the use of AI methods allows to study hundreds of thousands, if not millions of tweets, posts, or accounts at once. Secondly, these methods allow to track flows of people and information, thus giving a more dynamic picture of the process than I could here. In fact, what I consider to be the best study of the manosphere employed such methods to trace the evolving popularity and membership of the five manosphere branches, Ribeiro et al., "The Evolution of the Manosphere across the Web."

¹⁵⁶⁴ About the Men's Liberationist heritage, see Bachaud, "Aux Sources Du Masculinisme, Un Mouvement d'hommes Féministes"; for Ancient Classics, see Zuckerberg, *Not All Dead White Men*; for neoliberalism, see Van Valkenburgh, "Digesting the Red Pill: Masculinity and Neoliberalism in the Manosphere"; O'Neill, *Seduction: Men, Masculinity, and Mediated Intimacy.*

play a major role in combating the manosphere as a whole. This global conglomerate of online movements seems to be thriving at the moment, adapting its messages to younger audiences through new social media platforms like TikTok, spurred by a rise in online far-right ideologies, or by Donald Trump's candidacy in the United States.

A perennial issue for feminism, which was at the core of Men's Liberation in the 1970s, is how to get men on board with its program of social change. Today, this objective seems to be somewhat stuck in a rut, as there is growing male resentment over change in gender dynamics.¹⁵⁶⁵ In the increasingly polarized terrain of US politics, men, including young voters, are leaving the Democratic party in droves, while a feminist columnist and pollster rejoices: "the Democratic Party is the women's party. Sixty percent of self-identified Democrats are women."¹⁵⁶⁶ Since US politics is increasingly gendered and polarized, the manosphere might gain even more political influence, as its online content keeps on targeting young Republican-leaning men on social media.

For some of these men, the manosphere's scientific veneer plays a key part in the radicalization process, as in the testimony of Jack, a 24-year-old ex-Red Piller interviewed in the press: "The movement's use of evolutionary psychology convinced my rational mind that everything I read was a scientific fact suppressed by feminists," he recalls.¹⁵⁶⁷ Then, he explains that "an uncomfortable misogynistic streak grew within [him]," as well as support for Donald Trump: "Trump represented everything that the Red Pill told me to value at the time in a mainstream political candidate: anti-PC, anti-feminist and social Darwinist policy."¹⁵⁶⁸ In a similar testimony, another ex-manospherian also recalled being drawn by the manosphere's seemingly scientific tone: "I liked incel forums so much because they didn't sugar coat things. They give you brutal truths about genetic determinism and are backed by science and data from dating sites."¹⁵⁶⁹ Evolutionary scientists might not have much sway over politics or the deep trends of technological and ideological change in Western society, yet they can potentially influence such trajectories. In the conclusion of his op-ed, evolutionary psychologist Daniel Conroy-Beam concludes by writing that, if there was one thing he could teach the young men browsing the manosphere, "it would be

¹⁵⁶⁵ See Michael Kimmel, *Angry White Men: American Masculinity at the End of an Era* (New York: Nation Books, 2013).

¹⁵⁶⁶ In 2016, 51% of men aged 18-29 leaned or identified with the Democrats, in 2023, this has plummeted to 39%, Daniel Cox, "The GOP is Poised to Make Gains With Young Voters," *The Liberal Patriot*, July 15, 2024, <u>https://web.archive.org/web/20240723011133/https://www.liberalpatriot.com/p/the-gop-is-poised-to-make-gains-</u>

with, archived July 23, 2024; Anna Greenberg, "This Is not James Carville's 1992 Democratic Party," *The Hill*, March 28, 2024, <u>https://web.archive.org/web/20240403163339/https://thehill.com/opinion/4560169-this-is-not-james-carvilles-1992-democratic-party/</u>, archived April 3, 2024. For explanation of this growing partisan gender gap in the United States, see Daniel Gillion, Jonathan Troy Ladd, and Marc Meredith, "Party Polarization, Ideological Sorting and the Emergence of the US Partisan Gender Gap," *British Journal of Political Science* 50, no. 4 (2020): 1217–43, <u>https://doi.org/10.1017/S0007123418000285</u>.

¹⁵⁶⁷ Amelia Tait, "Spitting out the Red Pill: Former Misogynists Reveal How They Were Radicalised Online," *New Statesman*, February 28, 2017, <u>https://web.archive.org/web/20231004102921/https://www.newstatesman.com/long-reads/2017/02/reddit-the-red-pill-interview-how-misogyny-spreads-online</u>, archived October 4, 2023. ¹⁵⁶⁸ Ibid.

¹⁵⁶⁹ Cited in Matteo Botto and Lucas Gottzén, "Swallowing and Spitting out the Red Pill: Young Men, Vulnerability, and Radicalization Pathways in the Manosphere," *Journal of Gender Studies* 33, no. 5 (2023): 596–608, <u>https://doi.org/10.1080/09589236.2023.2260318</u>, 604.

that believing evolution is important for explaining human behavior need not commit you to a regressive worldview. Anyone who tells you otherwise is selling ideology, not science."¹⁵⁷⁰

Since its grand reveal in 1859, Darwinism has been appropriated for all sorts of ideological and political purposes.¹⁵⁷¹ In fact, I would argue that it does not only belong to the scientific establishment which applies and refines it on a daily basis. As shown by the examples of manosphere just-so stories or of 19th-century Darwinian feminists, laypeople appropriate this elegantly simple theory to make sense of the world around them, strengthen their arguments, and advance their agendas. Such is the scope and explanatory power of evolutionary theory that it is unreasonable to think it can be kept within the walls of laboratories. Yet, this is exactly the reason why evolutionary scientists should weigh in on those issues, as they are the best poised to disentangle science from ideology. Ultimately, this might not really diminish the popularity of evolutionary science in the manosphere—after all, the field is rich and fascinating. However, this will at least ensure that the rigorous research produced within those laboratories does not get assimilated with the crudely antagonistic and misogynistic Darwinism of the manosphere.

To some researchers, there are risks in being too preoccupied about the potential nefarious social impacts of scientific research. They fear that this could lead to censorship of sensitive or controversial research. They also resent the feeling that they might have to self-censor.¹⁵⁷² Certainly, issues of biological sex differences have a potential for political controversy from which academics should learn how to protect themselves, with the full support of their home institutions. I do not believe however that this is best done by refusing to engage with matters of public understanding and political appropriations altogether. My experience in conducting this research has been the opposite. By genuinely engaging with feminist criticisms of the field, by reflecting on the words and theories we use, by being preoccupied about the potential interpretations and appropriations of evolutionary research, I believe that I was able to reach a nuanced understanding of these complex issues—which are still laden with uncertainties. This allowed me to build bridges between disciplines and discuss evolutionary approaches with scholars who were not familiar with these ideas. This was one of the hope and purposes of the present dissertation, for which I received nothing but curiosity, encouragements, and goodwill. I also believe that this reflexive process will lead to me to produce better research and science communication.

Ultimately, as a civil servant, and a believer that scientific research is a worthwhile human endeavor only if it serves the people, other species, and our planet, I just cannot imagine that researchers should be absolved of moral responsibility for what they do or write. They wield tremendous amount of social prestige, public funding, and have privileged access to the media and to policymakers. This power entails responsibility. There has to be a way between constant self-

¹⁵⁷⁰ Conroy-Beam, "How the Incels Warped My Research."

¹⁵⁷¹ Denis Alexander and Ronald Numbers, eds., *Biology and Ideology: From Descartes to Dawkins* (Chicago and London: University of Chicago Press, 2010).

¹⁵⁷² This feeling has recently been documented by a survey of US psychology professors, in a study whose authors belong to the "academic freedom watchdog" cohort (including Geoffrey Miller), and worry about the prevalence of self-censorship on controversial issues among academics, Cory Clark et al., "Taboos and Self-Censorship Among U.S. Psychology Professors," *Perspectives on Psychological Science* (2024), <u>https://doi.org/10.1177/17456916241252085</u>. For a critical piece on the position of these "free speech libertarian" academics, see John Herbert, "Academic Free Speech or Right-Wing Grievance?," *Digital Discovery* 2, no. 2 (2023): 260–97, <u>https://doi.org/10.1039/D2DD00111J.</u>

censorship and fear of controversy, and total academic freedom and irresponsibility. Finding this way necessarily requires humility, reflexivity, and open-mindedness. The field of science studies is and will continue to be a major force in this reflection. I am honored to have been able to contribute to it and hope I can continue to do so in the future.

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1. MANOSPHERE SOURCES

1.A. Books, Book Chapters, and E-Books

- Anonymous. *The Masculine Principle*.
- https://web.archive.org/web/20240714023421/https://masculineprinciple.blogspot.com/, archived July 14, 2024.
- Baumli, Francis, ed. *Men Freeing Men: Exploding the Myth of the Traditional Male*. Jersey City: New Atlantis Press, 1985.
- Calvin, Daniel. "The Option of Joint Custody." In *Men Freeing Men: Exploding the Myth of the Traditional Male*, edited by Francis Baumli, 185-99. Jersey City: New Atlantis Press, 1985.
- Elam, Paul. Men. Women. Relationships: Surviving the Plague of Modern Masculinity. London: LPS Publishing, 2019.
- Farrell, Warren. *The Myth of Male Power: Why Men Are the Disposable Sex.* London: Fourth Estate, 1994.
- Farrell, Warren and John Gray. *The Boy Crisis: Why Our Boys Are Struggling and What We Can Do About It*. Dallas: BenBella Books, 2018.
- Goldberg, Herb. *The Hazards of Being Male: Surviving the Myth of Masculine Privilege*. New York: Nash Publishing, 1976.
- Haddad, Richard. "Female Chauvinism." In *Men Freeing Men: Exploding the Myth of the Traditional Male*, edited by Francis Baumli, 269. Jersey City: New Atlantis Press, 1985.
- Haddad, Richard. "Concepts and Overview of the Men's Liberation Movement." In *Men Freeing Men: Exploding the Myth of the Traditional Male*, edited by Francis Baumli, 281-88. Jersey City: New Atlantis Press, 1985.
- Haddad, Richard. "Today's Male Feminists." In *Men Freeing Men: Exploding the Myth of the Traditional Male*, edited by Francis Baumli, 290. Jersey City: New Atlantis Press, 1985.
- Hayward, Frederic. "We Who Are About to Die." In *Men Freeing Men: Exploding the Myth of the Traditional Male*, edited by Francis Baumli, 238-39. Jersey City: New Atlantis Press, 1985.
- Heartiste. On Game. Self-published, 2019.
- Ironwood, Ian. The Manosphere: A New Hope for Masculinity. Red Pill Press, 2012.
- Jeffries, Ross. How to Get the Women You Desire into Bed: A Down and Dirty Guide To Dating And Seduction For The Man Who's Fed Up With Being Mr. Nice Guy. Self-published, 1992.
- Lye, Matthew. The New Gay Liberation: Escaping the Fag End of Feminism. Zeta Press, 2016.
- Mystery. The Venusian Arts Handbook. 2nd ed. Self-published, 2007.
- Roosh V. The Best of Roosh: Volume One. Self-published, 2013.
- Roosh V. The Best of Roosh; Volume Two. Self-published, 2019.
- Savoy, Nick. Magic Bullets. Version 1.5. Self-published, 2007.

- Strauss, Neil. *The Game: Penetrating the Secret Society of Pickup Artists*. New York: Regan Books, 2005.
- Tomassi, Rollo. The Rational Male. Reno: Counterflow Media LLC, 2013.
- Williamson, Tom. "A History of the Men's Movement." In *Men Freeing Men: Exploding the Myth of the Traditional Male*, edited by Francis Baumli, 308-24. Jersey City: New Atlantis Press, 1985.

1.B. Blog Articles and Web Pages

- Adams, Edward. "The Equality Movement is Allowing Women to Tyrannize Men." Return of Kings.com. March 7, 2014, <u>https://web.archive.org/web/20180126104609/https://www.returnofkings.com/30492/the-equality-movement-is-allowing-women-to-tyrannize-men, archived January 26, 2018.</u>
- Angry Harry. "Who Is More Empathetic; Men or Women?" <u>https://web.archive.org/web/20201111203657/http://angryharry.com/Who-Is-More-Empathic-Men-Or-Women.htm</u>, archived November 11, 2020.
- Angry Harry. "Are Men More Intelligent than Women?" June 5, 2000. <u>https://web.archive.org/web/20201112010854/http://www.angryharry.com/esMenareMoreIntel</u> <u>ligentthanWomen.htm</u>, archived November 12, 2020.
- Anonymous. "The Red Pill Constitution." Illimitable Men.com. <u>https://web.archive.org/web/20201222232035/https://illimitablemen.com/archives/the-red-pill-constitution/, archived December 22, 2020.</u>
- Brockway, Robert. "Men Are Exceptional." A Voice For Men.com. December 7, 2014. <u>https://web.archive.org/web/20240205140251/https://avoiceformen.com/featured/men-are-exceptional-2/</u>, archived February 5, 2024.
- Contrary, Christopher. "Women Have No Sense Of Justice." Return of Kings.com. March 22, 2014.

https://web.archive.org/web/20170316112943/https://www.returnofkings.com/30485/womenhave-no-sense-of-justice, archived March 16, 2017.

Deichmohle, Jan. "Female Choice and Feminism – Part 1." A Voice For Men.com. November 23, 2015.

https://web.archive.org/web/20230922092806/https://avoiceformen.com/featured/femalechoice-and-feminism-part-1/, archived September 22, 2023.

Deichmohle, Jan. "Female Choice and Feminism – Part 2." A Voice For Men.com. November 27, 2015.

https://web.archive.org/web/20231205182744/https://avoiceformen.com/featured/femalechoice-and-feminism-part-2/, archived December 5, 2023.

Den Hollander, Roy. "Some Differences: Males v. Females." <u>https://web.archive.org/web/20210616231711/http://www.roydenhollander.com/main/articles.</u> <u>htm#act_together</u>, archived June 16, 2021.

Den Hollander, Roy. *Stupid Frigging Fool PART II*. <u>https://web.archive.org/web/20220330132627/http://been-</u> scammed.com/main/SFF/7.b.StupidFriggingFoolPt2.pdf, archived March 30, 2022.

- Den Hollander, Roy. "Evolutionarily Correct Cyclopedia." <u>https://web.archive.org/web/20240115195008/http://www.roydenhollander.com/main/Writing</u> <u>s/CyclopediaUpdate2.20.19.pdf</u>, archived January 15, 2024.
- Den Hollander, Roy. *Stupid Frigging Fool Part 6*. <u>https://web.archive.org/web/20200720231850/http://been-</u> <u>scammed.com/main/SFF/7.f.StupidFriggingFool_Pt6.pdf</u>, archived July 20, 2020.
- Devlin, Francis Roger. "Sexual Utopia in Power." r/TheRedPill sidebar. December 27, 2011. https://archive.vn/A1y2j, archived March 30, 2020
- Doe, John. "10 Reasons Why Foreign Women Are Better Than American Women." Return of Kings.com. December 13, 2013.
 <u>https://web.archive.org/web/20201112042152/https://www.returnofkings.com/22358/10-</u> reasons-why-foreign-women-are-better-than-american-women, archived November 12, 2020.
- "Don't Marry Why Modern, Western Marriage Has Become A Bad Business Decision For Men." Compiled October 2006. <u>https://web.archive.org/web/20210121092815/https://dontmarry.wordpress.com/</u>, archived January 21, 2021.
- Frost. "'Rape Culture' was manufactured to wage an unjust war against men." Return of Kings.com. December 24, 2013. <u>https://web.archive.org/web/20201111191928/https://www.returnofkings.com/22081/rape-</u> culture-was-manufactured-to-wage-an-unjust-war-against-men, archived November 11, 2020.
- Ironwood, Ian. "Ironwood Speaks: Welcome To The Puerarchy. This Is What The Hell Is Wrong With You." Puerarchy.com. July 16, 2013. <u>https://web.archive.org/web/20200126175018/http://puerarchy.com/2013/07/16/ironwood-speaks-welcome-to-the-puerarchy-this-is-what-the-hell-is-wrong-with-you, archived January 26, 2020.</u>
- Jarosek, Stephen. "Lessons from Nature: Brain in a Vat." A Voice For Men.com. January 27, 2012. https://web.archive.org/web/20230530045838/https://avoiceformen.com/women/lessons-from-

<u>nature-brain-in-a-vat/</u>, archived May 30, 2023. Jarosek, Stephen. "The success of feminism is the failure of science." A Voice for Men.com.

August 21, 2014. <u>https://web.archive.org/web/20220920111727/https://avoiceformen.com/featured/the-success-</u>of-feminism-is-the-failure-of-science/, archived September 20, 2022.

- Jarosek, Stephen. "Transcending the Matriarchy." A Voice for Men.com. June 15, 2015. <u>https://web.archive.org/web/20240111164922/https://avoiceformen.com/featured/transcending</u> <u>-the-matriarchy/</u>, archived January 11, 2024.
- Kelstein, Moshe. "A Scientific Review of ROK's Community Beliefs." Return of Kings.com. May 27, 2015.

https://web.archive.org/web/20221207174522/https://www.returnofkings.com/64303/a-scientific-review-of-roks-community-beliefs, archived December 12, 2022.

- Krauser, Nick. "Players Outrank Scientists in the Art of Seduction." October 21, 2014. <u>https://web.archive.org/web/20240125103536/https://krauserpua.com/2014/10/21/players-outrank-scientists-in-the-art-of-seduction/</u>, archived January 25, 2024.
- McMahon, Steve. "Women should not be allowed to vote." Return of Kings.com. May 15, 2014. <u>https://web.archive.org/web/20201107223808/https://www.returnofkings.com/34330/women-should-not-be-allowed-to-vote</u>, archived November 7, 2020.

MGTOW.com. "Glossary of Terms." <u>https://web.archive.org/web/20210104143807/https://www.mgtow.com/glossary/</u>, archived January 4, 2021.

MGTOW.com, "The History of M.G.T.O.W," <u>https://web.archive.org/web/20210104143908/https://www.mgtow.com/history/, archived</u> January 4, 2021.

MGTOW MANIFESTO. No Ma'am.blogspot.com. 2001. https://web.archive.org/web/20210105094527/http://no-maam.blogspot.com/2001/02/mgtowmanifesto.html, archived January 5, 2021.

- MGTOWhistory.com. "The History of MGTOW Men Going Their Own Way The Official Website." <u>https://web.archive.org/web/20130219174037/http://www.mgtowhistory.com/</u>, archived February 19, 2013.
- National Coalition for Men. "False Reporting of Sexual Misconduct: Understanding the Myths." November 29, 2020, <u>https://web.archive.org/web/20230922175329/http://ncfm.org/wp-content/uploads/2021/01/False-Reporting-Brochure-NCFM-compressed-5.2-mg.pdf</u>, archived September 22, 2023
- Reeves, Daniel. "Chivalry is a Beta Move, Right?" The Puerarchy. August 23, 2013. https://web.archive.org/web/20130827022023/http://puerarchy.com/2013/08/23/chivalry-is-abeta-move-right/, archived August 27, 2013.
- Roosh V. "Are We Alive to Only Survive and Reproduce?" November 4, 2015. <u>https://web.archive.org/web/20220623033400/https://www.rooshv.com/are-we-alive-to-only-</u> <u>survive-and-reproduce</u>, archived June 23, 2022.
- Roosh V. "How I Turned To God." January 27, 2020. <u>https://web.archive.org/web/20230601025202/https://www.rooshv.com/how-i-turned-to-god</u>, archived June 1, 2023.
- Saleem, Mo. "7 Benefits of Testosterone that You Probably don't Know." Return of Kings.com. November 29, 2017. <u>https://web.archive.org/web/20220925120222/https://www.returnofkings.com/138630/7-</u> benefits-of-testosterone-that-you-probably-dont-know, archived September 25, 2022.

Seville, Michael. "Why Men Are Intellectually Superior to Women." Return of Kings.com. February 25, 2014. <u>https://web.archive.org/web/20201109002920/https://www.returnofkings.com/29112/the-intellectual-inferiority-of-women</u>, archived November 9, 2020.

- Sonofra, Tuthmosis. "The 15 Magical Years of Womanhood." Return of Kings.com. April 24, 2013. <u>https://web.archive.org/web/20201208145534/https://www.returnofkings.com/9932/the-15-magical-years-of-womanhood</u>, archived December 8, 2020.
- Svoboda, Steven. "An Interview with Warren Farrell." Menweb.org. 1997. https://ia902600.us.archive.org/22/items/20230628_20230628_1237/_.pdf, archived June 28, 2023.
- Thompson, Randy. "Pickup Artists are Frauds." Incel.blog. November 2, 2020. <u>https://web.archive.org/web/20210107142849/https://incel.blog/pickup-artists-are-frauds/</u>, archived January 7, 2021.
- The Private Man. "He's About To Take The Red Pill." June 28, 2011. <u>https://web.archive.org/web/20200814064343/https:/theprivateman.wordpress.com/2011/06/2</u> <u>8/hes-about-to-take-the-red-pill/</u>, archived August 14, 2020.
- The Private Man. "A Woman Visits the Veterinarian." July 22, 2011. https://web.archive.org/web/20201112004947/https://theprivateman.wordpress.com/2011/07/2 2/a-woman-visits-the-veterinarian/, archived November 12, 2020.
- The Private Man. "Fulfilling a Woman's Hypergamy." September 9, 2011. <u>https://web.archive.org/web/20210216164311/https://theprivateman.wordpress.com/2011/09/0</u> <u>9/fulfilling-a-womans-hypergamy/</u>, archived February 16, 2021.
- The Private Man. "Being Thankful The Manosphere Way." November 24, 2011. <u>https://web.archive.org/web/20200814045124/https:/theprivateman.wordpress.com/2011/11/2</u> <u>4/being-thankful-the-manosphere-way/</u>, archived August 14, 2020.
- The Private Man. "Femininity You Have to Take the Good with the Bad." December 6, 2011. <u>https://web.archive.org/web/20210216163003/https://theprivateman.wordpress.com/2011/12/0</u> <u>6/femininity-you-have-to-take-the-good-with-the-bad/</u>, archived February 16, 2021.
- Tomassi, Rollo. "The Bitter Taste of the Red Pill." The Rational Male.com. April 10, 2012, <u>https://web.archive.org/web/20230530142959/https://therationalmale.com/2012/04/10/the-bitter-taste-of-the-red-pill/</u>, archived May 30, 2023.
- Tomassi, Rollo. "Women in Love." r/TheRedPill sidebar. December 27, 2011. https://archive.vn/A1y2j, archived March 30, 2020.
- Tomassi, Rollo. "She's Not Yours." The Rational Male.com. October 15, 2020. <u>https://web.archive.org/web/20210105111800/https://therationalmale.com/2020/10/15/shes-not-yours/</u>, archived January 5, 2021.

1.C. YouTube and Video Content

- CSM Archives. "The Evolutionary Psychology of Human Sex and Gender MGTOW." YouTube.com. November 23, 2018. <u>https://web.archive.org/web/20240617163203/https://www.youtube.com/watch?v=PvPEJRR6q6Q&t=1020s&ab_channel=CSMArchives</u>, archived June 17, 2024.
- CSM Archives. "Evolutionary Psychology 2 0 with Glenn Geher PhD MGTOW." YouTube.com. November 23, 2018.

https://web.archive.org/web/20240617163203/https://www.youtube.com/watch?v=PvPEJRR6 g6Q&t=1020s&ab_channel=CSMArchives, archived June 17, 2024.

- Entrepreneurs in Cars. "PTW # 91 Macken Murphy Data Driven Advice." YouTube.com. August 25, 2023. <u>https://web.archive.org/web/20240604074905/https://www.youtube.com/watch?v=Puydi_dMu</u>yc, archived June 4, 2024
- Hoe_math. "SEX FIGHT: Macken Murphy vs hoe_math." YouTube.com. November 3, 2023. <u>https://web.archive.org/web/20240605085044/https://www.youtube.com/watch?v=GDSsqNDj</u> <u>ENs</u>, archived June 5, 2024.
- Peterson, Jordan B. "The Four Dos and Don'ts of Divorce." YouTube.com. August, 16, 2021. <u>https://web.archive.org/web/20230428043036/https://www.youtube.com/watch?v=IpPr5i1aHj</u> <u>E</u>, archived April 28, 2023.
- Peterson, Jordan B. "Avoiding School Shootings and the Boy Crisis." YouTube.com. June 13, 2022.

https://web.archive.org/web/20231113152715/https://www.youtube.com/watch?v=lAqCISsZE M4&t=3340s, archived November 13, 2023.

Ronin Man. "The Predatory Female: READ AT YOUR OWN RISK." YouTube.com. January 26, 2017. https://web.archive.org/web/20210121095635/https://www.youtube.com/watch?y=HPeM9bE

https://web.archive.org/web/20210121095635/https://www.youtube.com/watch?v=HPeM9bF WIXE&ab_channel=RoninMan, archived January 21, 2021.

- Sandman. "Introduction to MGTOW." YouTube.com. August 24, 2014. <u>https://web.archive.org/web/20210104171134/https://www.youtube.com/watch?v=iVXdxaaRi</u> <u>AU&t=1s&ab_channel=Sandman</u>, archived January 4, 2021.
- Sandman. "Amish Women." YouTube.com. July 2, 2015. <u>https://web.archive.org/web/20210104171405/https://www.youtube.com/watch?v=A4AJxWb</u> <u>XR7A&t=410s&ab_channel=Sandman</u>, archived January 4, 2021.
- Samra, Gumrit. Attract Any Woman Anywhere. Derby: Lion Gent Productions, 2017.
- Straughan, Karen. "Feminism and the disposable male." YouTube.com. November 5, 2011. <u>https://web.archive.org/web/20210106131628/https://www.youtube.com/watch?v=vp8tToFv-bA&t=1s&ab_channel=karenstraughan</u>, archived January 6, 2021.
- The Pickup Artist. 3Ball Productions. Hosted by Mystery, aired on August 6, 2007, on VH1.
- Thinking-Ape. "MGTOW Talks: Professor Mills on Evolutionary Psychology and Free Will." YouTube.com. July 14, 2015. <u>https://web.archive.org/web/20240617160314/https://www.youtube.com/watch?v=vS83cewe2</u> <u>KM&t=26s&ab_channel=Thinking-Ape</u>, archived June 17, 2024.
- Thinking-Ape. "MGTOW Talks: Professor Mills On Aetherism And Feminist Academia." YouTube.com. August 4, 2015. <u>https://web.archive.org/web/20210611151814/https://www.youtube.com/watch?v=hdm76drqz</u> <u>s0&t=315s</u>, archived June 17, 2024.

1.D. Manosphere Wikis

Incels.wiki. "Alana's Involuntary Celibacy Project." https://web.archive.org/web/20230719150533/https://incels.wiki/w/Alana%27s_Involuntary_ Celibacy_Project, archived July 19, 2023.
Incels.wiki. "AWALT." https://web.archive.org/web/20240208155735/https://incels.wiki/w/AWALT, archived February 8, 2024
Incels.wiki. "-cel." <u>https://web.archive.org/web/20230914122548/https://incels.wiki/w/-cel</u> , archived September 14, 2023.
Incels.wiki. "Decile." <u>https://web.archive.org/web/20221006131947/https://incels.wiki/w/Decile</u> , archived October 6, 2022.
Incels.wiki. "Failo effect." https://web.archive.org/web/20240708102450/https://incels.wiki/w/Failo_effect, archived July 8, 2024.
Incels.wiki. "Feminism." https://web.archive.org/web/20210107144415/https://incels.wiki/w/Feminism, archived January 7, 2021.
Incels.wiki. "Femoid." <u>https://web.archive.org/web/20210107152234/https://incels.wiki/w/Femoid</u> , archived January 7, 2021.
Incels.wiki. "Genetic Prison Theory." https://web.archive.org/web/20201001164519/https://incels.wiki/w/Genetic_Prison_Theory, archived October 1, 2020.
Incels.wiki. "Gymcel." <u>https://web.archive.org/web/20210107152129/https://incels.wiki/w/Gymcel</u> , archived July 1, 2021.
Incels.wiki. "Hypergamy." <u>https://web.archive.org/web/20210107145101/https://incels.wiki/w/Hypergamy</u> , archived January 7, 2021.
Incels.wiki. "Intrasexual Competition." <u>https://web.archive.org/web/20201128215318/https://incels.wiki/w/Intrasexual_competition,</u> archived November 28, 2020
Incels.wiki. "Italian Incelosphere." <u>https://web.archive.org/web/20240711164508/https://incels.wiki/w/Italian_incelosphere</u> , archived July 11, 2024.
Incels.wiki. "Marriage." https://web.archive.org/web/20210107152223/https://incels.wiki/w/Marriage, archived January 7, 2021.

Incels.wiki. "Nice Guy."

https://web.archive.org/web/20230601192006/https://incels.wiki/w/Nice_guy, archived June 1, 2023.

Incels.wiki. "Puahate, Sluthate & Lookism (PSL)."

https://web.archive.org/web/20230914083534/https://incels.wiki/w/Puahate, Sluthate & Loo kism_%28PSL%29, archived September 14, 2023.

Incels.wiki. "Soyboy."

https://web.archive.org/web/20220915100936/https://incels.wiki/w/Soyboy#Femininzation_du e_to_soy_phytoestrogens, archived September 15, 2022.

- Incels.wiki. "Testosterone." <u>https://web.archive.org/web/20220914172612/https://incels.wiki/w/Testosterone</u>, archived September 14, 2022.
- Incels.wiki. "The Scientific Blackpill." <u>https://web.archive.org/web/20231225000334/https://incels.wiki/w/Scientific Blackpill</u>, archived December 25, 2023.
- Incels.wiki, "The Scientific Blackpill." Discussion page. <u>https://web.archive.org/web/20231226145156/https://incels.wiki/w/Talk:Scientific_Blackpill</u>, archived December 26, 2023.
- Incels.wiki. "Timeless quotes on women." <u>https://web.archive.org/web/20240122072205/https://incels.wiki/w/Timeless_quotes_on_wom</u> <u>en</u>, archived January 22, 2024.
- Wiki4Men. "International Conference on Men's Issues." https://web.archive.org/web/20230324164602/https://wiki4men.com/wiki/International_Conference_on_Men%27s_Issues, archived March 24, 2023.

Wiki4men. "Main Page." https://web.archive.org/web/20240129085218/https://wiki4men.com/wiki/Main_Page, archived January 29, 2024.

Wiki4men. "Roy Den Hollander." <u>https://web.archive.org/web/20231210045454/https://wiki4men.com/wiki/Roy_Den_Hollander_r</u>, archived December 10, 2023.

1.E. Social Media

Incel Wiki. Twitter. November 7, 2020. https://archive.is/hDcbm, archived July 8, 2024.

Incel Wiki. Twitter. November 7, 2020. https://archive.is/xDnmj, archived July 8, 2024.

R/mensrights. "RESULTS FROM THE R/MENSRIGHTS SURVEY." June 20, 2013. <u>https://web.archive.org/web/20230602040341/https://www.reddit.com/r/MensRights/comment</u> <u>s/1gp2u6/results_from_the_rmensrights_survey/</u>, archived June 2, 2023.

1.F. Other Manosphere

Rodger, Elliot. *My Twisted World*. May 23, 2014. <u>https://web.archive.org/web/20210104142706/https://assets.documentcloud.org/documents/11</u> <u>73619/rodger-manifesto.pdf</u>, archived January 4, 2021

1.G. Men's Liberationist Primary Sources

- Berkeley Men's Center. "Berkeley Men's Center Manifesto." 1973. In *Men and Masculinity.*, edited by Joseph Pleck and Jack Sawyer, 173-74. Englewood Cliffs: Prentice-Hall, 1974.
- Brannon, Robert, and Deborah David. *The Forty-Nine Percent Majority: The Male Sex Role*. Reading: Addison-Wesley, 1976.
- Collective. Unbecoming Men: A Men's Consciousness-Raising Group Writes on Oppression and Themselves. Washington, NJ: Times Change Press, 1971.
- Farrell, Warren. *The Liberated Man: Beyond Masculinity: Freeing Men and Their Relationships with Women*. New York: Random House, 1974.
- Feigen Fasteau, Marc. The Male Machine. New York: Mc Graw-Hill, 1974.
- Interrante, Joe. "Dancing Along the Precipice: The Men's Movement in the 80s." *Radical America* 15, no. 5 (1982): 53–71.
- Nichols, Jack. *Men's Liberation: A New Definition of Masculinity*. New York: Penguin Books, 1975.
- Pleck, Joseph and Jack Sawyer, eds. *Men and Masculinity*. Englewood Cliffs: Prentice-Hall, 1974.
- Sawyer, Jack. "On Male Liberation." Liberation. August-September-October 1970.

1.H. Mythopoetic Men's Movement: Primary Sources and Criticism

- Bliss, Shepherd. "Beyond Machismo: The New Men's Movement." *The Yoga Journal* 71 (1986): 36-40.
- Bliss, Shepherd. "Mythopoetic Men's Movements." In *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, edited by Michael Kimmel, 292–307. Philadelphia: Temple University Press, 1995.
- Bly, Robert. Iron John: A Book about Men. Reading: Addison-Wesley, 1990.
- Brod, Harry. "The Politics of the Mythopoetic Men's Movement." In *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, edited by Michael Kimmel, 89–96. Philadelphia: Temple University Press, 1995.
- Clatterbaugh, Kenneth. "Mythopoetic Foundations and New Age Patriarchy." In *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, 44–63. Philadelphia: Temple University Press, 1995.

- Diamond, Jed. *The Warrior's Journey Home: Healing Men Healing the Planet*. Oakland: New Harbinger Publications Inc., 1994.
- Diamond, Jed. "Twenty-Five Years in the Men's Movements." In *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, 313–20. Philadelphia: Temple University Press, 1995.
- Gillette, Douglas, and Robert Moore. *King, Warrior, Magician, Lover: Rediscovering the Archetypes of the Mature Masculine*. New York: Harper Collins, 1990.
- Keen, Sam. Fire in the Belly: On Being a Man. New York: Bantam Books, 1991.
- Kimmel, Michael ed. *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*. Philadelphia: Temple University Press, 1995.
- Kimmel, Michael and Michael Kaufman. "Weekend Warriors: The New Men's Movement." In *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, edited by Michael Kimmel, 15–43. Philadelphia: Temple University Press, 1995.
- Kipnis, Aaron. Knights Without Armor: A Practical Guide for Men in Quest of Masculine Soul. Los Angeles: Jeremy P. Tarcher Inc., 1991.
- Meade, Michael. *Men and the Water of Life: Initiation and the Tempering of Men.* San Francisco: Harper Collins, 1993.
- Schwalbe, Michael. "Mythopoetic Men's Work as a Search for Communitas." In *The Politics of Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer)*, edited by Michael Kimmel, 186–204. Philadelphia: Temple University Press, 1995.
- Schwalbe, Michael. "Why Mythopoetic Men Don't Flock to NOMAS." In *The Politics of* Manhood: Profeminist Men Respond to the Mythopoetic Men's Movement (And the Mythopoetic Leaders Answer), edited by Michael Kimmel, 323–32. Philadelphia: Temple University Press, 1995.
- Schwalbe, Michael. Unlocking the Iron Cage: The Men's Movement, Gender Politics, and American Culture. New York and Oxford: Oxford University Press, 1996.

2. MEDIA SOURCES

2.A. News Media

- Beauchamp, Zack. "Our incel problem." *Vox.com*. April 23, 2019, <u>https://web.archive.org/web/https://www.vox.com/the-highlight/2019/4/16/18287446/incel-definition-reddit</u>, archived July 19, 2023.
- Caesar, Chris. "How 'soy boy' became the alt-right's favorite new insult." *Mic*. October 27, 2017.

https://web.archive.org/web/20220915103051/https://www.mic.com/articles/185572/soy-boy-explained-alt-right-masculinity-new-insult, archived September 15, 2022.

- Colombo, Charlotte. "Meet Hollywod's New Supervillain: the Incel." *The Digital Fix*. September 23, 2022. <u>https://web.archive.org/web/20230612162145/https://www.thedigitalfix.com/dontworry-darling/the-batman-incel</u>, archived June 12, 2023.
- Cover. *Time*. August 1, 1977. https://web.archive.org/web/20231022122150/https://content.time.com/time/covers/0,16641,1 9770801,00.html, archived October 22, 2023.
- Cox, Daniel. "The GOP is Poised to Make Gains With Young Voters." *The Liberal Patriot*. July 15, 2024. <u>https://web.archive.org/web/20240723011133/https://www.liberalpatriot.com/p/the-gop-is-poised-to-make-gains-with</u>, archived July 23, 2024
- Damore, James. "Why I Was Fired by Google." *Wall Street Journal*. August 11, 2017. <u>https://web.archive.org/web/20240708161908/https://www.wsj.com/articles/why-i-was-fired-by-google-1502481290</u>, archived July 8, 2024.
- Farrell, Barry. "You've Come a Long Way, Buddy." Life. August 27, 1971.
- France 24. "Hungary Gender Studies Ban Draw University Anger." October 16, 2018. <u>https://web.archive.org/web/20230604161110/https://www.france24.com/en/20181016-hungary-gender-studies-ban-draws-university-anger</u>, archived June 4, 2023.
- Gabler, Neal. "The Testosterone-Fueled Presidency." *The Huffington Post*. August 16, 2017. <u>https://web.archive.org/web/20220915095100/https://www.huffpost.com/entry/the-</u>testosterone-fueled-presidency_b_59949cd3e4b056a2b0ef029c, archived September 15, 2022.
- Garvey, Megan. "Transcript of the Disturbing Video 'Elliot Rodger's Retribution." Los Angeles Times. May 24, 2014.

https://web.archive.org/web/20230922132035/https://www.latimes.com/local/lanow/la-me-lntranscript-ucsb-shootings-video-20140524-story.html, archived September 22, 2023.

- Greenberg, Anna. "This Is not James Carville's 1992 Democratic Party." *The Hill*. March 28, 2024. <u>https://web.archive.org/web/20240403163339/https://thehill.com/opinion/4560169-this-is-not-james-carvilles-1992-democratic-party/, archived April 3, 2024</u>
- Haidar, Emma and Cam Kettles. "Harvard Will Refrain From Controversial Statements About Public Policy Issues." *The Harvard Crimson*. May 28, 2024. <u>https://web.archive.org/web/20240702150728/https://www.thecrimson.com/article/2024/5/28/ harvard-institutional-neutrality-report/</u>, archived July 10, 2024.
- Hammel, Lisa. "Men's Lib Almost Underground, but a Growing Movement." *The New York Times*. August 9, 1972.
- Hathaway, Jay. "'Soy boys' is the far-right's newest favorite insult." *The Daily Dot*. October 27, 2017. <u>https://web.archive.org/web/20220519051251/https://www.dailydot.com/unclick/soy-boy-alt-right-insult/</u>, archived May 19, 2022
- Hauser, Christine. "Reddit Bans 'Incel' Group for Inciting Violence Against Women." *The New York Times*. November 9, 2017. <u>https://web.archive.org/web/20230922155513/https://www.nytimes.com/2017/11/09/technology/incels-reddit-banned.html</u>, archived September 22, 2023.

Kale, Sirin. "50 Years of Pickup Artists: Why Is the Toxic Skill Still so in Demand?" *The Guardian*. November 5, 2019.
 <u>https://web.archive.org/web/20221123165623/https://www.theguardian.com/lifeandstyle/2019</u>/nov/05/pickup-artists-teaching-men-approach-women-industry-street-harassment, archived November 23, 2022.

Katz, Barbara. "Saying Goodbye to Superman." The National Observer. December 1973.

Lewis, Paul. "'I See Things Differently': James Damore on His Autism and the Google Memo." *The Guardian*. November 7, 2017. <u>https://web.archive.org/web/20240708161543/https://www.theguardian.com/technology/2017/</u> <u>nov/16/james-damore-google-memo-interview-autism-regrets</u>, archived July 8, 2024.

Steinem, Gloria. "What it Would Be Like if Women Win." Time. August 31, 1970.

Mc Combs, Phil. "Men's Movement Stalks the Wild Side." *The Washington Post*, February 3, 1991,

https://web.archive.org/web/20220629173057/https://www.washingtonpost.com/archive/lifest yle/1991/02/03/mens-movement-stalks-the-wild-side/83d3e85f-1384-484c-8e43c4e30e1229f4/, archived June 29, 2022

- Quinn, Ryan. "Black Scholars Face Anonymous Accusations in Anti-DEI Crusade." Inside Higher Ed. April 1, 2024. <u>https://web.archive.org/web/20240620223533/https://www.insidehighered.com/news/diversity/race-ethnicity/2024/04/01/black-scholars-face-anonymous-accusations-anti-dei-crusade, archived July 10, 2024.</u>
- Robinson, Emerald. "The Collapse of the Never-Trump Conservatives." *The American Spectator*. June 29, 2018. <u>https://web.archive.org/web/20220915094720/https://spectator.org/the-collapse-of-the-never-trump-conservatives-2/</u>, archived September 15, 2022.
- Tait, Amelia. "Spitting out the Red Pill: Former Misogynists Reveal How They Were Radicalised Online." New Statesman. February 28, 2017. <u>https://web.archive.org/web/20231004102921/https://www.newstatesman.com/long-reads/2017/02/reddit-the-red-pill-interview-how-misogyny-spreads-online</u>, archived October 4, 2023.
- The Hill. "Trump Jr. MOCKS TESTOSTERONE LEVELS of Democratic Men." YouTube.com. December 19, 2020.

https://web.archive.org/web/20240603121535/https://www.youtube.com/watch?v=jd82LFFG VdU&ab_channel=TheHill, archived June 3, 2024.

- Trever, John. Untitled Cartoon. *Albuquerque Journal*. 1998. <u>https://web.archive.org/web/20240115192237/https://www.talkorigins.org/indexcc/CA/CA230</u> _1.html, archived January 15, 2024.
- Willis Aronowitz, Nona. "The 'Men's Liberation' Movement Time Forgot." *Vice*. March 18, 2019. <u>https://web.archive.org/web/20240828095441/https://www.vice.com/en/article/the-mens-liberation-movement-time-forgot/</u>, archived August 28, 2024.
- Young, Cathy. "The Feminist Leader Who Became a Men's-Rights Activist." *The Atlantic*. June 13, 2014.

https://web.archive.org/web/20220917181217/https://www.theatlantic.com/politics/archive/20

<u>14/06/the-now-president-who-became-a-mens-rights-activist/372742/</u>, archived September 17, 2022.

2.B. Science Media

Science columns and sections in newspapers, scientists' interventions in the media, press articles on scientific findings, universities' press releases, researcher blogs, etc.

- Alexander. "What the Manosphere Gets Wrong About Alphas and Betas." Date Psychology.com, June 8, 2022. <u>https://web.archive.org/web/20231017165457/https://datepsychology.com/what-the-manosphere-gets-wrong-about-alphas-and-betas/</u>, archived October 17, 2023.
- Alexander. "Why AWALT Will be Wrong Most Of The Time." Date Psychology.com. July 15, 2022. <u>https://web.archive.org/web/20231208161628/https://datepsychology.com/why-awalt-will-be-wrong-most-of-the-time/</u>, archived December 8, 2023.
- Alexander. "The Emotional Epistemology of the Red Pill." Date Psychology.com. March 16, 2023. <u>https://web.archive.org/web/20231017165459/https://datepsychology.com/the-emotional-epistemology-of-the-red-pill/</u>, archived October 17, 2023.
- Armitstead, Claire. "Dawkins Sees off Darwin in Vote for Most Influential Science Book." *The Guardian*. July 20, 2017.

https://web.archive.org/web/20240604085806/https://www.theguardian.com/books/booksblog/ 2017/jul/20/dawkins-sees-off-darwin-in-vote-for-most-influential-science-book, archived June 4, 2024.

Armstrong, Kim. "Janet Shibley Hyde Sinks Stereotypes With Data." *APS Observer*. January 30, 2019.

https://web.archive.org/web/20240305040615/https://www.psychologicalscience.org/observer/janet-shibley-hyde-sinks-stereotypes-with-data, archived March 5, 2024.

Chadwick, Jonathan. "When you lose your virginity may be written in your GENES." *Mail Online*. July 1st, 2021.

https://web.archive.org/web/20220818135645/https://www.dailymail.co.uk/sciencetech/article -9745237/When-lose-virginity-written-genes.html, archived August 18, 2022.

- Connor, Steve. "The Hard-Wired Difference Between Male and Female Brains Could Explain Why Men Are 'Better at Map-Reading." *Independent*. December 3, 2013. <u>https://web.archive.org/web/20210811123204/https://www.independent.co.uk/life-style/the-hardwired-difference-between-male-and-female-brains-could-explain-why-men-are-better-at-map-reading-8978248.html, archived August 11, 2021</u>
- Conroy-Beam, Daniel. "How the Incels Warped My Research." *The Boston Globe*. May 16, 2024.

https://web.archive.org/web/20240615015137/https://www.bostonglobe.com/2024/05/16/opini on/evolutionary-psychology-incel-manosphere/, archived June 15, 2024.

- Cook, Gareth. "Why We Are Wired to Connect." *Scientific American*. October 22, 2013. <u>https://web.archive.org/web/20220214120854/https://www.scientificamerican.com/article/why</u> <u>-we-are-wired-to-connect/</u>, archived February 14, 2022.
- Fleischman, Diana. "Does Evolutionary Psychology Really Cause Mass Shootings?" Dissentient.substack.com. May 24, 2024.

https://web.archive.org/web/20240718082425/https://dissentient.substack.com/p/doesevolutionary-psychology-really, archived July 18, 2024.

- Fowler, Garth, Caroline Cope, Daniel Michalski, Peggy Christidis, Luona Lin, and Jessica Conroy. "Women Outnumber Men in Psychology Graduate Programs." American Psychological Association, 2018. <u>https://web.archive.org/web/20230603062318/https://www.apa.org/monitor/2018/12/datapoint</u> , archived June 3, 2023.
- Geher, Glenn. "The Launching of the Feminist Evolutionary Psychology Society: FEPS." The Evolutionary Studies Consortium, July 18, 2009. <u>https://web.archive.org/web/20240421173931/https://evostudies.org/2009/07/the-launching-of-the-feminist-evolutionary-psychology-society-feps/, archived April 21, 2024.</u>
- Georgia State University. "Grant Will Fund Research Into Growing Male Supremacist Online Culture." June 26, 2019. <u>https://web.archive.org/web/20230612153119/https://news.gsu.edu/2019/06/26/federal-grantwill-fund-research-into-growing-male-supremacist-subculture-online/</u>, archived June 12, 2023.
- Jussim, Lee, Geoffrey Miller, David Schmitt, Debra Soh. "The Google Memo: Four Scientists Respond." *Quillette*, August 7, 2017. <u>https://web.archive.org/web/20240701074238/https://quillette.com/2017/08/07/google-memo-four-scientists-respond/</u>, archived July 1, 2024.
- Miller, Geoffrey. "Geoffrey Miller: 'Why the Seduction Crowd Picked up on My Work.'" Wired. May 14, 2013. <u>https://web.archive.org/web/20240526013438/https://www.wired.com/story/why-the-seduction-crowd-picked-up-on-my-work/</u>, archived May 26, 2024.
- National Institute on Drug Abuse. "New NIH study reveals shared genetic markers underlying substance use disorders." March 22, 2023. <u>https://web.archive.org/web/20231023112327/https://nida.nih.gov/news-events/news-releases/2023/03/new-nih-study-reveals-shared-genetic-markers-underlying-substance-use-disorders, archived October 23, 2023.</u>
- Price, Michael. "'It's a Toxic Place.' How the Online World of White Nationalists Distorts Population Genetics." *Science News*. May 22, 2018. https://doi.org/doi:10.1126/science.aau2571.
- Price, Michael. "Anthropologists Take up Arms against 'Race Science." *Science News*. March 29, 2024. <u>https://doi.org/10.1126/science.z6n7io6</u>.
- Sadedin, Suzanne. Answer to "What do Scientists Think about the Biological Claims Made in the Document about Diversity Written by a Google Employee in August 2017?" Quora.com. https://archive.is/02Isy, archived July 8, 2024.
- Sadedin, Suzanne. Answer to "What do Feminists Think of Distinct Gender Roles in Other Species, for Example, in Chickens?" Quora.com. <u>https://archive.is/aIDnO</u>, archived July 9, 2024.
- Skatssoon, Judy. "Porn Makes Sperm Better Swimmers." *News in Science*. June 8, 2005. <u>https://web.archive.org/web/20231225170725/https://www.abc.net.au/science/news/stories/s1386177.htm</u>, archived December 25, 2023.

- The University of Kansas News. "Study Finds our Desire for 'Like-Minded Others' is Hard-Wired." February 23, 2016.
 <u>https://web.archive.org/web/20210812223028/https://news.ku.edu/2016/02/19/new-study-finds-our-desire-minded-others-hard-wired-controls-friend-and-partner</u>, archived August 12, 2021.
- Williamson, Chris. "An Evolutionary Psychologist's Opinion On The Manosphere." YouTube.com. March 25, 2022. <u>https://web.archive.org/web/20230319031139/https://www.youtube.com/watch?v=nhQMqwv</u> <u>60IM</u>, archived June 19, 2024
- Wilson, Edward Osborne. "Human Decency Is Animal." *The New York Times*. October 12, 1975. https://web.archive.org/web/20231023113249/https://www.nytimes.com/1975/10/12/archives/ human-decency-is-animal-hawks-and-baboons-are-not-usually-heroic.html, archived October 23, 2023.

3. RESEARCH METHODS AND ETHICS

- Bachaud, Louis. "Navigating Grey Areas: Ethical Issues in Studying Online Antifeminist Communities," *Revue Française Des Sciences de l'information et de La Communication* no. 25 (2022). <u>https://doi.org/10.4000/rfsic.13374</u>.
- Baribeau, Colette and Chantal Royer. "L'entretien individuel en recherche qualitative : usages et modes de présentation dans la Revue des sciences de l'éducation." *Revue des sciences de l'éducation* 38, no. 1 (2012): 23–45. <u>https://doi.org/10.7202/1016748ar.</u>
- Bonevski, Billie, Madeleine Randell, Chris Paul, Kathy Chapman, Laura Twyman, Jamie Bryant, Irena Brozek, and Clare Hughes. "Reaching the Hard-to-Reach: A Systematic Review of Strategies for Improving Health and Medical Research with Socially Disadvantaged Groups." *BMC Medical Research Methodology* 14, no. 42 (2014): 1–29. <u>https://doi.org/10.1186/1471-</u> 2288-14-42.
- Cohen, Jacob. *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. New York: Routledge, 1988. <u>https://doi.org/10.4324/9780203771587</u>.
- Douglas, Benjamin, Patrick Ewell, and Markus Brauer. "Data Quality in Online Human-Subjects Research: Comparisons between MTurk, Prolific, CloudResearch, Qualtrics, and SONA." *PLoS ONE* 18, no. 3 (2023). https://doi.org/10.1371/journal.pone.0279720.
- European Commission. Ethics and Data Protection. 2018
- Franzke, Aline Shakti, Anja Bechmann, Michael Zimmer, and Charles Ess, "Internet Research: Ethical Guidelines 3.0." The Association of Internet Researchers, 2020.
- Halpin, Michael and Norann Richard. "An Invitation to Analytic Abduction." *Methods in Psychology* 5 (2021): 1-8. <u>https://doi.org/10.1016/j.metip.2021.100052.</u>
- Hanel, Paul, Gregory Maio, and Antony Manstead, "A New Way to Look at the Data: Similarities Between Groups of People Are Large and Important." *Journal of Personality and Social Psychology* 116, no. 4 (2019): 541–62. <u>https://doi.org/10.1037/pspi0000154</u>.

- Hine, Christine ed. Virtual Methods: Issues in Social Research on the Internet. Oxford, New York: Berg Publishers, 2005.
- Lavorgna, Anita and Lisa Sugiura. "Direct Contacts with Potential Interviewees When Carrying out Online Ethnography on Controversial and Polarized Topics: A Loophole in Ethics Guidelines." *International Journal of Social Research Methodology* 25, no. 2 (2020): 261–67. https://doi.org/10.1080/13645579.2020.1855719.
- Litman, Leib, Aaron Moss, Cheskie Rosenzweig, and Jonathan Robinson. "Reply to MTurk, Prolific or Panels? Choosing the Right Audience for Online Research." SSRN Scholarly Paper (Rochester, NY, January 28, 2021). https://doi.org/10.2139/ssrn.3775075
- Mathy, Robin, Marc Schillace, Sarah Coleman, and Barrie Berquist. "Methodological Rigor with Internet Samples: New Ways to Reach Underrepresented Populations." *CyberPsychology & Behavior* 5, no. 3 (2002): 253–66. <u>https://doi.org/10.1089/109493102760147259</u>.
- Michel, Jean-Baptiste, Yuan Kui Shen, Aviva Presser Aiden, Adrian Veres, Matthew Gray, Joseph Pickett, Dale Hoiberg, Dan Clancy, Peter Norvig, Jon Orwant, Steven Pinker, Martin Nowak, and Erez Lieberman Aiden. "Quantitative Analysis of Culture Using Millions of Digitized Books." *Science* 331, no. 6014 (2011): 176-182. https://doi.org/10.1126/science.1199644.
- Miller, Jon. "The Measurement of Civic Scientific Literacy." *Public Understanding of Science* 7 (1998): 203–23. <u>https://doi.org/10.1088/0963-6625/7/3/001</u>.
- Palan, Stefan and Christian Schitter. "Prolific.Ac—A Subject Pool for Online Experiments." *Journal of Behavioral and Experimental Finance* 17 (2018): 22–27. https://doi.org/10.1016/j.jbef.2017.12.004.
- Paillé, Pierre and Alex Mucchielli. *L'analyse Qualitative En Science Humaines et Sociales*. 4th ed. Malakoff: Armand Colin, 2016.
- Peer, Eyal, David Rothschild, Andrew Gordon, Zak Evernden, and Ekaterina Damer. "Data Quality of Platforms and Panels for Online Behavioral Research." *Behavior Research Methods* 54, no. 4 (2022): 1643–62. <u>https://doi.org/10.3758/s13428-021-01694-3</u>.
- Perreault, William Jr. "Controlling Order-Effect Bias." *The Public Opinion Quarterly* 39, no. 4 (1975): 544–51.
- Quinn Patton, Michael. *Qualitative Research & Evaluation Methods: Integrating Theory and Practice*. 4th ed. Thousand Oaks: SAGE Publications, 2015.
- Rubin, Herbert and Irene Rubin. *Qualitative Interviewing: The Art of Hearing Data*. 3rd ed. Los Angeles; London; New Delhi; Singapore; Washington DC: SAGE Publications, 2012.
- Rutter, Jason and Gregory Smith, "Ethnographic Presence in a Nebulous Setting." In *Virtual Methods: Issues in Social Research on the Internet*, edited by Christine Hine, 81–92. Oxford, New York: Berg Publishers, 2005.
- Sanders, Teela. "Researching the Online Sex Work Community." In Virtual Methods: Issues in Social Research on the Internet, edited by Christine Hine, 67–80. Oxford, New York: Berg Publishers, 2005.
- Sugiura, Lisa. "Engaging with Incels: Reflexivity, Identity and the Female Cybercrime Ethnographic Researcher." in *Researching Cybercrimes: Methodologies, Ethics, and Critical*

Approaches, edited by Anita Lavorgna and Thomas Holt, 473–92. Cham: Springer International Publishing, 2021. <u>https://doi.org/10.1007/978-3-030-74837-1_24</u>.

Timulak, Ladislav. "Meta-Analysis of Qualitative Studies: A Tool for Reviewing Qualitative Research Findings in Psychotherapy." *Psychotherapy Research* 19, no. 4–5 (2009): 591–600. https://doi.org/10.1080/10503300802477989.

4. SCIENCE STUDIES

Sociology of science, history of science, philosophy of science, scientific literacy and education, politics of science.

- Ah-King, Malin. *The Female Turn: How Evolutionary Science Shifted Perceptions About Females*. London: Palgrave Macmillan, 2023.
- Aldridge, Meryl and Robert Dingwall. "Teleology on Television?: Implicit Models of Evolution in Broadcast Wildlife and Nature Programmes." *European Journal of Communication* 18, no. 4 (2003): 435–53. <u>https://doi.org/10.1177/0267323103184001</u>.
- Alexander, Denis and Ronald Numbers, eds. *Biology and Ideology: From Descartes to Dawkins*. Chicago and London: University of Chicago Press, 2010.
- Anderson, Dianne, Kathleen Fisher, and Gregory Norman. "Development and Evaluation of the Conceptual Inventory of Natural Selection." *Journal of Research in Science Teaching* 39, no. 10 (2002): 952–78. <u>https://doi.org/10.1002/tea.10053</u>.
- Beckwith, Jon. "A Historical View of Social Responsibility in Genetics." *BioScience* 43, no. 5 (1993): 327–33. <u>https://doi.org/10.2307/1312065</u>.
- Bishop, Beth and Charles Anderson. "Student Conceptions of Natural Selection and Its Role in Evolution." *Journal of Research in Science Teaching* 27, no. 5 (1990): 415–27. https://doi.org/10.1002/tea.3660270503.
- Blancke, Stefaan, Koen Tanghe, and Johan Braeckman. "Intuitions in Science Education and the Public Understanding of Science." In *Perspectives on Science and Culture*, edited by Stefaan Blancke, Kris Rutten, and Ronald Soetaert, 223-42. West Lafayette: Purdue University Press, 2018. <u>https://doi.org/10.2307/j.ctt2204rxr.16</u>.
- Bleier, Ruth. Science and Gender: A Critique of Biology and Its Theories on Women. New York and London: Teachers College Press, 1997.
- Bowling, Bethany, Carl Huether, Lihshing Wang, Melanie Myers, Glenn Markle, Gary Dean, Erin Acra, Francis Wray, and George Jacob. "Genetic Literacy of Undergraduate Non– Science Majors and the Impact of Introductory Biology and Genetics Courses." *Bioscience* 58 (2008): 654-660. <u>https://doi.org/10.1641/B580712.</u>
- Bowling, Bethany, Erin Acra, Lihshing Wang, Melanie Myers, Gary Dean, Glenn Markle, Christine Moskalik, and Carl Huether. "Development and Evaluation of a Genetics Literacy Assessment Instrument for Undergraduates," *Genetics* 178, no. 1 (2008): 15–22. <u>https://doi.org/10.1534/genetics.107.079533</u>.
- Brescoll, Victoria and Marianne LaFrance. "The Correlates and Consequences of Newspaper Reports of Research on Sex Differences." *Psychological Science* 15 (2004): 515–20. <u>https://doi.org/10.1111/j.0956-7976.2004.00712.x.</u>

- Burch, Rebecca and Maryanne Fisher. "The Naturalistic Phallusy: the Use of Evolution to Justify Treatment of Women." Poster presented at the 2018 Northeastern Evolutionary Psychology conference, New Paltz, NY, April 2018.
- Burch, Rebecca. "More than Just a Pretty Face: The Overlooked Contributions of Women in Evolutionary Psychology Textbooks." *Evolutionary Behavioral Sciences* 14, no. 1 (2020): 100–114. https://doi.org/10.1037/ebs0000166.
- Buss, David and David Schmitt. "Evolutionary Psychology and Feminism." *Sex Roles* 64, no. 9–10 (2011): 768–87. <u>https://doi.org/10.1007/s11199-011-9987-3</u>.
- Buss, David. "Feminist Evolutionary Psychology: Some Reflections." Journal of Social, Evolutionary, and Cultural Psychology 7, no. 4 (2013): 295–96, <u>https://doi.org/10.1037/h0099192</u>, 295.
- Campbell, Anne. "The Study of Sex Differences: Feminism and Biology." Zeitschrift Für Psychologie 220, no. 2 (2012): 137–43. <u>https://doi.org/10.1027/2151-2604/a000105.</u>
- Carlson, Jedidiah, Brenna Henn, Dana Al-Hindi, and Sohini Ramachandran. "Counter the Weaponization of Genetics Research by Extremists." *Nature* 610, no. 7932 (2022): 444–47. https://doi.org/10.1038/d41586-022-03252-z.
- Carlson, Jedidiah and Kelley Harris. "Quantifying and Contextualizing the Impact of bioRxiv Preprints through Automated Social Media Audience Segmentation." *PLOS Biology* 18, no. 9 (2020): e3000860. <u>https://doi.org/10.1371/journal.pbio.3000860</u>.
- Carver, Rebecca Bruu, Jérémy Castéra, Niklas Gericke, Neima Alice Menezes Evangelista, and Charbel El-Hani. "Young Adults' Belief in Genetic Determinism, and Knowledge and Attitudes towards Modern Genetics and Genomics: The PUGGS Questionnaire." *PLOS ONE* 12, no. 1 (2017): e0169808. <u>https://doi.org/10.1371/journal.pone.0169808</u>.
- Chapman, Robert Maxim Likhanov, Fatos Selita, Ilya Zakharov, Emily Smith-Woolley, and Yulia Kovas. "Genetic Literacy And Attitudes Survey (Iglas): International Population-Wide Assessment Instrument." *The European Proceedings of Social & Behavioural Sciences EpSBS* 33, n°6 (2017): 45–66. https://doi.org/10.15405/epsbs.2017.12.6.
- Cobb, Cory, Brianna Crumly, Pablo Montero-Zamora, Seth Schwartz, and Charles Martinez Jr. "The Problem of Miscitation in Psychological Science: Righting the Ship." *American Psychologist* 79, no. 2 (2024): 299–311. https://doi.org/10.1037/amp0001138.
- Conde, Marta. "From Activism to Science and from Science to Activism in Environmental-Health Justice Conflicts." *Journal of Science Communication* 14, no. 2 (2015): C04. https://doi.org/10.22323/2.14020304.
- Corsi, Pietro. "Seduction and the Peacock: Charles Darwin and Sexual Selection." *Clio. Women, Gender, History* 55, no. 1 (2022): 173–89. <u>https://doi.org/10.4000/clio.21739</u>.
- Cowan, Laura. "Feminist Perceptions of Evolutionary Psychology: An Empirical Study." PhD dissertation, Texas Woman's University, 2014.
- Dar-Nimrod, Ilan and Steven Heine. "Exposure to Scientific Theories Affects Women's Math Performance." *Science* 314, no. 5798 (2006): 435–435. https://doi.org/10.1126/science.1131100.

- Dar-Nimrod, Ilan, Steven Heine, Benjamin Cheung, and Mark Schaller. "Do Scientific Theories Affect Men's Evaluations of Sex Crimes?" *Aggressive Behavior* 37, no. 5 (2011): 440–49. https://doi.org/10.1002/ab.20401.
- Dar-Nimrod, Ilan and Steven Heine. "Genetic Essentialism: On the Deceptive Determinism of DNA." *Psychological Bulletin* 137, no. 5 (2011): 800–818. <u>https://doi.org/10.1037/a0021860</u>.
- Daston, Lorraine and Fernando Vidal, eds. *The Moral Authority of Nature*. Chicago: The University of Chicago Press, 2004.
- Dawkins, Richard. The Magic of Reality. London: Bantam Press, 2011.
- Denault, Vincent and Mircea Zloteanu. "Darwin's Illegitimate Children: How Body Language Experts Undermine Darwin's Legacy." *Evolutionary Human Sciences* 4 (2022). https://doi.org/10.1017/ehs.2022.50.
- Dreger, Alice. Galileo's Middle Finger. New York: Penguin Press, 2015.
- Ehrenreich, Barbara and Deirdre English. For Her Own Good: 150 Years of the Experts' Advice to Women. New York: Anchor Books, 1989.
- Fausto-Sterling, Anne. *Myths Of Gender: Biological Theories About Women And Men, Revised Edition*. New York: Basic Books, 1985.
- Fitzgerald-Butt, Sara, Andrew Bodine, Kevin Fry, Jerry Ash, Ali Zaidi, Vidu Garg, Cynthia Gerhardt, and Kim McBride. "Measuring Genetic Knowledge: A Brief Survey Instrument for Adolescents and Adults." *Clinical Genetics* 89, no. 2 (2016): 235–43. <u>https://doi.org/10.1111/cge.12618</u>.
- Fuller, Steve, Mikael Stenmark, and Ulf Zackariasson, eds. *The Customization of Science: The Impact of Religious and Political Worldviews on Contemporary Science*. New York and Basingstoke: Palgrave Macmillan, 2014.
- García-Favaro, Laura. "'Porn Trouble': On the Sexual Regime and Travels of Postfeminist Biologism." *Australian Feminist Studies* 30, no. 86 (2015): 366–76. https://doi.org/10.1080/08164649.2016.1150937.
- Geher, Glenn and Daniel Gambacorta. "Evolution Is Not Relevant to Sex Differences in Humans Because I Want It That Way! Evidence for the Politicization of Human Evolutionary Psychology." *EvoS Journal: The Journal of the Evolutionary Studies Consortium* 2, no. 1 (2010): 32–47.
- Gormally, Cara, Peggy Brickman, and Mary Lutz. "Developing a Test of Scientific Literacy Skills (TOSLS): Measuring Undergraduates' Evaluation of Scientific Information and Arguments." *CBE—Life Sciences Education* 11 (2012): 364–77. https://doi.org/10.1187/cbe.12-03-0026.
- Gowaty, Patricia Adair, ed. Feminism and Evolutionary Biology: Boundaries, Intersections and Frontiers. London: Chapman & Hall, 1997.
- Gregory, T. Ryan and Cameron Ellis. "Conceptions of Evolution among Science Graduate Students." *BioScience* 59, no. 9 (2009): 792–99. <u>https://doi.org/10.1525/bio.2009.59.9.11</u>.
- Gross, Liza. "Scientific Illiteracy and the Partisan Takeover of Biology." *PLOS Biology* 4, no. 5 (2006): e167. <u>https://doi.org/10.1371/journal.pbio.0040167.</u>

- Hamlin, Kimberly. From Eve to Evolution: Darwin, Science, and Women's Rights in Gilded Age America. Chicago and London: The University of Chicago Press, 2014.
- Harding, Sandra. The Science Question in Feminism. Ithaca: Cornell University Press, 1986.
- Hawley, Patricia, Stephen Short, Luke McCune, Mark Osman, and Todd Little. "What's the Matter with Kansas?: The Development and Confirmation of the Evolutionary Attitudes and Literacy Survey (EALS)." *Evolution: Education and Outreach* 4, no. 1 (2011): 117–32. https://doi.org/10.1007/s12052-010-0294-1.
- Himmelstein, Daniel, Ariel Rodriguez Romero, Jacob Levernier, Thomas Anthony Munro, Stephen Reid McLaughlin, Bastian Greshake Tzovaras, Casey Ryan Greene, and Peter Rodgers. "Sci-Hub Provides Access to Nearly All Scholarly Literature." *eLife* 7 (2018): e32822. <u>https://doi.org/10.7554/eLife.32822</u>.
- Hooven, Carole. "Academic Freedom Is Social Justice: Sex, Gender, and Cancel Culture on Campus." *Archives of Sexual Behavior* 52, no. 1 (2023). <u>https://doi.org/10.1007/s10508-022-02467-5</u>.
- Hyde, Janet Shibley, Sara Lindberg, Marcia Linn, Amy Ellis, and Caroline Williams. "Gender Similarities Characterize Math Performance." *Science* 321, no. 5888 (2008): 494–95. https://doi.org/10.1126/science.1160364.
- Jonason, Peter and David Schmitt. "Quantifying Common Criticisms of Evolutionary Psychology." *Evolutionary Psychological Science* 2, no. 3 (2016): 177–88. <u>https://doi.org/10.1007/s40806-016-0050-z.</u>
- Juan Correa, Henry Laverde-Rojas, Julian Tejada, Fernando Marmolejo-Ramos. "The Sci-Hub Effect on Papers' Citations." *Scientometrics* 127, no. 1 (2022): 99–126. https://doi.org/10.1007/s11192-020-03806-w.
- Kelly, Suzanne. "Tofu Feminism: Can Feminist Theory Absorb Evolutionary Psychology?" *Dialectical Anthropology* 38, no. 3 (2014): 287–304. <u>https://doi.org/10.1007/s10624-014-9353-2.</u>
- Kruger, Daniel, Maryanne Fisher, Steven Platek, and Catherine Salmon. "The 2020 Survey of Evolutionary Scholars on the State of Human Evolutionary Science." *EvoS Journal: The Journal of the Evolutionary Studies Consortium* 9, no. 1 (2022): 37–63.
- Kuhle, Barry. "Evolutionary Psychology Is Compatible with Equity Feminism, but Not with Gender Feminism: A Reply To Eagly and Wood (2011)." *Evolutionary Psychology* 10, no. 1 (2012): 39-43. https://doi.org/10.1177/147470491201000104.
- Kuhn, Thomas. *The Structure of Scientific Revolutions*. Chicago: The University of Chicago Press, 1962.
- Kutschera, Ulrich. "A Comparative Analysis of the Darwin-Wallace Papers and the Development of the Concept of Natural Selection." *Theory in Biosciences* 122, no. 4 (December 1, 2003): 343–59. <u>https://doi.org/10.1007/s12064-003-0063-6</u>.
- Larson, Edward. "Biology and the Emergence of the Anglo-American Eugenics Movement." In *Biology and Ideology: From Descartes to Dawkins*, edited by Denis Alexander and Ronald Numbers, 165-91. Chicago and London: University of Chicago Press, 2010.

- Laugksch, Rüdiger. "Scientific Literacy: A Conceptual Overview." *Science Education SCI EDUC* 84 (2000): 71-94. https://doi.org/10.1002/(SICI)1098-237X(200001)84:13.0.CO;2-C.
- Lemerle, Sébastien. Le Cerveau Reptilien: Sur La Popularité d'une Erreur Scientifique. Paris: CNRS éditions, 2021.
- Levy, Sheri, Steven Stroessner, and Carol Dweck. "Stereotype Formation and Endorsement: The Role of Implicit Theories." *Journal of Personality and Social Psychology* 74 (1998): 1421–36. https://doi.org/10.1037/0022-3514.74.6.1421.
- Liesen, Laurette. "Women, Behavior, and Evolution: Understanding the Debate between Feminist Evolutionists and Evolutionary Psychologists." *Politics and the Life Sciences: The Journal of the Association for Politics and the Life Sciences* 26, no. 1 (2007): 51–70. https://doi.org/10.2990/21_1_51.
- Lyle III, Henry and Eric Smith. "How Conservative Are Evolutionary Anthropologists?: A Survey of Political Attitudes." *Human Nature* 23, no. 3 (2012): 306–22. https://doi.org/10.1007/s12110-012-9150-z.
- McCaughey, Martha. *The Caveman Mystique: Pop-Darwinism and the Debates Over Sex, Violence, and Science.* New York: Routledge, 2008.
- Meyers, Diana Tietjens. "FEAST Cluster on Feminist Critiques of Evolutionary Psychology— Editor's Introduction." *Hypatia* 27, no. 1 (2012): 1–2. <u>https://doi.org/10.1111/j.1527-2001.2011.01239.x</u>.
- Miller, Jon. "Public Understanding of, and Attitudes toward, Scientific Research: What We Know and What We Need to Know." *Public Understanding of Science* 13, no. 3 (2004): 273– 94. <u>https://doi.org/10.1177/0963662504044908.</u>
- Miller, Jon. "Adult Science Learning in the Internet Era." *Curator: The Museum Journal* 53, no. 2 (2010): 191–208. <u>https://doi.org/10.1111/j.2151-6952.2010.00019.x.</u>
- Miller, Jon, Eugenie Scott, Marck Ackerman, Belén Laspra, Glenn Branch, Carmelo Polino, and Jordan Huffaker. "Public Acceptance of Evolution in the United States, 1985–2020." *Public Understanding of Science* 31, no. 2 (2022): 223–38. <u>https://doi.org/10.1177/09636625211035919</u>.
- Miller, Jon, Eugenie Scott, and Shinji Okamoto, "Public Acceptance of Evolution," *Science* 313 (2006): 765–66, <u>https://doi.org/10.1126/science.1126746</u>.
- Miller, Jon, Mark Ackerman, Belén Laspra, and Jordan Huffaker. "The Acquisition of Health and Science Information in the 21st Century." *The Information Society* 37, no. 2 (2021): 82–98. https://doi.org/10.1080/01972243.2020.1870022.
- National Academies of Sciences, Engineering, and Medicine. *Science Literacy: Concepts, Contexts, and Consequences.* Washington, DC: The National Academies Press, 2011.
- National Academies of Sciences, Engineering, and Medicine. "Using Population Descriptors in Genetics and Genomics Research: A New Framework for an Evolving Field." DC: The National Academies Press, 2023. https://doi.org/10.17226/26902.
- Nehm, Ross and Leah Reilly. "Biology Majors' Knowledge and Misconceptions of Natural Selection." *BioScience* 57, no. 3 (2007): 263–72. <u>https://doi.org/10.1641/B570311</u>.

- Nelkin, Dorothy and Susan Lindee. *The DNA Mystique: The Gene as a Cultural Icon*. Ann Arbor: University of Michigan Press, 2004.
- Nelson, Lynn Hankinson. "Feminism and Science." In *The Customization of Science: The Impact of Religious and Political Worldviews on Contemporary Science*, edited by Steve Fuller, Mikael Stenmark, and Ulf Zackariasson, 37-54. New York and Basingstoke: Palgrave Macmillan, 2014.
- Nettle, Daniel, Willem Frankenhuis, and Karthik Panchanathan. "Biology, Society, or Choice: How Do Non-Experts Interpret Explanations of Behaviour?" *Open Mind: Discoveries in Cognitive Science* 7 (2023): 625–51. <u>https://doi.org/10.1162/opmi_a_00098</u>.
- Norris, Stephen, Linda Phillips, and David Burns. "Conceptions of Scientific Literacy: Identifying and Evaluating Their Programmatic Elements." In *International Handbook of Research in History, Philosophy and Science Teaching*, edited by Michael Matthews, 1317-1344. Dordrecht: Springer Netherlands, 2014.
- O'Neill, Rachel. "Feminist Encounters with Evolutionary Psychology." *Australian Feminist Studies* 30, no. 86 (2015): 345–50. <u>https://doi.org/10.1080/08164649.2016.1157909.</u>
- Open Science Collaboration. "Estimating the Reproducibility of Psychological Science." *Science* 349, no. 6251 (2015): aac4716. <u>https://doi.org/10.1126/science.aac4716</u>.
- Oxman, Matt, Lillebeth Larun, Giordano Pérez Gaxiola, Dima Alsaid, Anila Qasim, Christopher James Rose, Karin Bischoff and Andrew David Oxman. "Quality of Information in News Media Reports about the Effects of Health Interventions: Systematic Review and Meta-Analyses." *F1000Research* 10 (2022): 433. <u>https://doi.org/10.12688/f1000research.52894.2</u>.
- Perry, George and Ruth Mace. "The Lack of Acceptance of Evolutionary Approaches to Human Behaviour." *Journal of Evolutionary Psychology* 8, no. 2 (2010): 105–25. https://doi.org/10.1556/JEP.8.2010.2.2.
- Piwowar, Heather, Jason Priem, Vincent Larivière, Juan Pablo Alperin, Lisa Matthias, Bree Norlander, Ashley Farley, Jevin West, and Stefanie Haustein. "The State of OA: A Large-Scale Analysis of the Prevalence and Impact of Open Access Articles." *PeerJ* 6 (2018): e4375. <u>https://doi.org/10.7717/peerj.4375.</u>
- Rasplus, Valéry. "Ce que la science veut dire, ce que la pseudo-science veut faire." In *Sciences et Pseudo-Sciences: Regards Des Sciences Humaines*, edited by Valéry Rasplus, 7-28. Paris: Matériologiques, 2014.
- Roberts, Douglas and Rodger Bybee. "Scientific Literacy, Science Literacy, and Science Education." In *Handbook of Research on Science Education*, edited by Norman Lederman and Sandra Abell. Vol II. New York: Routledge, 2014.
- Ruse, Michael. "Evolution and the Idea of Social Progress." In *Biology and Ideology: From Descartes to Dawkins*, edited by Denis Alexander and Ronald Numbers, 247–75. Chicago and London: University of Chicago Press, 2010.
- Rutherford, Adam. Control: The Dark History and Troubling Present of Eugenics. New York: W. W. Norton & Company, 2022.

- Sauvayre, Romy. "Comment la science alimente les croyances." In *Sciences et Pseudo-Sciences: Regards Des Sciences Humaines*, edited by Valéry Rasplus, 81–92. Paris: Matériologiques, 2014.
- Schmid, Philipp and Cornelia Betsch. "Effective Strategies for Rebutting Science Denialism in Public Discussions." *Nature Human Behaviour* 3, no. 9 (2019): 931–39. https://doi.org/10.1038/s41562-019-0632-4.
- Segerstråle, Ullica. "Colleagues in Conflict: An 'in Vivo' Analysis of the Sociobiology Controversy." *Biology and Philosophy* 1, no. 1 (1986): 53–87. https://doi.org/10.1007/BF00127089.
- Segerstråle, Ullica. "Reductionism, 'Bad Science,' and Politics: A Critique of Anti-Reductionist Reasoning." *Politics and the Life Sciences* 11, no. 2 (1992): 199–214. https://doi.org/10.1017/S0730938400015215.
- Segerstråle, Ullica. *Defenders of the Truth: The Sociobiology Debate*. Oxford: Oxford University Press, 2000.
- Segerstråle, Ullica, ed. *Beyond the Science Wars: The Missing Discourse about Science and Society*. Albany: State University of New York Press, 2000.
- Segerstråle, Ullica. "Implicit and Explicit Customized Science: The Case of Evolutionary Biology." In *The Customization of Science: The Impact of Religious and Political Worldviews* on Contemporary Science, edited by Steve Fuller, Mikael Stenmark, and Ulf Zackariasson, 91-103. New York and Basingstoke: Palgrave Macmillan, 2014. https://doi.org/10.1057/9781137379610_6.
- Shen, Benjamin. "Views: Science Literacy: Public Understanding of Science Is Becoming Vitally Needed in Developing and Industrialized Countries Alike" *American Scientist* 63, no. 3 (1975): 265–68.
- Sherwood, Steven. "Science Controversies Past and Present." *Physics Today* 64, no. 10 (2011): 39–44. <u>https://doi.org/10.1063/PT.3.1295</u>.
- Schiebinger, Londa. *Nature's Body: Gender in the Making of Modern Science*. 2nd ed. New Brunswick: Rutgers University Press, 2004.
- Shields, Stephanie and Sunil Bhatia. "Darwin on Race, Gender, and Culture." *American Psychologist* 64, no. 2 (2009): 111–19. <u>https://doi.org/10.1037/a0013502.</u>
- Short, Stephen and Patricia Hawley. "The Effects of Evolution Education: Examining Attitudes toward and Knowledge of Evolution in College Courses." *Evolutionary Psychology* 13, no. 1 (2015): 67–88. <u>https://doi.org/10.1177/147470491501300105.</u>
- Smiler, Andrew. "Sexual Strategies Theory: Built for the Short Term or the Long Term?" Sex Roles 64, no. 9 (2011): 603–12. <u>https://doi.org/10.1007/s11199-010-9817-z</u>.
- Stove, David. Darwinian Fairytales. Aldershot: Averbury Press, 1995.
- Speakman, Robert, Carla Hadden, Matthew Colvin, Justin Cramb, K.C. Jones, Travis Jones, Isabelle Lulewicz, Katharine Napora, Katherine Reinberger, Brandon Ritchison, Alexandra Edwards, and Victor Thompson. "Market Share and Recent Hiring Trends in Anthropology Faculty Positions." *PLOS ONE* 13, no. 9 (2018). https://doi.org/10.1371/journal.pone.0202528.

- Stenmark, Mikael. "The Customization of Science: An Introduction to the Debate." in *The Customization of Science: The Impact of Religious and Political Worldviews on Contemporary Science*, edited by Steve Fuller, Mikael Stenmark, and Ulf Zackariasson, 1-18. New York and Basingstoke: Palgrave Macmillan, 2014. https://doi.org/10.1057/9781137379610_1.
- Sumner, Petroc, Solveiga Vivian-Griffiths, Jacky Boivin, Andy Williams, Christos Venetis, Aimée Davies, Jack Ogden, Leanne Whelan, Bethan Hughes, Bethan Dalton, Fred Boy, and Christopher Chamber. "The Association between Exaggeration in Health Related Science News and Academic Press Releases: Retrospective Observational Study." *BMJ* 349 (2014): 1– 8. <u>https://doi.org/10.1136/bmj.g7015</u>.
- Tang-Martinez, Zuleyma. "The Curious Courtship of Sociobiology and Feminism: A Case of Irreconcilable Differences." in *Feminism and Evolutionary Biology: Boundaries, Intersections* and Frontiers, edited by Patricia Adair Gowaty, 116-50. Boston: Springer US, 1997. <u>https://doi.org/10.1007/978-1-4615-5985-6_6.</u>
- Thyer, Bruce and Monica Pignotti. *Science and Pseudoscience in Social Work Practice*. New York: Springer Publishing Company, 2015.
- Tybur, Joshua, Geoffrey Miller, and Steven Gangestad. "Testing the Controversy." *Human Nature* 18, no. 4 (2007): 313–28. <u>https://doi.org/10.1007/s12110-007-9024-y.</u>
- Vandermassen, Griet. Who's Afraid of Charles Darwin? Debating Feminism and Evolutionary Theory. Lanham: Rowman & Littlefield Publishers, 2005.
- Ward, Andrew, Tammy English, and Mark Chin. "Physical Attractiveness Predicts Endorsement of Specific Evolutionary Psychology Principles." *PLOS ONE* 16, no. 8 (2021): e0254725. https://doi.org/10.1371/journal.pone.0254725.
- Watson, James Dewey and Andrew James Berry. *DNA: The Secret of Life*. New York: Alfred Knopf, 2003.
- Wedeen, Lisa. "Savoir Scientifique, Libéralisme et Empire. La Science Politique Américaine et La Région Afrique Du Nord et Moyen-Orient Aujourd'hui." In Les Sciences Sociales En Voyage: L'Afrique Du Nord et Le Moyen-Orient Vus d'Europe, d'Amérique et de l'intérieur, edited by Eberhard Kienle, 148–79. New Online Edition. Aix-en-Provence: Institut de Recherches et d'Etudes sur les Mondes Arabes et Musulmans, 2010. <u>https://doi.org/10.4000/books.iremam.314.</u>
- Weindling, Paul. "Genetics, Eugenics, and the Holocaust." In *Biology and Ideology: From Descartes to Dawkins*, edited by Denis Alexander and Ronald Numbers, 192-214. Chicago and London: University of Chicago Press, 2010.
- Winegard, Benjamin, Bo Winegard, and Robert Deaner. "Misrepresentations of Evolutionary Psychology in Sex and Gender Textbooks." *Evolutionary Psychology* 12, no. 3 (2014): 474–508. <u>https://doi.org/10.1177/147470491401200301</u>.
- Yates, Tony and Edmund Marek. "Is Oklahoma Really OK? A Regional Study of the Prevalence of Biological Evolution-Related Misconceptions Held by Introductory Biology Teachers." *Evolution: Education and Outreach* 6, no. 1 (2013): 1-20. <u>https://doi.org/10.1186/1936-6434-6-6.</u>

Yates, Tony and Edmund Marek. "Teachers Teaching Misconceptions: A Study of Factors Contributing to High School Biology Students' Acquisition of Biological Evolution-Related Misconceptions." *Evolution: Education and Outreach* 7, no. 1 (2014): 1-18. <u>https://doi.org/10.1186/s12052-014-0007-2</u>.

5. EVOLUTIONARY BIOLOGY AND EVOLUTIONARY BEHAVIORAL SCIENCES

Evolutionary biology, genetics, endocrinology, neurosciences, medicine, as well as evolutionary approaches to human and animal behavior.

- Abed, Riadh and Paul St John-Smith, eds. *Evolutionary Psychiatry: Current Perspectives on Evolution and Mental Health*. Cambridge: Cambridge University Press, 2022.
- Al-Shawaf, Laith, Kareem Zreik, and David Buss. "Thirteen Misunderstandings About Natural Selection." In *Encyclopedia of Evolutionary Psychological Science*, edited by Todd Shackelford and Viviana Weekes-Shackelford. Cham: Springer International Publishing, 2021. https://doi.org/10.1007/978-3-319-19650-3_2158.
- Alcock, John. "Just So Stories." In *Encyclopedia of Evolutionary Psychological Science*, edited by Todd Shackelford and Viviana Weekes-Shackelford. Cham: Springer International Publishing, 2018. <u>https://doi.org/10.1007/978-3-319-16999-6_1378-1</u>.
- Allen, Elizabeth, Barbara Beckwith, Jon Beckwith, Steven Chorover, and David Culver. "Against 'Sociobiology." *The New York Review of Books*, November 13, 1975. <u>https://web.archive.org/web/20231016124346/https://www.nybooks.com/articles/1975/11/13/a</u> <u>gainst-sociobiology/</u>, archived October 16, 2023.
- Almeida, Osvaldo, Bu Yeap, Graeme Hankey, Konrad Jamrozik, and Leon Flicker. "Low Free Testosterone Concentration as a Potentially Treatable Cause of Depressive Symptoms in Older Men." Archives of General Psychiatry 65, no. 3 (2008): 283–89. https://doi.org/10.1001/archgenpsychiatry.2007.33.
- Amanatkar, Hamid, John Chibnall, Byung-Woun Seo, Jothika Manepalli, and George Grossberg.
 "Impact of Exogenous Testosterone on Mood: A Systematic Review and Meta-Analysis of Randomized Placebo-Controlled Trials." *Annals of Clinical Psychiatry: Official Journal of the American Academy of Clinical Psychiatrists* 26, no. 1 (2014): 19–32.
- Arnqvist, Göran and Locke Rowe. *Sexual Conflict*. Princeton, Oxford: Princeton University Press, 2005.
- Baker, Robin. Sperm Wars: The Science of Sex. New York: Basic Books, 1996.
- Basolo, Alexandra. "The Dynamics of Fisherian Sex-Ratio Evolution: Theoretical and Experimental Investigations." *The American Naturalist* 144, no. 3 (1994): 473–90.
- Bellis, Mark and Robin Baker, "Do Females Promote Sperm Competition? Data for Humans." Animal Behaviour 40, no. 5 (1990): 997–99, <u>https://doi.org/10.1016/S0003-3472(05)81008-5</u>.
- Birkhead, Tim, K.E. Lee, and P. Young, "Sexual Cannibalism in the Praying Mantis *Hierodula Membranacea*." *Behaviour* 1/2 (1988): 112–118.

- Blake, Khandis. "Beyond Nature vs. Nurture: An Interdisciplinary Exploration of Sexual Politics and Ideological Divides." Plenary at the Evolution and Human Behavior European Association conference, London, 2023.
- Brown, Gillian and Melissa Hines. "Sex Differences in the Brain: A Critique of the 'Hardwired' Metaphor." Presentation given in 2017.
- Burger, Oskar, Ronald Lee, and Rebecca Sear, eds. *Human Evolutionary Demography*. Cambridge: OpenBook Publishers, 2024.
- Buss, David. "Sexual Conflict: Evolutionary Insights into Feminism and the 'Battle of the Sexes." In *Sex, Power, Conflict: Evolutionary and Feminist Perspectives*, edited by David Buss and Neil Malamuth, 296–318. New York: Oxford University Press, 1996.
- Buss, David. *Evolutionary Psychology: The New Science of the Mind*. New York: Routledge, 2019.
- Buss, David. When Men Behave Badly: The Hidden Roots of Sexual Deception, Harassment, and Assault. New York: Little, Brown and Company, 2021.
- Buss, David ed. *The Oxford Handbook of Human Mating*. New York: Oxford University Press USA, 2023.
- Buss, David, Cari Goetz, Joshua Duntley, Kelly Asao, and Daniel Conroy-Beam. "The Mate Switching Hypothesis." *Personality and Individual Differences* 104 (2017): 143–49. https://doi.org/10.1016/j.paid.2016.07.022.
- Buss, David, Max Abbott, Alois Angleitner, Armen Asherian, Angela Biaggio, Angel Villaseñor, Marilou Bruchon-Schweitzer, Hai-Yuan Ch'U, Janusz Czapiński, Boele Deraad, Bo Ekehammar, Noha Lohamy, Mario Fioravanti, James Georgas, Per Gjerde, Ruth Guttman, Fatima Hazan, Saburo Iwawaki, N. Janakiramaiah, and Kuo-Shu Yang. "International Preferences in Selecting Mates: A Study of 37 Cultures." *Journal of Cross-Cultural Psychology* 21, no. 1 (1990): 5–47. https://doi.org/10.1177/0022022190211001.
- Buss, David and Neil Malamuth, eds. Sex, Power, Conflict: Evolutionary and Feminist Perspectives. New York: Oxford University Press, 1996.
- Cissé, Yasmine-Marie, Jeremy Borniger, and Randy Nelson. "Hormones, Circadian Rhythms, and Mental Health." In *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, ed. Lisa Welling and Todd Shackelford, 367–80. New York: Oxford University Press, 2019.
- Cowan, Mary Louise and Anthony Little. "The Effects of Relationship Context and Modality on Ratings of Funniness." *Personality and Individual Differences* 54, no. 4 (2013): 496–500. https://doi.org/10.1016/j.paid.2012.10.020.
- Christov-Moore, Leonardo, Elizabeth Simpson, Gino Coudé, Kristina Grigaityte, Marco Iacoboni, and Pier Francesco Ferrari. "Empathy: Gender Effects in Brain and Behavior." *Neuroscience and Biobehavioral Reviews* 46, no. 4 (2014): 604–27. <u>https://doi.org/10.1016/j.neubiorev.2014.09.001</u>.
- Darwin Correspondence Project. "Letter n°2192." December 22, 1857. <u>https://web.archive.org/web/https://www.darwinproject.ac.uk/letter/DCP-LETT-2192.xml</u>, archived October 10, 2023.

- Darwin, Charles. The Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life. London: John Murray, 1859.
- Darwin, Charles. *The Descent of Man and Selection in Relation to Sex*. London: John Murray, 1871.
- Darwin, Charles. *The Expression of the Emotions in Man and Animals*. London: John Murray, 1872.
- Das, Hindol, Vaibhav Motghare, and Mrinalini Singh. "Human Evolution of the Teeth & Jaws: A Mouthful of History." *International Journal of Oral Health and Medical Research* 5, no. 4 (2018): 32–36.
- Davies, Nicholas, John Krebs, and Stuart West, eds. *An Introduction to Behavioural Ecology*. 4th ed. Oxford: Wiley-Blackwell, 2012.
- Dawkins, Richard. The Selfish Gene. Oxford: Oxford University Press, 1976.
- Dawkins, Richard. The Blind Watchmaker. New York: Norton, 1986.
- Dawkins, Richard. *The Extended Phenotype: The Long Reach of the Gene*. Oxford, New York: Oxford University Press, 1999.
- De Waal, Frans. *Chimpanzee Politics: Power and Sex among Apes*. Baltimore: John Hopkins University Press, 1982.
- De Waal, Frans. *Different: Gender Through the Eyes of a Primatologist*. New York: W.W. Norton and Company, 2022.
- Del Giudice, Marco. "Sex Differences in Romantic Attachment: A Meta-Analysis." *Personality* and Social Psychology Bulletin 37, no. 2 (2011): 193–214. https://doi.org/10.1177/0146167210392789.
- Del Giudice, Marco and Steven Gangestad. "No Evidence Against the Greater Male Variability Hypothesis: A Commentary on Harrison et al.'s (2022) Meta-Analysis of Animal Personality." *Evolutionary Psychological Science* 9, no. 3 (2023): 293–300. <u>https://doi.org/10.1007/s40806-023-00358-z.</u>
- Di Dio, Cinzia, Emiliano Macaluso, and Giacomo Rizzolatti. "The Golden Beauty: Brain Response to Classical and Renaissance Sculptures." *PLOS ONE* 2, no. 11 (2007): e1201. https://doi.org/10.1371/journal.pone.0001201.
- Durkee, Patrick, Pablo Polo, José Antonio Muñoz-Reyes, Claudia Rodríguez-Ruiz, María Losada-Pérez, Ana Fernández-Martínez, Enrique Turiégano, David Buss, and Miguel Pita.
 "Men's Bodily Attractiveness: Muscles as Fitness Indicators." *Evolutionary Psychology* 17, no. 2 (2019). <u>https://doi.org/10.1177/1474704919852918</u>.
- Dutton, Edward. "Women Marry Up" In *Encyclopedia of Evolutionary Psychological Science*, edited by Todd Shackelford and Viviana Weekes-Shackelford. Cham: Springer International Publishing, 2018. <u>https://doi.org/10.1007/978-3-319-16999-6_249-1</u>
- Eagly, Alice and Wendy Wood. "Feminism and the Evolution of Sex Differences and Similarities." *Sex Roles* 64, no. 9 (2011): 758–67. <u>https://doi.org/10.1007/s11199-011-9949-9</u>.

- Eastwick, Paul and Eli Finkel. "Sex Differences in Mate Preferences Revisited: Do People Know What They Initially Desire in a Romantic Partner?" *Journal of Personality and Social Psychology* 94, no. 2 (2008): 245–64. https://doi.org/10.1037/0022-3514.94.2.245.
- Egeland, Jonathan. "Evolutionary Psychology and Normal Science: In Search of a Unifying Research Program." *Integrative Psychological and Behavioral Science* 57, no. 2 (2023): 390–411. <u>https://doi.org/10.1007/s12124-022-09736-x</u>.
- Eldakar, Omar Tonsi and David Sloan Wilson. "Eight Criticisms Not to Make About Group Selection." *Evolution* 65, no. 6 (2011): 1523–26. <u>https://doi.org/10.1111/j.1558-5646.2011.01290.x</u>.
- Férec, Claude. "La mucoviscidose Du gène à la thérapeutique." *médecine/sciences* 37, no. 6–7 (2021): 618–24. <u>https://doi.org/10.1051/medsci/2021085</u>.
- Fessler, Daniel. "Reproductive Immunosuppression and Diet: An Evolutionary Perspective on Pregnancy Sickness and Meat Consumption." *Current Anthropology* 43, no. 1 (2002): 19–61. https://doi.org/10.1086/324128.
- Friederici, Angela. "The Brain Basis of Language Processing: From Structure to Function." *Physiological Reviews* 91, no. 4 (2011): 1357–92. https://doi.org/10.1152/physrev.00006.2011.
- Gangestad, Steven and Martie Haselton. "Human Estrus: Implications for Relationship Science." *Current Opinion in Psychology* 1 (2015): 45–51. https://doi.org/10.1016/j.copsyc.2014.12.007.
- Gangestad, Steven, Randy Thornhill, and Christine Garver. "Changes in Women's Sexual Interests and Their Partners' Mate-Retention Tactics across the Menstrual Cycle: Evidence for Shifting Conflicts of Interest." *Proceedings of the Royal Society B: Biological Sciences* 269, no. 1494 (2002): 975-82. https://doi.org/10.1098/rspb.2001.1952.
- Geher, Glenn and Nicole Wedberg. *Positive Evolutionary Psychology: Darwin's Guide to Living a Richer Life*. New York: Oxford University Press USA, 2019.
- Ghirlanda, Stefano, Liselotte Jansson, and Magnus Enquist. "Chickens Prefer Beautiful Humans." *Human Nature* 13, no. 3 (2002): 383–89. <u>https://doi.org/10.1007/s12110-002-1021-6</u>.
- Gildersleeve, Kelly, Martie Haselton, and Melissa Fales. "Do Women's Mate Preferences Change across the Ovulatory Cycle? A Meta-Analytic Review." *Psychological Bulletin* 140, no. 5 (2014): 1205–59. https://doi.org/10.1037/a0035438.
- Gould, Stephen Jay. "Sociobiology: The Art of Storytelling." New Scientist 16 (1978): 530-33.
- Gould, Stephen Jay. "The Evolution of Life on the Earth." *Scientific American*, 1994, 85–91, https://doi.org/10.1038/scientificamerican1094-84.
- Grammer, Karl, Bernhard Fink, and Nick Neave. "Human Pheromones and Sexual Attraction." *European Journal of Obstetrics & Gynecology and Reproductive Biology* 118, no. 2 (2005): 135–42. https://doi.org/10.1016/j.ejogrb.2004.08.010.
- Greiling, Heidi and David Buss. "Women's Sexual Strategies: The Hidden Dimension of Extra-Pair Mating." *Personality and Individual Differences* 28 (2000): 929–63. https://doi.org/10.1016/S0191-8869(99)00151-8.

- Hampson, Elizabeth. "Sex Differences in Cognition: Evidence for the Organizational-Activational Hypothesis." In *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, edited by Lisa Welling and Todd Shackelford, 43-66. New York: Oxford University Press, 2019.
- Harrison, Lauren, Daniel Noble, and Michael Jennions. "A Meta-Analysis of Sex Differences in Animal Personality: No Evidence for the Greater Male Variability Hypothesis." *Biological Reviews* 97, no. 2 (2022): 679–707. <u>https://doi.org/10.1111/brv.12818.</u>
- Haselton, Martie, Daniel Nettle, and Damian Murray. "The Evolution of Cognitive Bias." In *The Handbook of Evolutionary Psychology, Volume 2*, edited by David Buss, 968–87. Hoboken: John Wiley & Sons, 2016.
- Haselton, Martie, Mina Mortezaie, Elizabeth Pillsworth, April Bleske-Rechek, and David Frederick. "Ovulatory Shifts in Human Female Ornamentation: Near Ovulation, Women Dress to Impress." *Hormones and Behavior* 51, no. 1 (2007): 40–45. https://doi.org/10.1016/j.yhbeh.2006.07.007.
- Hatoum, Alexander, Sarah Colbert, Emma Johnson, Spencer Huggett, Gita Pathak, Mariela Jennings, Sarah Robinson, Nicole Karcher, Isabella Hansen, David Baranger, Alexis Edwards, Andrew Grotzinger, Elliot Tucker-Drob, Henry Kranzler, Lea Davis, Sandra Sanchez-Roige, Renato Polimanti, Joel Gelernter, Howard Edenberg, Ryan Bogdan, and Arpana Agrawal.
 "Multivariate Genome-Wide Association Meta-Analysis of over 1 Million Subjects Identifies Loci Underlying Multiple Substance Use Disorders." *Nature Mental Health* 1, no. 3 (2023): 210–23. https://doi.org/10.1038/s44220-023-00034-y.
- Hooven, Carole. T: The Story of Testosterone, the Hormone That Dominates and Divides Us. New York: Henry Holt and Company, 2021.
- Hrdy, Sarah. *The Woman That Never Evolved*. Cambridge, London: Harvard University Press, 1981, 1999 reprint.
- Hrdy, Sarah, *Mothers and Others: The Evolutionary Origins of Mutual Understanding* (Cambridge: Harvard University Press, 2009)
- Huxley, Julian. Evolution: The Modern Synthesis. London: Allen & Unwin, 1942.
- Hyde, Janet Shibley. "Where Are the Gender Differences? Where Are the Gender Similarities?" In *Sex, Power, Conflict: Evolutionary and Feminist Perspectives*, edited by David Buss and Neil Malamuth, 107–25. New York: Oxford University Press, 1996.
- Jobling, Mark, Edward Hollox, Matthew Hurles, Toomas Kivisild, and Chris Tyler-Smith eds. *Human Evolutionary Genetics*. 2nd ed. New York and London: Garland Science, 2014.
- Kościński, Krzysztof. "Life History of Female Preferences for Male Faces." *Human Nature* 22, no. 4 (2011): 416–38. <u>https://doi.org/10.1007/s12110-011-9123-7</u>.
- Kropotkin, Peter. Mutual Aid. London: W. Heineman, 1902.
- Krügerk, Tillmann, Michael Exton, Cornelius Pawlak, Alexander von zur Mühlen, Uwe Hartmann, and Manfred Schedlowski. "Neuroendocrine and Cardiovascular Response to Sexual Arousal and Orgasm in Men." *Psychoneuroendocrinology* 23, no. 4 (1998): 401–11. <u>https://doi.org/10.1016/S0306-4530(98)00007-9</u>.

- Lala, Kevin and Gillian Brown. Sense and Nonsense: Evolutionary Perspectives on Human Behaviour. Oxford, New York: Oxford University Press, 2011.
- Leca, Jean-Baptiste. "Evolutionary By-Products." in *Encyclopedia of Evolutionary Psychological Science*, edited by Todd Shackelford and Viviana Weekes-Shackelford. Cham: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-319-16999-6_2850-1.
- Lehre, Anne-Catherine, Knut Lehre, Petter Laake, and Niels Danbolt. "Greater Intrasex Phenotype Variability in Males than in Females Is a Fundamental Aspect of the Gender Differences in Humans." *Developmental Psychobiology* 51, no. 2 (2009): 198–206. https://doi.org/10.1002/dev.20358.
- Liddle, James and Todd Shackelford, eds. *The Oxford Handbook of Evolutionary Psychology and Religion* (New York: Oxford University Press, 2020)
- Lior, Yair and Justin Lane, eds. *The Routledge Handbook of Evolutionary Approaches to Religion*. New York: Routledge, 2022.
- Lishner, David, Steven Steinert, and Eric Stocks. "Gratitude, Sympathy, and Empathy." In *Encyclopedia of Evolutionary Psychological Science*, edited by Viviana Weekes-Shackelford and Todd Shackelford. Cham: Springer International Publishing, 2016. https://doi.org/10.1007/978-3-319-16999-6_3053-1
- Lloyd, Elisabeth and Marcus Feldman. "Commentary: Evolutionary Psychology: A View From Evolutionary Biology." *Psychological Inquiry* 13, no. 2 (2002): 150–56. https://doi.org/10.1207/S15327965PLI1302_04.
- Lombardi, Gaetano, Stefano Zarrilli, Annamaria Colao, Luigi Paesano, Carolina Di Somma, Francesca Wanda Rossi, and Michele De Rosa. "Estrogens and Health in Males." *Molecular and Cellular Endocrinology* 178, no. 1 (2001): 51–55. <u>https://doi.org/10.1016/S0303-</u> 7207(01)00420-8.
- MacLean, Paul. *The Triune Brain in Evolution: Role in Paleocerebral Function*. New York: Plenum Press, 1990.
- Mascherek, Anna, Mirjam Christina Reidick, Jürgen Gallinat, and Simone Kühn. "Is Ejaculation Frequency in Men Related to General and Mental Health? Looking Back and Looking Forward." *Frontiers in Psychology* 12 (2021). <u>https://doi.org/10.3389/fpsyg.2021.693121</u>.
- Majolo, Bonaventura, Julia Lehmann, Aurora de Bortoli Vizioli, and Gabriele Schino. "Fitness-Related Benefits of Dominance in Primates." *American Journal of Physical Anthropology* 147, no. 4 (2012): 652–60. <u>https://doi.org/10.1002/ajpa.22031</u>.
- Marcinkowska, Urszula. "The Good Genes Hypothesis." In *Encyclopedia of Sexual Psychology and Behavior*, edited by Todd Shackelford and Viviana Weekes-Shackelford. Cham: Springer International Publishing, 2023. <u>https://doi.org/10.1007/978-3-031-08956-5_1081-1</u>.
- McKerracher, Luseadra. Mark Collard, and Joseph Henrich. "Food Aversions and Cravings during Pregnancy on Yasawa Island, Fiji." *Human Nature* 27, no. 3 (2016): 296–315. https://doi.org/10.1007/s12110-016-9262-y
- Mech, David. The Wolf: The Ecology and Behavior of an Endangered Species. New York: Doubleday, 1970.

- Mech, David. "Alpha Status, Dominance, and Division of Labor in Wolf Packs." *Canadian Journal of Zoology* 77 (1999): 1196–1203.
- Mech, David. "Whatever Happened to the Term Alpha Wolf?" *International Wolf: A Publication of the International Wolf Center*. Winter 2008, 4–8.
- Mills, Melinda, Felix Tropf, David Brazel, Natalie van Zuydam, Ahmad Vaez, Tune Pers, Harold Snieder, John Perry, Ken Ong, Marcel den Hoed, Nicola Barban, and Felix Day.
 "Identification of 371 Genetic Variants for Age at First Sex and Birth Linked to Externalising Behaviour." *Nature Human Behaviour* 5, no. 12 (2021): 1717–30. https://doi.org/10.1038/s41562-021-01135-3.
- Mogilski, Justin, Anna Wysoki, Simon Reeve, Virgina Mitchell, Jenna Lunge, and Lisa Welling. "Stress Hormones, Physiology, and Behavior." In *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, edited by Lisa Welling and Todd Shackelford, 351–66. New York: Oxford University Press, 2019.
- Moxon, Steve. "Dominance as Adaptive Stressing and Ranking of Males, Serving to Allocate Reproduction by Differential Self-Suppressed Fertility: Towards a Fully Biological Understanding of Social Systems." *Medical Hypotheses* 73, no. 1 (2009): 5–14. https://doi.org/10.1016/j.mehy.2009.02.011.
- Moxon, Steve. "Beyond Staged Retreat behind Virtual 'Gender Paradigm' Barricades: The Rise and Fall of the Misrepresentation of Partner-violence, and Its Eclipse by an Understanding of Mate-guarding." *Journal of Aggression, Conflict and Peace Research* 3, no. 1 (2011): 45–54. https://doi.org/10.5042/jacpr.2011.0021.
- Murphy, Macken, Caroline Phillips, and Khandis Blake. "Why Women Cheat: Testing Evolutionary Hypotheses for Female Infidelity in a Multinational Sample." *Evolution and Human Behavior* 45, no. 5 (2024). https://doi.org/10.1016/j.evolhumbehav.2024.106595.
- Nakagawa. "Sexual Dimorphism in Trait Variability and Its Eco-Evolutionary and Statistical Implications." *eLife* 9 (2020): e63170. <u>https://doi.org/10.7554/eLife.63170</u>.
- Neibergall, Nicholas, Alex Swanson, and Francisco Sánchez. "Hormones, Sexual Orientation, and Gender Identity." in *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, edited by Lisa Welling and Todd Shackelford, 201–214. New York: Oxford University Press, 2019.
- Nelson, Randy, and Lance Kriegsfeld. *An Introduction to Behavioral Endocrinology*. 6th ed. New York and London: Oxford University Press, 2022.
- Nesse, Randolph. "Social Selection and the Origins of Culture." In *Evolution, Culture, and the Human Mind*, edited by Mark Schaller, Ara Norenzayan, Steven Heine, Toshio Yamagishi, and Tatsuya Kameda, 137–50. New York: Psychology Press, 2010.
- Nesse, Randolph. "Core Principles for Evolutionary Medicine." In *Oxford Handbook of Evolutionary Medicine*, edited by Martin Brüne and Wulf Schiefenhövel, 4–43. Oxford University Press, 2019. https://doi.org/10.1093/oxfordhb/9780198789666.013.1.
- Nettle, Daniel and Thom Scott-Phillips. "Is a Non-Evolutionary Psychology Possible?" In Evolutionary Thinking Across Disciplines: Problems and Perspectives in Generalized Darwinism, edited by Agathe du Crest, Martina Valković, André Ariew, Hugh Desmond,

Philippe Huneman and Thomas Reydon, 21–42. Cham: Springer International Publishing, 2023. <u>https://doi.org/10.1007/978-3-031-33358-3_2</u>

- Okada, Keisuke, Kohei Yamaguchi, Koji Chiba, Hideaki Miyake, and Masato Fujisawa. "Comprehensive Evaluation of Androgen Replacement Therapy in Aging Japanese Men with Late-Onset Hypogonadism." *The Aging Male* 17, no. 2 (2014): 72–75. <u>https://doi.org/10.3109/13685538.2014.888052</u>.
- Olson, Mark and Alfonso Arroyo-Santos. "How to Study Adaptation (and Why to Do It That Way)." *Quarterly Review of Biology* 90, no. 2 (2015): 167–91. <u>https://doi.org/10.1086/681438</u>.
- Penton-Voak, Ian and David Perrett. "Female Preference for Male Faces Changes Cyclically: Further Evidence." *Evolution and Human Behavior* 21, no. 1 (2000): 39–48. <u>https://doi.org/10.1016/S1090-5138(99)00033-1</u>.
- Petersen, Michael Bang. "Evolutionary Political Psychology" In *The Handbook of Evolutionary Psychology, Volume 2*, edited by David Buss, 1084–1102. Hoboken: John Wiley & Sons, 2016.
- Pigott, Teresa, Alexandra Duran, Isha Jalnapurkar, Tyler Kimm, Stephanie Linscheid, and Melissa Allen. "Sex Differences in Anxiety Disorders." In *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, edited by Lisa Welling and Todd Shackelford, 405–432. New York: Oxford University Press, 2019.
- Pillsworth, Elizabeth and Martie Haselton. "Male Sexual Attractiveness Predicts Differential Ovulatory Shifts in Female Extra-Pair Attraction and Male Mate Retention." *Evolution and Human Behavior* 27, no. 4 (2006): 247–58. https://doi.org/10.1016/j.evolhumbehav.2005.10.002.
- Pike Ivy. "The Nutritional Consequences of Pregnancy Sickness." *Human Nature* 11, no. 3 (2000): 207–32. <u>https://doi.org/10.1007/s12110-000-1011-5</u>.
- Pinker, Steven. How the Mind Works. New York: Norton, 1997.
- Pinker, Steven. *The Blank Slate: The Modern Denial of Human Nature*. New York: Penguin Books, 2002.
- Pomiankowski, Andrew and Anders Pape Møller. "A Resolution of the Lek Paradox." *Proceedings: Biological Sciences* 260, no. 1357 (1995): 21–29.
- Prendergast, Brian, Kenneth Onishi, and Irving Zucker. "Female Mice Liberated for Inclusion in Neuroscience and Biomedical Research." *Neuroscience & Biobehavioral Reviews* 40 (2014): 1–5. <u>https://doi.org/10.1016/j.neubiorev.2014.01.001</u>.
- Reed, Katharine, Juliana Camargo, Jill Hamilton-Reeves, Mindy Kurzer, and Mark Messina. "Neither Soy nor Isoflavone Intake Affects Male Reproductive Hormones: An Expanded and Updated Meta-Analysis of Clinical Studies." *Reproductive Toxicology* 100 (2021): 60–67. <u>https://doi.org/10.1016/j.reprotox.2020.12.019</u>.
- Ridley, Matt. The Red Queen: Sex and the Evolution of Human Nature. New York: Viking Books, 1993.
- Reinhold, Klaus and Leif Engqvist. "The Variability Is in the Sex Chromosomes." *Evolution* 67, no. 12 (2013): 3662–68. https://doi.org/10.1111/evo.12224.

- Rochat, Magali Jane. "Sex and Gender Differences in the Development of Empathy." *Journal of Neuroscience Research* 101, no. 5 (2023): 718–29. <u>https://doi.org/10.1002/jnr.25009</u>.
- Rose, Hilary and Steven Rose, eds. Alas, Poor Darwin: Arguments Against Evolutionary Psychology. New York: Harmony Books, 2000.
- Schenkel, Rudolf. "Expression Studies on Wolves." Behaviour 1 (1947): 81-129.
- Sherman, Paul and Samuel Flaxman. "Nausea and Vomiting of Pregnancy in an Evolutionary Perspective." *American Journal of Obstetrics and Gynecology* 186, no. 5, Supplement 2 (2002): S190–97. https://doi.org/10.1067/mob.2002.122593.
- Siegel, Allan and Hreday Sapru. *Essential Neuroscience*. 4th ed. Philadelphia: Wolters Kluwer, 2019.
- Smith, Carrie Veronica and Benjamin Hadden. "Romantic Attachment." In Encyclopedia of Evolutionary Psychological Science, edited by Todd Shackelford and Viviana Weekes-Shackelford, 1–10. Cham: Springer International Publishing, 2018. https://doi.org/10.1007/978-3-319-16999-6_1714-1.
- Smuts, Barbara. "The Evolutionary Origins of Patriarchy." *Human Nature* 6, no. 1 (1995): 1–32. https://doi.org/10.1007/BF02734133.
- Sokol, Rosemary, Maryanne Fisher, and Feminist Evolutionary Psychology Society. "Letter of Purpose of the Feminist Evolutionary Psychology Society." *Journal of Social, Evolutionary,* and Cultural Psychology 7, no. 4 (2013): 286–94. <u>https://doi.org/10.1037/h0099193</u>.
- Stern, Julia and Lars Penke. "Ovulatory Cycle Effects and Hormonal Influences on Women's Mating Psychology." In *The Oxford Handbook of Human Mating*, edited by David Buss, 739-55. New York: Oxford University Press, 2022. https://doi.org/10.1093/oxfordhb/9780197536438.013.13.
- Stern, Julia, Sabine Ostermann, and Lars Penke. "Investigating Cycle Shifts in Women's Clothing Style and Grooming." *British Journal of Social Psychology* 63, no. 1 (2024): 378– 402. <u>https://doi.org/10.1111/bjso.12681</u>.
- Taylor, Christa, Sameh Said-Metwaly, Anaëlle Camarda, and Baptiste Barbot. "Gender Differences and Variability in Creative Ability: A Systematic Review and Meta-Analysis of the Greater Male Variability Hypothesis in Creativity." *Journal of Personality and Social Psychology* 126, no. 6 (2023): 1161–1179. <u>https://doi.org/10.1037/pspp0000484</u>.
- Tiger, Lionel. Men in Groups. New York: Random House, 1969.
- Tinbergen, Niko. "On the Aims and Methods of Ethology." *Zeitschrift Für Tierpsychologie* 20, no. 4 (1963): 410-433. <u>https://doi.org/10.1111/j.1439-0310.1963.tb01161.x</u>.
- Trivers, Robert. "Parental Investment and Sexual Selection" In Sexual Selection and the Descent of Man, edited by Bernard Campbell, 136–79. Chicago: Aldine, 1972.
- Trivers, Robert. "I had the future exactly wrong." Interview conducted at the conference on "Biological Perspectives in the Social Sciences" at the Gruter Institute, Darthmouth College, Hanover, USA, August 1995.

https://web.archive.org/web/20231104152904/http://www.froes.dds.nl/TRIVERS.htm, archived November 4, 2023.

- Trivers, Robert. *Deceit and Self-Deception: Fooling Yourself the Better to Fool Others*. London: Allen Lane, 2011.
- Vakirtzis, Tony. Hack Your Mating: An Evolutionary Psychologist's Guide to a Life of Sexual Abundance. Old Marston Press, 2018.
- Van Den Berghe, Pierre. "Sociobiology: Several Views." *BioScience* 31, no. 5 (1981): 406. https://doi.org/10.2307/1308416.
- Vandenberg, Laura. "Endocrine Disruptors and Other Environmental Influences on Hormone Action." In *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, edited by Lisa Welling and Todd Shackelford, 87–106. New York: Oxford University Press, 2019.
- Volk, Anthony, Andrew Dane, Zopito Marini, and Tracy Vaillancourt. "Adolescent Bullying, Dating, and Mating: Testing an Evolutionary Hypothesis." *Evolutionary Psychology* 13, no. 4 (2015), 1-11. <u>https://doi.org/10.1177/1474704915613909</u>.
- Wrangham, Richard and Dale Peterson. *Demonic Males: Apes and the Origins of Human Violence*. Boston: Mariner Books, 1997.
- Weekes-Shackelford, Viviana and Todd Shackelford, eds. *The Oxford Handbook of Evolutionary Psychology and Parenting*. New York: Oxford University Press, 2021.
- Weisberg, Yanna and John Kim. "Dual-Mating Hypothesis." In *Encyclopedia of Evolutionary Psychological Science*, edited by Todd Shackelford and Viviana Weekes-Shackelford. Cham: Springer International Publishing, 2021. <u>https://doi.org/10.1007/978-3-319-16999-6_238-1</u>.
- Wiezel, Adi, Michael Barlev, Christopher Martos, and Douglas Kenrick. "Stereotypes versus Preferences: Revisiting the Role of Alpha Males in Leadership." *Evolution and Human Behavior* 45, no. 3 (2024): 292–308. <u>https://doi.org/10.1016/j.evolhumbehav.2024.01.001</u>.
- Welling, Lisa and Todd Shackelford, eds. *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*. New York: Oxford University Press, 2019.
- Welling, Lisa and Robert Burriss. "Investigating the Ovulatory Cycle: An Overview of Research and Methods." In *The Oxford Handbook of Evolutionary Psychology and Behavioral Endocrinology*, edited by Lisa Welling and Todd Shackelford, 109–23. New York: Oxford University Press, 2019.
- Williams, George and Randolph Nesse. "The Dawn of Darwinian Medicine." *The Quarterly Review of Biology* 66, no. 1 (1991): 1–22. <u>https://doi.org/10.1086/417048</u>.
- Wilson, David Sloan and Edward Osborne Wilson. "Evolution 'for the Good of the Group."" *American Scientist* 96 (2008): 380–89. <u>https://doi.org/10.1511/2008.74.1</u>.
- Wilson, Edward Osborne. Sociobiology. Cambridge: Harvard University Press, 1975.
- Wilson, Edward Osborne. "For Sociobiology." The New York Review of Books, December 11, 1975. <u>https://web.archive.org/web/20231016124830/https://www.nybooks.com/articles/1975/12/11/f</u> or-sociobiology/, archived October 16, 2023.
- Wilson, Edward Osborne. Naturalist. Washington DC: Island Press, 1994.

- Wood, Wendy, Laura Kressel, Priyanka Joshi, and Brian Louie. "Meta-Analysis of Menstrual Cycle Effects on Women's Mate Preferences." *Emotion Review* 6, no. 3 (2014): 229–49. https://doi.org/10.1177/1754073914523073.
- Woodley of Menie, Michael, Mateo Peñaherrera-Aguirre, Matthew Sarraf, Daniel Kruger and Catherine Salmon. "Soft Core Evolutionary Psychology? Potential Evidence Against a Unified Research Program from a Survey of 581 Evolutionarily Informed Scholars." *Evolutionary Psychological Science* 9 (2023): 397–406. https://doi.org/10.1007/s40806-023-00370-3.
- Wyatt, Tristram. "The Search for Human Pheromones: The Lost Decades and the Necessity of Returning to First Principles." *Proceedings of the Royal Society B: Biological Sciences* 282, no. 1804 (2015): 20142994. <u>https://doi.org/10.1098/rspb.2014.2994</u>
- Zajitschek, Susanne, Felix Zajitschek, Russell Bonduriansky, Robert Brooks, Will Cornwell, Daniel Falster, Malgorzata Lagisz, Jeremy Mason, Alistair Senior, Daniel Noble, and Shinichi Nakagawa. "Sexual Dimorphism in Trait Variability and its Eco-Evolutionary and Statistical Implications." *ELife* 9 (2020): e63170. <u>https://doi.org/10.7554/eLife.63170</u>.

6. MANOSPHERE RESEARCH

- Almog, Ran and Danny Kaplan. "The Nerd and His Discontent: The Seduction Community and the Logic of the Game as a Geeky Solution to the Challenges of Young Masculinity." *Men and Masculinities* 20, no. 1 (2017): 27–48. <u>https://doi.org/10.1177/1097184X15613831</u>.
- Alschech, Jonathan and Michael Saini. ""Fathers' Rights" Activism, Discourse, Groups and Impacts: Findings from a Scoping Review of the Literature." *Journal of Divorce & Remarriage* 60, no. 5 (2019): 362–88. <u>https://doi.org/10.1080/10502556.2018.1546505</u>.
- Bachaud, Louis. "Aux Sources Du Masculinisme, Un Mouvement d'hommes Féministes : L'étonnante Trajectoire Du Men's Liberation Movement." In *Genres et Militantismes: Pluralité Des Formes de Mobilisations Féministes et LGBTQ*+, edited by Groupe d'Études Doctorales sur le Genre (GEDoG), 41–68. Joinville-le-Pont: Double Ponctuation, 2022.
- Bachaud, Louis. "'I'll Always Be a Subhuman, I Just Lost the Genetic Lottery': Subaltern Identity-Building in Online Incel Discourse and Ideology." *Nuevo Mundo Mundos Nuevos* (2024). <u>https://doi.org/10.4000/nuevomundo.95206</u>.
- Bachaud, Louis. "La manosphère anglophone : tour d'horizon et revue de la littérature." *Revue française des sciences de l'information et de la communication*, no. 28 (2024). https://journals.openedition.org/rfsic/15570.
- Bachaud, Louis and Sarah Johns. "The Use and Misuse of Evolutionary Psychology in Online Manosphere Communities: The Case of Female Mating Strategies." *Evolutionary Human Sciences* 5 (2023). <u>https://doi.org/10.1017/ehs.2023.22.</u>
- Baele, Stephane, Lewys Brace, and Travis Coan. "From 'Incel' to 'Saint': Analyzing the Violent Worldview behind the 2018 Toronto Attack." *Terrorism and Political Violence* 33, no. 8 (2019): 1667–91. <u>https://doi.org/10.1080/09546553.2019.1638256</u>.
- Baele, Stephane, Lewys Brace, and Debbie Ging. "A Diachronic Cross-Platforms Analysis of Violent Extremist Language in the Incel Online Ecosystem." *Terrorism and Political Violence* 36, no. 3 (2023): 382–405. <u>https://doi.org/10.1080/09546553.2022.2161373.</u>

- Baselice, Kathryn. "Analyzing Incels through the Lens of Evolutionary Psychology." *Culture and Evolution* 20, no. 1 (2023): 42-58. <u>https://doi.org/10.1556/2055.2022.00016</u>, 12-13.
- Basu, Srimati. "Looking through Misogyny: Indian Men's Rights Activists, Law, and Challenges for Feminism." *Canadian Journal of Women and the Law* 28, no. 1 (2016): 45–68. https://doi.org/10.3138/cjwl.28.1.45.
- Bates, Laura. Men Who Hate Women: From Incels to Pickup Artists, the Truth About Extreme Misogyny and How It Affects Us All. London: Simon and Schuster, 2020.
- Bertoia, Carl and Janice Drakich. "The Fathers' Rights Movement: Contradictions in Rhetoric and Practice." *Journal of Family Issues* 14, no. 4 (December 1, 1993): 592–615. https://doi.org/10.1177/019251393014004007.
- Blais, Mélissa. "Marc Lépine : héros ou martyr ? Le masculinisme et la tuerie de l'École Polytechnique." In *Le Mouvement Masculiniste Au Québec : L'antiféminisme Démasqué*, edited by Mélissa Blais and Francis Dupuis-Déri, 109–28. Montréal: Remue ménage, 2015.
- Blais, Mélissa and Francis Dupuis-Déri, eds. *Le Mouvement Masculiniste Au Québec : L'antiféminisme Démasqué*. Montréal: éditions du remue-ménage, 2015.
- Botto, Matteo and Lucas Gottzén. "Swallowing and Spitting out the Red Pill: Young Men, Vulnerability, and Radicalization Pathways in the Manosphere." *Journal of Gender Studies* 33, no.5 (2023): 596-608. <u>https://doi.org/10.1080/09589236.2023.2260318</u>.
- Branthonne, Adeline and Elena Waldispuehl. "La netnographie pour étudier une communauté masculiniste en ligne : contributions méthodologiques d'un e-terrain." *Recherches Qualitatives* Hors-série : quelles possibilités et quels défis pour la recherche qualitative ?, no. 24 (2019): 6–19.
- Brooks, Robert, Daniel Russo-Batterham, and Khandis Blake. "Incel Activity on Social Media Linked to Local Mating Ecology." *Psychological Science* 33, no. 2 (2022): 249–58. https://doi.org/10.1177/09567976211036065.
- Broyd, Josephine, Lauren Boniface, Damon Parsons, David Murphy, Jonathan Hafferty. "Incels, Violence and Mental Disorder: A Narrative Review with Recommendations for Best Practice in Risk Assessment and Clinical Intervention." *BJPsych Advances* 29, no. 4 (2022): 254-64. <u>https://doi.org/10.1192/bja.2022.15</u>.
- Brzuszkiewicz, Sara. "Incel Radical Milieu and External Locus of Control." *The International Centre for Counter-Terrorism The Hague (ICCT) Evolutions in Counter-Terrorism 2* (2020): 1–20. https://doi.org/10.19165/2020.5.21.
- Burns, Léa-May and Marie-Aude Boislard. "'I'm Better Than This': A Qualitative Analysis of the Turning Points Leading to Exiting Inceldom." *The Journal of Sex Research* (2024): 1–17. https://doi.org/10.1080/00224499.2024.2340110.
- Cannito, Maddalena and Raffaella Ferrero Camoletto. "The Rules of Attraction: An Empirical Critique of Pseudoscientific Theories about Sex in the Manosphere." *Sexes* 3, no. 4 (2022): 593–607. <u>https://doi.org/10.3390/sexes3040043</u>.
- Carian, Emily, Alex DiBranco, and Chelsea Ebin. Male Supremacism in the United States: From Patriarchal Traditionalism to Misogynist Incels and the Alt-Right. London and New York: Routledge, 2022.

- Chang, Winnie. "The Monstrous-Feminine in the Incel Imagination: Investigating the Representation of Women as 'Femoids' on /r/Braincels." *Feminist Media Studies* 22, no. 2 (2020): 254–70. https://doi.org/10.1080/14680777.2020.1804976.
- Chowdhury, Romit. "Conditions of Emergence: The Formation of Men's Rights Groups in Contemporary India." *Indian Journal of Gender Studies* 21, no. 1 (2014): 27–53. https://doi.org/10.1177/0971521513511199.
- Collins, Christopher and James Clark. "Using the TRAP-18 to Identify an Incel Lone-Actor Terrorist." *Journal of Threat Assessment and Management* 8 (2021): 159–73. https://doi.org/10.1037/tam0000167.
- Costello, William, Joe Whittaker, and Andrew Thomas. "The Social Networking of Incels (Involuntary Celibates)." Poster presented at the 2023 Human Behavior and Evolution Society Conference, Palm Springs, CA, June 2023.
- Costello, William, Vania Rolon, Andrew Thomas, and David Schmitt. "Levels of Well-Being Among Men Who Are Incel (Involuntarily Celibate)." *Evolutionary Psychological Science* 8, no. 4 (2022): 375–90. <u>https://doi.org/10.1007/s40806-022-00336-x.</u>
- Coston, Bethany and Michael Kimmel. "White Men as the New Victims: Reverse Discrimination Cases and the Men's Rights Movement." *Nevada Law Journal* 13, no. 2 (2013): 368–85.
- Cottee, Simon. "Incel (E)Motives: Resentment, Shame and Revenge." *Studies in Conflict & Terrorism* 44, no. 2 (2021): 93–114. <u>https://doi.org/10.1080/1057610X.2020.1822589.</u>
- Crowley, Jocelyn Elise. "On the Cusp of a Movement: Identity Work and Social Movement Identification Processes within Father's Rights' Groups." *Sociological Spectrum* 28, no. 6 (2008): 705–24. <u>https://doi.org/10.1080/02732170802342974</u>.
- Crowley, Jocelyn Elise. "Conflicted Membership: Women in Fathers' Rights Groups." *Sociological Inquiry* 79, no. 3 (2009): 328–50. <u>https://doi.org/10.1111/j.1475-682X.2009.00293.x</u>.
- Daly, Sarah. "An Asian American Woman's Reflexive Account of Direct Research With Incels." *Forum: Qualitative Social Research* 23, no. 3 (2022). <u>https://doi.org/10.17169/FQS-23.3.3932</u>.
- Daly, Sarah and Albina Laskovtsov. "Goodbye, My Friendcels': An Analysis of Incel Suicide Posts." *Journal of Qualitative Criminal Justice & Criminology* 11, no. 1 (2021). https://doi.org/10.21428/88de04a1.b7b8b295.
- Daly, Sarah and Shon Reed. "'I Think Most of Society Hates Us': A Qualitative Thematic Analysis of Interviews with Incels." *Sex Roles* 86, no. 1 (2022): 14–33. https://doi.org/10.1007/s11199-021-01250-5.
- Dayter, Daria and Sofia Rüdiger. "Reporting from the Field: The Narrative Reconstruction of Experience in Pick-up Artist Online Communities." *Open Linguistics* 2, no. 1 (2016). <u>https://doi.org/10.1515/opli-2016-0016</u>.
- DeCook, Julia and Megan Kelly. "Interrogating the 'Incel Menace': Assessing the Threat of Male Supremacy in Terrorism Studies." *Critical Studies on Terrorism* 15, no. 3 (2022): 706–26. https://doi.org/10.1080/17539153.2021.2005099.

- Denes, Amanda. "Biology as Consent: Problematizing the Scientific Approach to Seducing Women's Bodies." *Women's Studies International Forum* 34, no. 5 (2011): 411–19. https://doi.org/10.1016/j.wsif.2011.05.002.
- DiBranco, and Chelsea Ebin, 117-41. Oxfordshire, New York: Routledge, 2022.
- Dignam, Pierce Alexander and Deana Rohlinger. "Misogynistic Men Online: How the Red Pill Helped Elect Trump." *Signs: Journal of Women in Culture and Society* 44, no. 3 (2019): 589– 612. https://doi.org/10.1086/701155.
- Dragiewicz, Molly. "Patriarchy Reasserted: Fathers' Rights and Anti-VAWA Activism." *Feminist Criminology* 3, no. 2 (2008): 121–44. <u>https://doi.org/10.1177/1557085108316731</u>.
- Dragiewicz, Molly. *Equality with a Vengeance: Men's Rights Groups, Battered Women, and Antifeminist Backlash.* Boston: Northeastern University Press, 2011.
- Dupuis-Déri, Francis. "Le discours de la « crise de la masculinité » comme refus de l'égalité entre les sexes: histoire d'une rhétorique antiféministe." *Recherches féministes* 25, no. 1 (2012): 89–109. https://doi.org/10.7202/1011118ar.
- Eslen-Ziya, Hande and Margunn Bjørnholt. "Men's Rights Activism and Anti-Feminist Resistance in Turkey and Norway." *Social Politics: International Studies in Gender, State & Society* 30, no.1 (2022): 213-38. <u>https://doi.org/10.1093/sp/jxac011.</u>
- Farrell, Tracie, Miriam Fernandez, Jakub Novotny, and Harith Alani. "Exploring Misogyny across the Manosphere in Reddit." In *Proceedings of the 10th ACM Conference on Web Science*, (2019): 87–96. <u>https://doi.org/10.1145/3292522.3326045</u>.
- Farrell, Tracie, Oscar Araque, Miriam Fernandez, and Harith Alani. "On the Use of Jargon and Word Embeddings to Explore Subculture within the Reddit's Manosphere." In 12th ACM Conference on Web Science, WebSci '20 (New York: Association for Computing Machinery, 2020): 221–30. <u>https://doi.org/10.1145/3394231.3397912</u>.
- Flood, Michael. ""Fathers' Rights" and the Defense of Paternal Authority in Australia." *Violence Against Women* 16, no. 3 (2010): 328–47. <u>https://doi.org/10.1177/1077801209360918</u>.
- Fox, John. "How Men's Movement Participants View Each Other." *The Journal of Men's Studies* 12, no. 2 (March 1, 2004): 103–18. <u>https://doi.org/10.3149/jms.1202.103</u>.
- Ging, Debbie. "Alphas, Betas, and Incels: Theorizing the Masculinities of the Manosphere." *Men and Masculinities* 22, no. 4 (2019): 638–57. <u>https://doi.org/10.1177/1097184X17706401</u>.
- Ging, Debbie and Shane Murphy. "Tracking the Pilling Pipeline: Limitations, Challenges and a Call for New Methodological Frameworks in Incel and Manosphere Research." *AoIR Selected Papers of Internet Research*, 2021. <u>https://doi.org/10.5210/spir.v2021i0.12174</u>.
- Górska, Anna Maria, Karolina Kulicka, and Dariusz Jemielniak. "Men Not Going Their Own Way: A Thick Big Data Analysis of #MGTOW and #Feminism Tweets." *Feminist Media Studies* 23, no. 8 (2022): 3774–92. https://doi.org/10.1080/14680777.2022.2137829.
- Gotell, Lise and Emily Dutton. "Sexual Violence in the 'Manosphere': Antifeminist Men's Rights Discourses on Rape." *International Journal for Crime, Justice and Social Democracy* 5, no. 2 (2016): 65–80. <u>https://doi.org/10.5204/ijcjsd.v5i2.310</u>.
- Gourarier, Mélanie. Alpha Mâle. Paris: Seuil, 2017.

- Gygax, Sebastian. "Shedding a Different Light on MGTOW: An Anthropological Exploration of the Emic Perspective of Belonging to MGTOW." Master's Thesis, Stockholms universitet, 2021. http://urn.kb.se/resolve?urn=urn:nbn:se:su:diva-199428.
- Habib, Hussam, Padmini Srinivasan, and Rishab Nithyanand. "Making a Radical Misogynist: How Online Social Engagement with the Manosphere Influences Traits of Radicalization." (ArXiv, 2022). <u>http://arxiv.org/abs/2202.08805.</u>
- Hajarian, Mohammad, Azam Bastanfard, Javad Mohammadzadeh, and Madjid Khalilian.
 "SNEFL: Social Network Explicit Fuzzy like Dataset and Its Application for Incel Detection." *Multimedia Tools and Applications* 78, no. 23 (2019): 33457–86. <u>https://doi.org/10.1007/s11042-019-08057-3.</u>
- Hajarian, Mohammad and Zahra Khanbabaloo. "Toward Stopping Incel Rebellion: Detecting Incels in Social Media Using Sentiment Analysis." In 2021 7th International Conference on Web Research (ICWR), (2021): 169–74. https://doi.org/10.1109/ICWR51868.2021.9443027.
- Halpin, Michael, Kayla Preston, Dem Lockyer, and Finlay Maguire. "A Soldier and a Victim: Masculinity, Violence, and Incels Celebration of Marc Lépine." (SocArXiv, 2022). https://doi.org/10.31235/osf.io/cseun.
- Hambling-Jones, Oliver and Andrew Merrison. "Inequity in the Pursuit of Intimacy: An Analysis of British Pick-up Artist Interactions." *Journal of Pragmatics* 44, no. 9 (2012): 1115–27. https://doi.org/10.1016/j.pragma.2012.04.008.
- Hintz, Elizabeth Ann and Jonathan Troy Baker. "A Performative Face Theory Analysis of Online Facework by the Formerly Involuntarily Celibate." *International Journal of Communication* 15 (2021): 3047-3066.
- Hoffman, Bruce, Jacob Ware, and Ezra Shapiro. "Assessing the Threat of Incel Violence." *Studies in Conflict & Terrorism* 43, no. 7 (2020): 565–87. https://doi.org/10.1080/1057610X.2020.1751459.
- Hopton, Kathryn and Susanne Langer. "Kick the XX out of Your Life': An Analysis of the Manosphere's Discursive Constructions of Gender on Twitter." *Feminism & Psychology* 32, no. 1 (2022): 3–22. <u>https://doi.org/10.1177/09593535211033461</u>.
- Jaki, Sylvia, Tom De Smedt, Maja Gwóźdź, Rudresh Panchal, Alexander Rossa, and Guy De Pauw. "Online Hatred of Women in the Incels.Me Forum: Linguistic Analysis and Automatic Detection." *Journal of Language Aggression and Conflict* 7, no. 2 (2019): 240–68. <u>https://doi.org/10.1075/jlac.00026.jak</u>.
- Jane, Emma. "Systemic Misogyny Exposed: Translating Rapeglish from the Manosphere with a Random Rape Threat Generator." *International Journal of Cultural Studies* 21, no. 6 (2018): 661–80. https://doi.org/10.1177/1367877917734042.
- Jelodar, Hamed and Richard Frank. "Semantic Knowledge Discovery and Discussion Mining of Incel Online Community: Topic Modeling." (ArXiv, 2021), https://doi.org/10.48550/arXiv.2104.09586.
- Jones, Callum. Verity Trott, and Scott Wright. "Sluts and Soyboys: MGTOW and the Production of Misogynistic Online Harassment." *New Media & Society* 22, no. 10 (2020): 1903–21, <u>https://doi.org/10.1177/1461444819887141</u>.

- Jordan, Ana. "'Dads Aren't Demons. Mums Aren't Madonnas.' Constructions of Fatherhood and Masculinities in the (Real) Fathers 4 Justice Campaign." *Journal of Social Welfare and Family Law* 31, no. 4 (2009): 419–33. https://doi.org/10.1080/09649060903430280.
- Jordan, Ana. "Conceptualizing Backlash: (UK) Men's Rights Groups, Anti-Feminism, and Postfeminism." *Canadian Journal of Women and the Law* 28, no. 1 (2016): 18–44. https://doi.org/10.3138/cjwl.28.1.18.
- Kaiser, Susanne. Political Masculinity: How Incels, Fundamentalists and Authoritarians Mobilise for Patriarchy. Hoboken: John Wiley & Sons, 2022.
- Kelly, Casey Ryan and Chase Aunspach. "Incels, Compulsory Sexuality, and Fascist Masculinity." *Feminist Formations* 32, no. 3 (2020): 145–72. <u>https://doi.org/10.1353/ff.2020.0044</u>.
- Kelly, Megan, Alex DiBranco, and Julia DeCook. "Misogynist Incels and Male Supremacism: Overview and Recommendations for Addressing the Threat of Male Supremacist Violence." New America, 2021. <u>https://web.archive.org/web/20230614145759/https://www.newamerica.org/political-</u>reform/reports/misogynist-incels-and-male-supremacism/, archived June 14, 2023.
- Kenedy, Robert. "Researching the Intersection between Collective Identity and Conceptions of Post-Separation and Divorced Fatherhood: A Case Study Fathers For Justice, Fathers For Just Us, or Fathers Are Us?" *Qualitative Sociology Review* 2, no. 2 (2006): 75–97. <u>https://doi.org/10.18778/1733-8077.2.2.06</u>.
- Koller, Veronika. Alexandra Krendel, and Jessica Aiston. "The Language of Gender-Based Separatism: A Comparative Analysis." *Elements in Language, Gender and Sexuality*, 2023. https://doi.org/10.1017/9781009216890
- Krendel, Alexandra. "The Men and Women, Guys and Girls of the 'Manosphere': A Corpus-Assisted Discourse Approach." *Discourse & Society* 31, no. 6 (2020): 607–30. <u>https://doi.org/10.1177/0957926520939690.</u>
- Krendel, Alexandra, Mark McGlashan, and Veronika Koller. "The Representation of Gendered Social Actors across Five Manosphere Communities on Reddit." *Corpora* 17, no. 2 (2022): 291–321. <u>https://doi.org/10.3366/cor.2022.0257.</u>
- LaViolette, Jack and Bernie Hogan. "Using Platform Signals for Distinguishing Discourses: The Case of Men's Rights and Men's Liberation on Reddit." *Proceedings of the Thirteenth International AAAI Conference on Web and Social Media* (2019): 323–34. https://doi.org/10.1609/icwsm.v13i01.3357.
- Leidig, Eviane. "Why Terrorism Studies Miss the Mark When It Comes To Incels." International Centre for Counter-Terrorism, 2021. <u>https://web.archive.org/web/20230614151514/https://www.icct.nl/publication/why-terrorism-studies-miss-mark-when-it-comes-incels</u>, archived June 14, 2023.
- Lily, Mary. "'The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere." PhD Dissertation, University of Ottawa, 2016. <u>http://dx.doi.org/10.20381/ruor-5184</u>.

- Lin, Jie Liang. "Antifeminism Online: MGTOW (Men Going Their Own Way)." in *Digital Environments: Ethnographic Perspectives Across Global Online and Offline Spaces*, edited by Urte Undine Frömming, Steffen Köhn, Samantha Fox, and Mike Terry, 77–96. Bielefeld: Transcript Verlag, 2017.
- Liu, Haiping. "Aspirational Taste Regime: Masculinities and Consumption in Pick-up Artist Training in China." *Journal of Consumer Culture* 23, no. 1 (2021): 1–19. https://doi.org/10.1177/14695405211062068.
- Maddison, Sarah. "Private Men, Public Anger: The Men's Rights Movement in Australia." *Journal of Interdisciplinary Gender Studies* 4, no. 2 (1999): 39–52. <u>https://doi.org/10.3316/ielapa.803980536786452.</u>
- Marwick, Alice and Robyn Caplan. "Drinking Male Tears: Language, the Manosphere, and Networked Harassment." *Feminist Media Studies* 18, no. 4 (2018): 543–59. https://doi.org/10.1080/14680777.2018.1450568.
- Maryn, Alyssa, Jordan Keough, Ceilidh McConnell, and Deinera Exner-Cortens. "Identifying Pathways to the Incel Community and Where to Intervene: A Qualitative Study with Former Incels." *Sex Roles* 90 (2024): 910-22. <u>https://doi.org/10.1007/s11199-024-01478-x</u>.
- Menzie, Lauren. "Stacys, Beckys, and Chads: The Construction of Femininity and Hegemonic Masculinity within Incel Rhetoric." *Psychology & Sexuality* 13, no. 1 (2020): 69–85. <u>https://doi.org/10.1080/19419899.2020.1806915</u>.
- Messner, Michael. "The Limits of 'The Male Sex Role': An Analysis of the Men's Liberation and Men's Rights Movements' Discourse." *Gender & Society* 12, no. 3 (1998): 255–76. https://doi.org/10.1177/0891243298012003002.
- Morton, Jesse, Alexander Ash, Ken Reidy, Naama Kates, Molly Ellenberg, and Anne Speckhard. "Asking Incels (Part 1): Assessing the Impacts of COVID-19 Quarantine and Coverage of the Canadian Terrorism Designation on Incel Isolation and Resentment." International Center for the Study of Violent Extremism, 2021.
- Moskalenko, Sophia, Juncal Fernández-Garayzábal González, Naama Kates, and Jesse Morton. "Incel Ideology, Radicalization and Mental Health: A Survey Study." *The Journal of Intelligence, Conflict, and Warfare* 4, no. 3 (2022): 1–29. <u>https://doi.org/10.21810/jicw.v4i3.3817.</u>
- Moskalenko, Sophia, Naama Kates, Juncal Fernández-Garayzábal González, and Mia Bloom. "Predictors of Radical Intentions among Incels: A Survey of 54 Self-Identified Incels." *Journal of Online Trust and Safety* 1, no. 3 (2022). https://doi.org/10.54501/jots.v1i3.57.
- Mountford, Joseph. "Creating Masculinities Online: Bronies and The Red Pill." Master's Thesis, University of Sussex, 2015. <u>http://rgdoi.net/10.13140/RG.2.1.4400.5608.</u>
- Mountford, Joseph. "Topic Modeling The Red Pill." *Social Sciences* 7, no. 3 (2018): 42–57. https://doi.org/10.3390/socsci7030042.
- Nagle, Angela. "An Investigation into Contemporary Online Anti-Feminist Movements" (PhD Dissertation, Dublin City University, 2015). <u>https://web.archive.org/web/20240930174329/https://doras.dcu.ie/22385/</u>, archived September 30, 2024.

- Nicholas, Lucy and Christine Agius. "#Notallmen, #Menenism, Manospheres and Unsafe Spaces: Overt and Subtle Masculinism in Anti-'PC' Discourse." In *The Persistence of Global Masculinism: Discourse, Gender and Neo-Colonial Re-Articulations of Violence*, edited by Lucy Nicholas and Christine Agius, 31–59. Cham: Springer International Publishing, 2018. <u>https://doi.org/10.1007/978-3-319-68360-7_2</u>.
- O'Neill, Rachel. "The Work of Seduction: Intimacy and Subjectivity in the London 'Seduction Community." *Sociological Research Online* 20, no. 4 (2015): 172–85. <u>https://doi.org/10.5153/sro.3744</u>.
- O'Neill, Rachel. *Seduction: Men, Masculinity, and Mediated Intimacy.* New York: John Wiley & Sons, 2018.
- Oesch, Nathan and Igor Miklousic. "The Dating Mind: Evolutionary Psychology and the Emerging Science of Human Courtship." *Evolutionary Psychology* 10, no. 5 (2012): 899–909. https://doi.org/10.1177/147470491201000511.
- Osuna, Amanda Isabel. "Leaving the Incel Community: A Content Analysis." *Sexuality & Culture* 28, no. 2 (2024): 749–70. <u>https://doi.org/10.1007/s12119-023-10143-6</u>.
- Preston, Kayla, Michael Halpin, and Finlay Maguire. "The Black Pill: New Technology and the Male Supremacy of Involuntarily Celibate Men." *Men and Masculinities* 24, no. 5 (2021): 823–41. <u>https://doi.org/10.1177/1097184X211017954</u>.
- Prøitz, Lin, Fredrik Langeland, Kamilla Knutsen Steinnes, and Henry Mainsah."Hybride Maskuliniteter Og Hatideologi På Nett." *Norsk Medietidsskrift* 29, no. 2 (2022): 1–15. <u>https://doi.org/10.18261/nmt.29.2.3</u>.
- Radicalisation Awareness Network. "Incels: A First Scan of the Phenomenon (in the EU) and Its Relevance and Challenges for P/CVE." European Commission, 2021.
- Rafail, Patrick and Isaac Freitas. "Grievance Articulation and Community Reactions in the Men's Rights Movement Online." *Social Media* + *Society* 5, no. 2 (2019): 1–11. https://doi.org/10.1177/2056305119841387.
- Regehr, Kaitlyn. "In(Cel)Doctrination: How Technologically Facilitated Misogyny Moves Violence off Screens and on to Streets." *New Media & Society* 24, no. 1 (2022): 138–55. <u>https://doi.org/10.1177/1461444820959019</u>.
- Ribeiro, Manoel Horta, Jeremy Blackburn, Barry Bradlyn, Emiliano De Cristofaro, Gianluca Stringhini, Summer Long, Stephanie Greenberg, and Savvas Zannettou. "The Evolution of the Manosphere across the Web." *Proceedings of the International AAAI Conference on Web and Social Media* 15 (2021): 196–207. https://doi.org/10.1609/icwsm.v15i1.18053.
- Ribeiro, Manoel Horta, Shagun Jhaver, Savvas Zannettou, Jeremy Blackburn, Emiliano De Cristofaro, Gianluca Stringhini, and Robert West. "Do Platform Migrations Compromise Content Moderation? Evidence from r/The_Donald and r/Incels." *Proceedings of the ACM on Human-Computer Interaction* 5 (2021): 316:1-316:24. <u>https://doi.org/10.1145/3476057</u>.
- Rosen, Leora, Molly Dragiewicz, and Jennifer Gibbs. "Fathers' Rights Groups: Demographic Correlates and Impact on Custody Policy." *Violence Against Women* 15, no. 5 (2009): 513–31. https://doi.org/10.1177/1077801209331409.

- Roser, Meg, Charlotte Chalker, and Tim Squirrell. "Spitting out the Blackpill: Evaluating How Incels Present Themselves in Their Own Words on the Incel Wiki." London: Institute for Strategic Dialogue, 2023.
- Rothermel, Ann-Kathrin, Megan Kelly, and Greta Jasser. "Of Victims, Mass Murder, and 'Real Men': The Masculinities of the 'Manosphere." In *Male Supremacism in the United States: From Patriarchal Traditionalism to Misogynist Incels and the Alt-Right*, edited by Emily Carian, Alex
- Schmitz, Rachel and Emily Kazyak. "Masculinities in Cyberspace: An Analysis of Portrayals of Manhood in Men's Rights Activist Websites." *Social Sciences* 5, no. 2 (2016). <u>https://doi.org/10.3390/socsci5020018</u>.
- Solea, Anda Iulia and Lisa Sugiura. "Mainstreaming the Blackpill: Understanding the Incel Community on TikTok." *European Journal on Criminal Policy and Research* 29, no. 3 (2023): 311–36. <u>https://doi.org/10.1007/s10610-023-09559-5</u>.
- Sparks, Brandon, Alexandra Zidenberg, and Mark Olver. "One Is the Loneliest Number: Involuntary Celibacy (Incel), Mental Health, and Loneliness." *Current Psychology* 43 (2024): 392–406. <u>https://doi.org/10.1007/s12144-023-04275-z</u>.
- Sparks, Brandon, Alexandra Zidenberg, and Mark Olver, "Involuntary Celibacy: A Review of Incel Ideology and Experiences with Dating, Rejection, and Associated Mental Health and Emotional Sequelae." *Current Psychiatry Reports* 24 (2022): 731–40. <u>https://doi.org/10.1007/s11920-022-01382-9</u>.
- Speckhard, Anne, Molly Ellenberg, Jesse Morton, and Alexander Ash. "Involuntary Celibates' Experiences of and Grievance over Sexual Exclusion and the Potential Threat of Violence Among Those Active in an Online Incel Forum." *Journal of Strategic Security* 14, no. 2 (2021): 89–121. <u>https://doi.org/10.5038/1944-0472.14.2.1910</u>.
- Speckhard, Anne and Molly Ellenberg. "Self-Reported Psychiatric Disorder and Perceived Psychological Symptom Rates among Involuntary Celibates (Incels) and Their Perceptions of Mental Health Treatment." *Behavioral Sciences of Terrorism and Political Aggression* (2022): 1–18. <u>https://doi.org/10.1080/19434472.2022.2029933.</u>
- Stijelja, Stefan and Brian Mishara. "Psychosocial Characteristics of Involuntary Celibates (Incels): A Review of Empirical Research and Assessment of the Potential Implications of Research on Adult Virginity and Late Sexual Onset." *Sexuality & Culture* 27 (2023): 715–34. https://doi.org/10.1007/s12119-022-10031-5.
- Sugiura, Lisa. *The Incel Rebellion: The Rise of the Manosphere and the Virtual War Against Women*. Bingley: Emerald Publishing, 2021.
- Tomkinson, Sian, Tauel Harper, and Katie Attwell. "Confronting Incel: Exploring Possible Policy Responses to Misogynistic Violent Extremism." *Australian Journal of Political Science* 55, no. 2 (April 2, 2020): 152–69. <u>https://doi.org/10.1080/10361146.2020.1747393.</u>
- Van Brunt, Brian and Chris Taylor. Understanding and Treating Incels: Case Studies, Guidance, and Treatment of Violence Risk in the Involuntary Celibate Community. New York: Routledge, 2020. <u>https://doi.org/10.4324/9780367824396</u>.

- Van Valkenburgh, Shawn. "Digesting the Red Pill: Masculinity and Neoliberalism in the Manosphere." *Men and Masculinities* 24, no. 1 (2018): 84–103. <u>https://doi.org/10.1177/1097184X18816118.</u>
- Vu, Anh, Lydia Wilson, Yi Ting Chua, Ilia Shumailov, and Ross Anderson. "ExtremeBB: Enabling Large-Scale Research into Extremism, the Manosphere and Their Correlation by Online Forum Data." (ArXiv, 2021). <u>http://arxiv.org/abs/2111.04479.</u>
- Witt, Taisto. "'If i Cannot Have It, i Will Do Everything i Can to Destroy It.' the Canonization of Elliot Rodger: 'Incel' Masculinities, Secular Sainthood, and Justifications of Ideological Violence." *Social Identities* 26, no. 5 (2020): 675–89. <u>https://doi.org/10.1080/13504630.2020.1787132</u>.
- Wood, Alecia Toni, P. Tanteckchi, and David Keatley. "A Crime Script Analysis of Involuntary Celibate (INCEL) Mass Murderers." *Studies in Conflict & Terrorism* (2022): 1–13, <u>https://doi.org/10.1080/1057610X.2022.2037630</u>.
- Wright, David. "The Discursive Construction of Resistance to Sex in an Online Community." *Discourse, Context & Media* 36 (2020): 1–25. <u>https://doi.org/10.1016/j.dcm.2020.100402.</u>
- Wright, Scott, Verity Trott, and Callum Jones. "The Pussy Ain't Worth It, Bro': Assessing the Discourse and Structure of MGTOW." *Information, Communication & Society* 23, no. 6 (2020): 908–25. <u>https://doi.org/10.1080/1369118X.2020.1751867.</u>
- Zimmerman, Shannon. "The Ideology of Incels: Misogyny and Victimhood as Justification for Political Violence." *Terrorism and Political Violence*, 2022, 1–14, https://doi.org/10.1080/09546553.2022.2129014.
- Zuckerberg, Donna. Not All Dead White Men: Classics and Misogyny in the Digital Age. Cambridge, London: Harvard University Press, 2018.

7. AMERICAN STUDIES, US HISTORY AND SOCIOLOGY

US history, sociology, culture, gender, health, education, and politics. Surveys and institutional reports.

- Allen, Judith. "Men Interminably in Crisis? Historians on Masculinity, Sexual Boundaries, and Manhood." *Radical History Review* 82 (2002): 191–207. <u>https://doi.org/10.1215/01636545-2002-82-191</u>.
- American Sociological Association. "Women More Likely Than Men to Initiate Divorces, But Not Non-Marital Breakups." August 22, 2015. <u>https://web.archive.org/web/20240117230246/https://www.asanet.org/women-more-likely-</u> men-initiate-divorces-not-non-marital-breakups/, archived January 17, 2024.

Ashcraft, Karen Lee. Wronged and Dangerous: Viral Masculinity and the Populist Pandemic. Bristol: Bristol University Press, 2022.

- Baribi-Bartov, Sahar, Briony Swire-Thompson, and Nir Grinberg, "Supersharers of Fake News on Twitter." *Science* 384, no. 6699 (2024): 979–82. <u>https://doi.org/10.1126/science.adl4435</u>.
- Bauman, Kurt. "Over the Hill at 25? College Completion at Higher Ages." United States Census Bureau, March 31, 2016.

https://web.archive.org/web/20240118141635/https://www.census.gov/newsroom/blogs/resear ch-matters/2016/03/over-the-hill-at-25-college-completion-at-higher-ages.html, archived January 18, 2024.

- Breiding, Matthew, Sharon Smith, Kathleen Basile, Mikel Walters, Jieru Chen, and Melissa Merrick. "Prevalence and Characteristics of Sexual Violence, Stalking, and Intimate Partner Violence Victimization National Intimate Partner and Sexual Violence Survey, United States, 2011," *Morbidity and Mortality Weekly Report Surveillance Summaries* 63, no. 8 (2014): 1–18.
- Center for American Progress. "The Basic Facts About Women in Poverty." August 3, 2020. <u>https://web.archive.org/web/20231208224202/https://www.americanprogress.org/article/basic-facts-women-poverty/</u>, archived December 8, 2023.
- Clark, Cory, Louise Lu, Roy Baumeister, Stephen Ceci, Komi Frey, Geoffrey Miller, Wilfred Reilly, Dianne Tice, William von Hippel, Wendy Williams, Bo Winegard, and Philip Tetlock.
 "Taboos and Self-Censorship Among U.S. Psychology Professors." *Perspectives on Psychological Science* (2024). https://doi.org/10.1177/17456916241252085.
- Clatterbaugh, Kenneth. Contemporary Perspectives on Masculinity: Men, Women, and Politics in Modern Society. 2nd ed. Boulder: Westview Press, 1997.
- Clatterbaugh, Kenneth. "Literature of the U.S. Men's Movements." *Signs: Journal of Women in Culture and Society* 25, no. 3 (April 1, 2000): 883–94. <u>https://doi.org/10.1086/495485</u>.
- Degler, Carl. In Search of Human Nature: The Decline and Revival of Darwinism in American Social Thought. New York: Oxford University Press, 1991.
- Delap, Lucy. Feminisms: A Global History. London: Pelican, 2020.
- Desilver, Drew, Pew Research Center. "The Polarization in Today's Congress Has Roots that Go Back Decades." March 10, 2022. <u>https://web.archive.org/web/20230922163506/https://www.pewresearch.org/short-reads/2022/03/10/the-polarization-in-todays-congress-has-roots-that-go-back-decades/,</u> archived September 22, 2023.
- DiAngelo, Robin. *White Fragility: Why It's So Hard for White People to Talk About Racism.* Boston: Beacon Press, 2018.
- Dimock, Michael, Richard Wike, and Pew Research Center. "America Is Exceptional in the Nature of its Political Divide." November 30, 2020, https://web.archive.org/web/20230922164756/https://www.pewresearch.org/short-reads/2020/11/13/america-is-exceptional-in-the-nature-of-its-political-divide/, archived September 22, 2023.
- Echols, Alice. *Daring to Be Bad: Radical Feminism in America 1967-1975*. Minneapolis: University of Minnesota Press, 1989.
- Ehrenreich, Barbara. *The Hearts of Men: American Dreams and the Flight from Commitment*. New York: Anchor Books, 1983.
- Faludi, Susan. Backlash: The Undeclared War Against American Women. New York: Crown, 1991.

- Fileborn, Bianca and Rachel Loney-Howes, eds. *#MeToo and the Politics of Social Change*. Cham: Palgrave Macmillan, 2019.
- Gerhard, Jane. Desiring Revolution: Second-Wave Feminism and the Rewriting of American Sexual Thought 1920 to 1982. New York: Columbia University Press, 2001.
- Gillion, Daniel, Jonathan Troy Ladd, and Marc Meredith. "Party Polarization, Ideological Sorting and the Emergence of the US Partisan Gender Gap." *British Journal of Political Science* 50, no. 4 (2020): 1217–43. https://doi.org/10.1017/S0007123418000285.
- Hartman, Andrew. A War for the Soul of America: A History of the Culture Wars. 2nd ed. Chicago: The University of Chicago Press, 2019.
- Hauben, Michael and Ronda Hauben. *Netizens: On the History and Impact of Usenet and the Internet*. Los Alamitos: Wiley-IEEE Computer Society Press, 1997.
- Herbert, John. "Academic Free Speech or Right-Wing Grievance?" *Digital Discovery* 2, no. 2 (2023): 260–97. <u>https://doi.org/10.1039/D2DD00111J.</u>
- Hewitt, Nancy ed. *No Permanent Waves: Recasting Histories of U.S. Feminism.* New Brunswick: Rutgers University Press, 2010.
- Hofstadter, Richard. Social Darwinism in American Thought: 1860-1915. Revised Edition. Boston: Beacon Press, 1955.
- Jurkowitz, Mark, Amy Mitchell, Elisa Shearer, Mason Walker, and Pew Research Center. "U.S. Media Polarization and the 2020 Election: A Nation Divided." January 24, 2020. <u>https://web.archive.org/web/20230922164347/https://www.pewresearch.org/journalism/2020/01/24/u-s-media-polarization-and-the-2020-election-a-nation-divided/</u>, archived September 22, 2023.
- Kennedy, David. "Overview: The Progressive Era." *The Historian* 37, no. 3 (1975). https://doi.org/10.1111/j.1540-6563.1975.tb00037.x.
- Kimmel, Michael. *Angry White Men: American Masculinity at the End of an Era*. New York: Nation Books, 2013.
- Lawrence, Jane. "The Indian Health Service and the Sterilization of Native American Women." *American Indian Quarterly* 24, no. 3 (2000): 400–419.
- Leppert, Rebbeca, Drew Desilver, Pew Research Center. "118th Congress Has a Record Number of Women." January 3, 2023. <u>https://web.archive.org/web/20240427073127/https://www.pewresearch.org/shortreads/2023/01/03/118th-congress-has-a-record-number-of-women/</u>, archived April 27, 2024.
- Lovenduski, Joni ed. *State Feminism and Political Representation*. Cambridge: Cambridge University Press, 2005.
- Luse, Christopher. "Slavery's Champions Stood at Odds: Polygenesis and the Defense of Slavery." *Civil War History* 53, no. 4 (2007): 379–412. https://doi.org/10.1353/cwh.2007.0080.

Mansbridge, Jane. Why We Lost the ERA. Chicago: University of Chicago Press, 1986.

- Mason, Mary Ann. From Father's Property to Children's Rights: The History of Child Custody in the United States. New York: Columbia University Press, 1994.
- Mc Intosh, Peggy. "White Privilege and Male Privilege." Wellesley College Center for Research on Women, 1998, cited in Anna Wenzel, ed., *Male Privilege*. New York: Greenhaven Publishing, 2020.
- Messner, Michael. Politics of Masculinities: Men in Movements. Lanham: AltaMira Press, 1997.
- Michael, Robert. "The Rise in Divorce Rates, 1960-1974: Age-Specific Components." *Demography* 15, no. 2 (1978): 177–82. <u>https://doi.org/10.2307/2060521.</u>
- National Institute on Drug Abuse. "Steroids and Other Appearance and Performance
- Enhancing Drugs (APEDs) Research Report." Revised February 2008. <u>https://web.archive.org/web/20220921032701/https://nida.nih.gov/download/815/steroids-other-appearance-performance-enhancing-drugs-apeds-research-report.pdf?v=b864e9e791bbde96f1c35024bc52084f, archived September 21, 2022</u>
- Newman, Louise Michele. *White Women's Rights: The Racial Origins of Feminism in the United States*. New York: Oxford University Press, 1999.
- O'Donnell, Jessica. *Gamergate and Anti-Feminism in the Digital Age*. Cham: Springer Nature Switzerland, 2022.
- Olasky, Marvin and John Perry. *Monkey Business: The True Story of the Scopes Trial*. Nashville: Broadman and Holman, 2005.
- Petersen, Jennifer. "Gender Difference in Verbal Performance: A Meta-Analysis of United States State Performance Assessments." *Educational Psychology Review* 30, no. 4 (2018): 1269–81, https://doi.org/10.1007/s10648-018-9450-x.
- Pew Research Center. "Partisan Antipathy: More Intense, More Personal." October 10, 2019. <u>https://web.archive.org/web/20230922163719/https://www.pewresearch.org/politics/2019/10/</u>10/partisan-antipathy-more-intense-more-personal/, archived September 22, 2023.
- Pew Research Center. "U.S. Media Polarization and the 2020 Election: A Nation Divided." January 24, 2020, <u>https://web.archive.org/web/20230922164347/https://www.pewresearch.org/journalism/2020/01/24/u-s-media-polarization-and-the-2020-election-a-nation-divided/, archived September 22, 2023.</u>
- Pittenger, Mark. American Socialists and Evolutionary Thought, 1870-1920. Madison: University of Wisconsin Press, 1993.
- Rosenfeld, Michael. "Who Wants the Breakup? Gender and Breakup in Heterosexual Couples." In Social Networks and the Life Course: Integrating the Development of Human Lives and Social Relational Networks, edited by Duane Alwin, Diane Felmlee, and Derek Kreager, 221– 43. Cham: Springer, 2018.
- Rosenfeld, Michael, Reuben Thomas, and Sonia Hausen. "Disintermediating Your Friends: How Online Dating in the United States Displaces Other Ways of Meeting." *Proceedings of the National Academy of Sciences* 116, no. 36 (2019): 17753–58, https://doi.org/10.1073/pnas.1908630116.

- Rotundo, Anthony. American Manhood: Transformations in Masculinity from the Revolution to the Modern Era. New York: Basic Books, 1993.
- Selective Service System. "Induction Statistics." <u>https://web.archive.org/web/20230925144222/https://www.sss.gov/history-and-</u>records/induction-statistics/, archived September 25, 2023.
- Southern Poverty Law Center "Male Supremacy." <u>https://web.archive.org/web/20230925161629/https://www.splcenter.org/fighting-hate/extremist-files/ideology/male-supremacy, archived September 25, 2023.</u>
- Stern, Alexandra Minna. "STERILIZED in the Name of Public Health." *American Journal of Public Health* 95, no. 7 (2005): 1128–38. <u>https://doi.org/10.2105/AJPH.2004.041608.</u>
- Swinth, Kirsten. *Feminism's Forgotten Fight: The Unfinished Struggle for Work and Family.* Cambridge: Harvard University Press, 2018.
- Tarrant, Shira. When Sex Became Gender. Abingdon and New York: Routledge, 2006.
- US Bureau of Labor Statistics. "News Release." December 16, 2022. <u>https://web.archive.org/web/20230913085134/https://www.bls.gov/news.release/pdf/cfoi.pdf</u>, archived September 13, 2023.
- US Department of Housing and Urban Development. "The 2022 Annual Homelessness Assessment Report (AHAR) to Congress." December 2022, 12. <u>https://web.archive.org/web/20230925172056/https://www.huduser.gov/portal/sites/default/fil</u> <u>es/pdf/2022-ahar-part-1.pdf</u>, archived September 25, 2023.
- Yesalis, Charles, Nancy Henley, Andrea Kopstein, and Michael Bahrke. "Anabolic-Androgenic Steroid Use in the United States." *JAMA* 270, n° 10 (1993): 1217–21. https://doi.org/10.1001/jama.1993.03510100067034.

8. ALT-RIGHT/FAR-RIGHT STUDIES

- Hickey, Daniel, Daniel Fessler, Kristina Lerman, and Keith Burghardt. "The Peripatetic Hater: Predicting Movement Among Hate Subreddits." (ArXiv, 2024). <u>https://doi.org/10.48550/arXiv.2405.17410.</u>
- Hermansson, Patrick, David Lawrence, Joe Mulhall, and Simon Murdoch. *The International Alt-Right: Fascism for the 21st Century?* London and New York: Routledge, 2020.
- International Center for Counter-Terrorism. "ICCT Annual Conference 2023 Hybrid Extremism: Causes and Responses to Anti-Institutional and Far-Right Extremisms." <u>https://web.archive.org/web/20230620161637/https://www.icct.nl/event/icct-annualconference-2023-hybrid-extremism-causes-and-responses-anti-institutional-and-far</u>, archived June 20, 2023.
- Kosse, Maureen. "'Ted Cruz Cucks Again': The Insult Term Cuck as an Alt-Right Masculinist Signifier." *Gender and Language* 16, no. 2 (2022): 99–124. https://doi.org/10.1558/genl.21079.

- Mamié, Robin, Manoel Horta Ribeiro, and Robert West. "Are Anti-Feminist Communities Gateways to the Far Right? Evidence from Reddit and YouTube." *Proceedings of the 13th ACM Conference on Web Science* (2021): 139–47. <u>https://doi.org/10.1145/3447535.3462504.</u>
- Molas, Bàrbara. "Alt-solutism: Intersections between Alt-Right Memes and Monarchism on Reddit." International Centre for Counter-Terrorism, 2023. <u>https://web.archive.org/web/20230620160931/https://www.icct.nl/publication/alt-solutism-</u> intersections-between-alt-right-memes-and-monarchism-reddit, archived June 20, 2023.
- Ribeiro, Manoel Horta, Raphael Ottoni, Robert West, Virgílio Almeida, and Wagner Meira. "Auditing Radicalization Pathways on YouTube." *Proceedings of the 2020 Conference on Fairness, Accountability, and Transparency* (2020): 131–41. https://doi.org/10.1145/3351095.3372879.

Southern Poverty Law Center. "The Year in Hate: Trump Buoyed White Supremacists in 2017, Sparking Backlash Among Black Nationalist Groups." <u>https://web.archive.org/web/20221123111508/https://www.splcenter.org/news/2018/02/21/yea</u> <u>r-hate-trump-buoyed-white-supremacists-2017-sparking-backlash-among-black-nationalist</u>, archived November 23, 2022.

9. OTHER RESEARCH PUBLICATIONS

General sociology, anthropology, psychology, gender studies, philosophy. Non-US, non-manosphere research objects.

- Amory, Deborah, Sean Massey, Jennifer Miller, and Allison Brown, eds. An Introduction to LGBTQ+ Studies: A Cross Disciplinary Approach. Albany: SUNY Press, 2022.
- Anderson, Benedict. Imagined Communities: Reflections on the Origin and Spread of Nationalism. London and New York: Verso, 1983.
- Banner, Jessica. "Dressed in the Trappings of a Sentimental Heroine: Costuming Shakespeare's Juliet on the Eighteenth-Century English Stage." *Theory and Practice in English Studies* 10, no. 1 (2021): 79–100.
- Bargad, Adena and Janet Shibley Hyde. "Women's Studies: A Study of Feminist Identity Development in Women." *Psychology of Women Quarterly* 15, no. 2 (1991): 181–201. https://doi.org/10.1111/j.1471-6402.1991.tb00791.x.
- Beaubatie, Emmanuel. "L'espace social du genre." Sociologie 10, no. 4 (2019).
- Blake, Khandis, Siobhan O'Dean, James Lian, and Thomas Denson. "Misogynistic Tweets Correlate with Violence against Women." *Psychological Science* 32, no. 3 (2021): 315–25. https://doi.org/10.1177/0956797620968529.
- Cosentino, Gabriele. Social Media and the Post-Truth World Order: The Global Dynamics of Disinformation. Cham: Palgrave Macmillan, 2020.
- Davis, Kingsley. "Intermarriage in Caste Societies." *American Anthropologist* 43, no. 3 (1941): 376–95.
- Fischer, Kurt Rudolf. "Nazism as a Nietzschean 'Experiment." In *Nietzche-Studien*, edited by Mazzino Montinari, 116–22. Vol. 6. Berlin: De Gruyter, 1977.

- Fraley, Chris, Niels Waller, and Kelly Brennan. "An Item Response Theory Analysis of Self-Report Measures of Adult Attachment." *Journal of Personality and Social Psychology* 78, no. 2 (2000): 350–65. https://doi.org/10.1037/0022-3514.78.2.350.
- Hartley, Ruth. "Sex-Role Pressures and the Socialization of the Male Child." *Psychological Reports* 5, no. 2 (1959): 457–68. https://doi.org/10.2466/pr0.1959.5.h.457.
- Hillery, George jr. "Definitions of Community: Areas of Agreement." *Rural Sociology* 20, no. 2 (1955): 111–23.
- Hyde, Janet Shibley and Marcia Linn. "Gender Differences in Verbal Ability: A Meta-Analysis," *Psychological Bulletin* 104, no. 1 (1988): 53–69. <u>https://doi.org/10.1037/0033-2909.104.1.53</u>.
- Karre, Idahlynn. "Stereotyped Sex Roles and Self-concept: Strategies for Liberating the Sexes." *Communication Education* 25, no. 1 (1976): 43–52. https://doi.org/10.1080/03634527609384598.
- Johnson, Wendy, Andrew Carothers, and Ian Deary. "Sex Differences in Variability in General Intelligence: A New Look at the Old Question." *Perspectives on Psychological Science* 3, no. 6 (2008): 518–31. <u>https://doi.org/10.1111/j.1745-6924.2008.00096.x</u>.
- Lippert, Erica. "Argumentative Strategies and Neologisms in Greenpeace Communication: Ecocide and Climaticide on Instagram." *Neologica*, no. 16 (2022): 173–202. https://doi.org/10.48611/isbn.978-2-406-13219-6.p.0173.
- Lohman, David and Joni Lakin. "Consistencies in Sex Differences on the Cognitive Abilities Test across Countries, Grades, Test Forms, and Cohorts." *British Journal of Educational Psychology* 79, no. 2 (2009): 389–407. <u>https://doi.org/10.1348/000709908X354609.</u>
- Lugea, Jane. "The Pragma-Stylistics of 'Image Macro' Internet Memes." In *Contemporary Media Stylistics*, edited by Helen Ringrow and Stephen Pihlaja, 81–106. London: Bloomsbury Academic, 2019.
- Mead, Margaret. *Sex and Temperament in Three Primitive Societies*. New York: William Morrow and Company, 1935.
- Nicholson, Linda. "Interpreting Gender." *Signs: Journal of Women in Culture and Society* 20, no. 1 (1994): 79–105.
- Sharpley, Christopher. "Research Findings on Neurolinguistic Programming: Nonsupportive Data or an Untestable Theory?" *Journal of Counseling Psychology* 34, no. 1 (1987): 103–7. https://doi.org/10.1037/0022-0167.34.1.103.
- Sit, Meghan, Sarah Elliott, Kelsey Wright, Shannon Scott, and Lisa Hartling. "Youth Mental Health Help-Seeking Information Needs and Experiences: A Thematic Analysis of Reddit Posts." *Youth & Society* 56, no. 1 (2024): 24–41. https://doi.org/10.1177/0044118X221129642.
- Smith, David Livingstone. *Making Monsters: The Uncanny Power of Dehumanization*. Cambridge, London: Harvard University Press, 2021.
- Sörbom, Adrienne and Magnus Wennerhag. "Individualization, Life Politics, and the Reformulation of Social Critique: An Analysis of the Global Justice Movement." *Critical Sociology* 39, no. 3 (2013): 453–78. <u>https://doi.org/10.1177/0896920511431499.</u>

- Strand, Steve, Ian Deary, and Pauline Smith. "Sex Differences in Cognitive Abilities Test Scores: A UK National Picture." *British Journal of Educational Psychology* 76, no. 3 (2006): 463–80, https://doi.org/10.1348/000709905X50906.
- Watson, John. Behaviorism. Revised edition. Chicago: University of Chicago Press, 1962.
- Wiesner-Hanks, Merry. *Gender in History: Global Perspectives*. Hoboken: John Wiley & Sons, 2021.
- Willever-Farr, Heather, Lisl Zach, and Andrea Forte. "Tell Me about My Family: A Study of Cooperative Research on Ancestry.Com." In *Proceedings of the 2012 iConference* (New York: Association for Computing Machinery, 2012), 303–10. <u>https://doi.org/10.1145/2132176.2132215</u>.
- WIRED. "Former FBI Agent Explains How to Read Body Language." YouTube.com, May 21, 2019. <u>https://web.archive.org/web/20231017142558/https://www.youtube.com/watch?v=4jwUXV4</u> OaTw, archived October 17, 2023.
- Witkowski, Tomasz. "Thirty-Five Years of Research on Neuro-Linguistic Programming. NLP Research Data Base. State of the Art or Pseudoscientific Decoration?" *Polish Psychological Bulletin* 41, no. 2 (2010): 58–66. <u>https://doi.org/10.2478/v10059-010-0008-0</u>.

10. MISCELLANEOUS

Alana. 1997.

https://web.archive.org/web/19970525065344/http://www.ncf.carleton.ca/~ad097/invcel.html, archived July 19, 2023.

- Angry White Men. "Tracking White Supremacy." <u>https://web.archive.org/web/20230929142903/https://angrywhitemen.org/category/people/jam</u> <u>es-weidmann/</u>, archived September 29, 2023.
- Briffault, Robert. *The Mothers: A Study of the Origins of Sentiments and Emotions*. London: Allen and Unwin, 1926.
- Briffault, Robert. *The Mothers: The Matriarchal Theory of Social Origins*. New York: The Macmillan Company, 1931.
- Clarke, Edward. *Sex in Education, or, a Fair Chance for the Girls*. Boston: James Osgood and Company, 1873.
- Collective. "III: The Race Question." UNESCO and its programme. Paris: Unesco, 1950.
- Damore, James. "Google's Ideological Echo Chamber." July 2017. <u>https://web.archive.org/web/20170809021151/https://diversitymemo.com/</u>, archived July 8, 2024.
- Eja, Harald. Hjevernask. Produced and aired in 2010 by the state channel NRK1.
- Ehrlich, Carol. Socialism, Anarchism, and Feminism. Baltimore: Research Group One, 1977.
- Friedan, Betty. "Abortion: A Woman's Civil Right." Speech delivered at the first National Conference on Abortion Laws in Chicago, Illinois, February 16, 1969.

https://web.archive.org/web/20230626134934/https://awpc.cattcenter.iastate.edu/2022/02/23/a bortion-a-womans-civil-right-feb-16-1969/, archived June 26, 2023.

Genesis.2:22. King James Version.

- Gravel, Elise. "Boys Can Be." <u>https://web.archive.org/web/20240329102344/http://elisegravel.com/wp-content/uploads/2018/01/Boys.png</u>, archived March 29, 2024.
- Gray, John. Men Are from Mars, Women Are from Venus. New York: Harper Collins, 1992.
- Grinder, John and Richard Bandler. *The Structure of Magic I: A Book About Language and Therapy*. Palo Alto: Science and Behavior Books, 1975.
- Grinder, John and Richard Bandler, *The Structure of Magic II: A Book About Communication and Change*. Palo Alto: Science and Behavior Books, 1976.
- Ioannis, Evrigenis. "Hobbes and Rousseau on Human Nature and the State of Nature." In *Human: A History*, edited by Karolina Hübner, 221–50. New York: Oxford University Press, 2022. <u>https://doi.org/10.1093/oso/9780190876371.003.0011</u>.
- James, E.L. Fifty Shades of Grey. New York: Vintage Books, 2012.
- Kipling, Rudyard. Just So Stories. London: Macmillan, 1902.
- Mars. "O Fim dos Homens The End of Men." YouTube.com, January 5, 2023. <u>https://web.archive.org/web/20240603121050/https://www.youtube.com/watch?v=r97O7u2x8</u> <u>aU&t=860s</u>, archived June 3, 2024.
- Max, Tucker and Geoffrey Miller. *Mate: Become the Man Women Want*. New York: Little, Brown and Company, 2015.
- Moxon, Steve. The Great Immigration Scandal. Exeter: Imprint Academic, 2004.
- Moxon, Steve. The Woman Racket: The New Science Explaining How the Sexes Relate at Work, at Play and in Society. Exeter: Imprint Academic, 2008.
- National Organization for Women. "Statement of Purpose." 1966. <u>https://web.archive.org/web/20230607125404/https://now.org/about/history/statement-of-purpose/#:~:text=The%20purpose%20of%20NOW%20is,truly%20equal%20partnership%20 with%20men., archived June 7, 2023.</u>
- National Organization for Women. "Resolution on Establishing a Task Force on The Masculine Mystique 1971."

https://web.archive.org/web/20231002130014/https://feminist.org/resources/feministchronicles/part-iii-the-early-documents/resolution-on-establishing-a-task-force-on-themasculine-mystique-1971/, archived October 2, 2023.

National Organization for Women. "Fall 2012 – Newsletter of the NOW Family Law Ad Hoc Advisory Committee – SPECIAL REPORT." <u>https://web.archive.org/web/20121018120803/http://www.nowfoundation.org/issues/family/Fa</u> <u>milyLawNewsletter-Fall2012.pdf</u>, archived October 18, 2012.

National Coalition For Men et al. v. Selective Service System et al., 593. U.S. (2021).

Our World in Data. "Male-to-Female Ratio of Suicide Rate." <u>https://web.archive.org/web/20230922114617/https://ourworldindata.org/grapher/Male-Female-Ratio-of-Suicide-Rates</u>, archived September 22, 2023.

- Perkins Gilman, Charlotte. Women and Economics: A Study of the Economic Relation Between Men and Women as a Factor in Social Evolution. Boston: Small, Maynard & Company, 1898.
- Peterson, Jordan. 12 Rules for Life: An Antidote to Chaos. Toronto: Penguin Random House Canada, 2018.
- Plato. The Republic. Harmondsworth: Penguin Books, 1955.
- Schopenhauer, Arthur. *The World as Will and Representation*. Vol. 1. Cambridge: Cambridge University Press, 2010.
- Stove, David. "The Intellectual Capacity of Women." *Proceedings of the Russellian Society* 15 (1990): 1–16.
- Summers, Larry. "Remarks at NBER Conference on Diversifying the Science & Engineering Workforce." Cambridge, Massachusetts, January 2005. <u>https://web.archive.org/web/20240205125851/https://www.harvard.edu/president/news-speeches-summers/2005/remarks-at-nber-conference-on-diversifying-the-science-engineering-workforce/</u>, archived February 5, 2024.
- Tiger, Lionel. The Decline of Males. New York: Golden Books, 1999.
- United Kingdom Home Office. "Commission for Countering Extremism end of year report 2022 to 2023." March 28, 2023.

https://web.archive.org/web/20230612160516/https://www.gov.uk/government/publications/c ommission-for-countering-extremism-end-of-year-report-2022-to-2023/commission-forcountering-extremism-end-of-year-report-2022-to-2023-accessible-version, archived June 12, 2023.

United Nations Office of Counter-Terrorism. "UN Office for Counter-Terrorism Workshop Investigates Role of Technology and Mental Health in Radicalization to Violent Extremism in Europe."

https://web.archive.org/web/20230612155313/https://www.un.org/counterterrorism/events/BI-Hub-Technology-Mental-Health-Radicalization-in-Europe, archived June 12, 2023.

Wachowski, Lana and Lily Wachowski. The Matrix. Burbank, CA: Warner Bros., 1999.

Weiser, Irene and Marcia Pappas. "Fathers' Responsibility Before Fathers' Rights." July 29, 2006.

https://web.archive.org/web/20140512230817/http://www.nownys.org/fathers_resp.html, archived May 12, 2014.

11.REFERENCE BOOKS

11.A. Dictionaries

Ayto, John. 20th Century Words. Oxford: Oxford University Press, 1999.

- Bailey, Lucy. "Feminism, Liberal." In *The Wiley Blackwell Encyclopedia of Gender and Sexuality Studies*, edited by Nancy Naples. Hoboken: John Wiley & Sons, 2016. https://doi.org/10.1002/9781118663219.wbegss738.
- Barfield, Thomas, ed. The Dictionary of Anthropology. Oxford: Blackwell, 1997.
- Cambridge Online Dictionary. "Manosphere." https://web.archive.org/web/20230116130323/https://dictionary.cambridge.org/dictionary/engl ish/manosphere, archived January 16, 2023.
- Cambridge Online Dictionary. "Hardwired." <u>https://web.archive.org/web/20171013161027/http://dictionary.cambridge.org/dictionary/engli</u><u>sh/hardwired</u>, archived February 15, 2022.
- Lawson, Tony and Joan Garrod. *Dictionary of Sociology*. London and Chicago: Fitzroy Dearborn, 2001.
- Marshall, Gordon, ed. A Dictionary of Sociology. Oxford: Oxford University Press, 1998.
- Merriam-Webster Online Dictionary. "Dox." <u>https://web.archive.org/web/20241001085313/https://www.merriam-webster.com/dictionary/dox</u>, archived October 1, 2024.
- Merriam-Webster Online Dictionary. "Firmware." <u>https://web.archive.org/web/20240208140426/https://www.merriam-webster.com/dictionary/firmware</u>, archived February 8, 2024.
- Merriam-Webster Online Dictionary. "Lookism." <u>https://web.archive.org/web/20221116103953/https://www.merriam-webster.com/dictionary/lookism</u>, archived November 16, 2022.
- Merriam-Webster Online Dictionary. "Politically correct" <u>https://web.archive.org/web/20240901145431/https://www.merriam-</u> webster.com/dictionary/political%20correctness, archived September 1, 2024.
- Roeckelein, Jon, ed. *Elsevier's Dictionary of Psychological Theories*. Amsterdam: Elsevier, 2006.
- Wiktionary.com. "Glowie." <u>https://web.archive.org/web/20230407123733/https://en.wiktionary.org/wiki/glowie#,</u> archived April 7, 2023.

11.B. Referencing and Style

University of Chicago Press. *The Chicago Manual of Style*. 17th ed. Chicago and London: University of Chicago Press, 2017.

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Appendix 1: Softwares and Tools Used for the Work

A) Internet Research

- The Internet Archive: Archiving web pages to create durable hyperlinks for citing.
- **Archive.today**: Archiving web pages to create durable hyperlinks for citing (in cases where the Internet Archive did not function).
- **GoFullPage:** Screenshotting entire web pages.
- **Trint:** AI-powered tool used to transcribe videos and interviews.
- **Python**: Coding for the random selection algorithm.
- **PushShift:** Independent Reddit API used for the random selection algorithm.

B) Other Research

- **Google Ngram Viewer**: Studying the frequency of words and phrases over time in a corpus of millions of digitized books.
- **Qualtrics**: Survey builder and online survey platform.
- **Prolific**: Recruiting the US survey respondents counterpart group.
- SPSS: Data Analysis.

C) Writing, Editing, and Referencing

- Microsoft Word: Word processing.
- Frisechronos.fr: Generating and editing timelines.
- **Zotero:** Referencing.

Appendix 2: Selection of Manosphere Memes

Here is a selection of online memes illustrating common manosphere antifeminist tropes, as described in Chap. I, B, 70. Those memes often spread beyond the confines of the manosphere, and usually have a humoristic purpose. Since they have no specified authorship, and are constantly modified and re-employed collectively, it is impossible to ascertain their sources.¹⁵⁷³ For an example of manosphere platform dedicated to memes, see the r/mramemes subreddit.¹⁵⁷⁴

Figure A2.1: Trope n°1 - Society is Impervious to Men's Distress and Suffering



¹⁵⁷³ This is common practice in research on memes, e.g., Jane Lugea, "The Pragma-Stylistics of 'image Macro' Internet Memes," in *Contemporary Media Stylistics*, ed. Helen Ringrow and Stephen Pihlaja (London: Bloomsbury Academic, 2019), 81–106.

¹⁵⁷⁴ R/mramemes, <u>https://web.archive.org/web/20231115160218/https://www.reddit.com/r/mramemes/</u>, archived November 15, 2023.

Figure A2.2: Trope n°2 - Men are Neither Oppressors, nor Privileged



The World According to a Feminist



Don't let feminist propaganda convince you that men are "privileged."

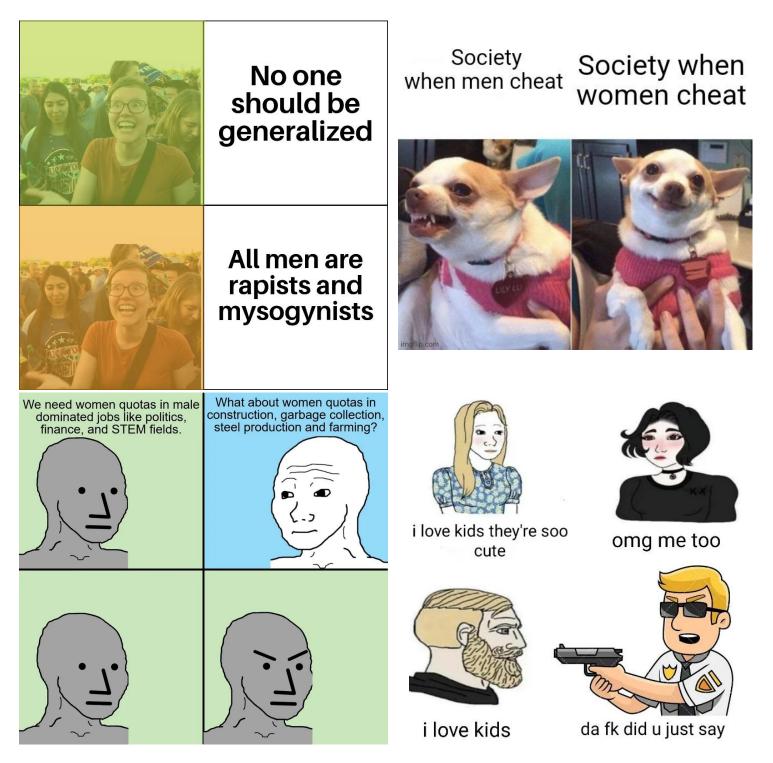


Feminism in a nutshell lol

A bunch of guys lying around in their male privilege.



Figure A2.3: Trope n°3 - Society and Feminists Have Unfair Double Standards Against Men.



Appendix 3: Ethics Protocol for the Qualitative Corpus Study

[As submitted and approved in March 2021]¹⁵⁷⁵

My PhD is based on Internet research, specifically qualitative discourse analysis of forum, blog, and website content. The following ethics protocol pertains to that qualitative research design. I might also conceive quantitative, Big Data, or in-person research designs for my PhD, but these will require their own ethics protocol.

Table of Contents

- 1) Copyright
- 2) Consent
- 3) Privacy and Data Protection
- 4) Content
- 5) Researcher Safety
- 6) Summary

The following protocol was established based on the following documents:

- University of Kent: *Ethics Code; Code of Ethical Practice for Research.*
- European Commission: Ethics in Social Science and Humanities; Ethics and Data Protection, Guidance: How to complete your ethics self-assessment.
- Association of Internet Researchers: *Ethical Decision-making and Internet Research; Ethical Decision-making and Internet Research 2.0; Ethical Guidelines 3.0.*
- Academic literature on Internet research ethics.
- Studies of online masculinism.
- 1) Copyright

Most Internet content is copyrighted. Yet, as with published literary material and other types of content, researchers have a specific right to quote relevant material as they see fit. In UK law, this is called a "permitted act", provided that "fair dealing" is respected. A negative answer to the following two questions ensures "fair dealing":

- have you used it in a way that stops them from selling the work, or making use of it in the way they want to?
- have you used more of the work than you need to for your purpose?¹⁵⁷⁶

¹⁵⁷⁵ Some references have been updated, and ulterior comments are signaled by brackets. This is the version that was approved by the University of Kent's School of Anthropology and Conservation Ethical Review Board (Ethics ID: 8-PGR-20/21). The version approved by the University of Lille's Comité d'Éthique de la Recherche (Ethics ID: QSMDC 2021-478-S91) is identical in content, but different in form since both institutions have different formal requirements. 1576 University Kent, "Copyright, what need of you to know", https://web.archive.org/web/20210113082018/https://www.kent.ac.uk/guides/copyright-what-you-need-to-know, archived January 13, 2021.

My thesis will respect "fair dealing" of the cited works and content, and will thus respect UK copyright laws, in compliance with the University of Kent's *Ethics Code* which states that, "Each member of the University Community should: 2.f. be aware of the University's rules on confidentiality, copyright, Data Protection and Freedom of Information and act accordingly.¹⁵⁷⁷"

In French law, researchers also enjoy a specific copyright exception called "exception pédagogique et de recherche". Copyright issues should therefore not arise as a result of the publication of my PhD research.

2) Consent

"Most social science research endeavours are such that human participation requires evidence of the voluntary, free, and informed consent of those who contribute their time, insights, effort and data for the use of researchers."¹⁵⁷⁸ Indeed, informed consent is the cornerstone of traditional social science and biomedical research ethics.¹⁵⁷⁹

However, there is a clear consensus that it is not always applicable to Internet research designs, most notably because it is completely impossible to apply to Big Data research. Official guidelines now recognize this, although they do not indicate any alternatives,

In principle, living individuals should not be the subject of a research project without being informed, even in the relatively rare cases where research methods, conditions or objectives dictate that they are not made fully aware of the nature of the study until its completion. However, the advent of the internet and the widespread use of social media platforms and other ICTs have dramatically expanded opportunities for researching human behaviour without the express consent of the subjects. In turn, this has created a range of ethical dilemmas and challenges for the research community.¹⁵⁸⁰

The Association of Internet Researchers (AoIR) documents why obtaining informed consent is not always possible and shows that in such cases, the attention of researchers is focused rather on "mitigating risk against research subjects."¹⁵⁸¹

To the best of my knowledge, no study of online masculinist groups has ever involved obtaining informed consent from Internet users to process their forums and social media.¹⁵⁸² Researchers justify this in many ways:

¹⁵⁷⁷ University of Kent, *Ethics Code*, 3. <u>https://web.archive.org/web/20230523021153/https://www.kent.ac.uk/governance/downloads/documents/ethics-</u> code.pdf, archived May 22, 2023.

¹⁵⁷⁸ European Commission, Ethics in Social Science and Humanities, 2018, 13.

¹⁵⁷⁹ "Informed consent is the cornerstone of research ethics", European Commission, *Ethics and Data Protection*, 2018, 10.

¹⁵⁸⁰ Ibid.

¹⁵⁸¹ Aline Shakti Franzke et al., "Internet Research: Ethical Guidelines 3.0" (The Association of Internet Researchers, 2020), https://aoir.org/reports/ethics3.pdf, 10.

¹⁵⁸² The only exception I could find were bachelor and master theses recently conducted at the University of Twente, which were based on a questionnaire survey, making informed consent both inevitable and easy to collect. See Helena Bieselt, "Personality of Incels and Its Extent as Predictor of Involvement and Activity in The Incel Community"

- The research subjects would refuse, making any attempt at studying them impossible:

The specificity of our online research field is not that we hate our research object, but that our research objects hates us and denies our capacity to produce rational analysis. As such, getting informed consent from the website's users is by definition impossible for they express deep distrust towards female social scientists.¹⁵⁸³

These spaces are extremely hostile to any attempts to de-anonymise their subcultures and an attempt to intrude with a polite academic request would have been met with disdain $[...]^{1584}$

- It would represent a safety hazard to the researcher.

[...] a polite academic request would have been met with disdain and would have made the researcher vulnerable to being hacked by contributors to the site¹⁵⁸⁵.

According to the American Sociological Association's (ASA) Code of Ethics, in dilemmas of informed consent "sociologists may seek waivers from an authoritative body with expertise in the ethics of social science research" (2018). I therefore contacted the Norwegian Center for Research Data (NSD) to ensure a proper research procedure. In conversation with NSD they understood that it would be difficult and unsafe for me to try to visibly insert myself into their online environment¹⁵⁸⁶.

- It is not feasible given the volume of data under study.

It was not practical to get informed consent from all users given the large volumes involved¹⁵⁸⁷.

These three justifications not to obtain informed consent all apply to my own research design. Since a sizeable part of my corpus is composed of archives from now defunct websites, getting consent from people who used to post on these forums is also impossible. Moreover, most studies in the field do not even mention informed consent¹⁵⁸⁸.

⁽Bachelor Thesis, University of Twente, 2020); Johannes Stickel, "What Incels Can Tell Us About Misogyny: Evaluating Sexual Frustration and Pornography Usage as Potential Factors for Misogyny" (Master Thesis, University of Twente, 2020).

¹⁵⁸³ Adeline Branthonne and Elena Waldispuehl, "La netnographie pour étudier une communauté masculiniste en ligne : contributions méthodologiques d'un e-terrain," *Recherches Qualitatives* Hors-série : quelles possibilités et quels défis pour la recherche qualitative ?, n°24 (2019): 6–19, 11. Translation mine, original text, "La particularité de notre e-terrain, ce n'est pas que nous détestons notre objet, mais que notre objet nous déteste et nie notre capacité à produire une analyse rationnelle. Pour notre recherche, le consentement des utilisateurs du site se révèle donc a priori impossible en raison de la défiance profonde exprimée envers les chercheuses en sciences sociales."

¹⁵⁸⁴ Angela Nagle, "An Investigation into Contemporary Online Anti-Feminist Movements" (PhD Dissertation, Dublin City University, 2015), 100-101.

¹⁵⁸⁵ Ibid.

¹⁵⁸⁶ Katrine Rummelhoff, "Incels and Misogyny; What's so Appealing about Hatred?" (University of Oslo, 2020), https://www.duo.uio.no/handle/10852/80126, 15.

¹⁵⁸⁷ Scott Wright, Verity Trott, and Callum Jones, "'The Pussy Ain't Worth It, Bro': Assessing the Discourse and Structure of MGTOW," *Information, Communication & Society* 23, no. 6 (May 11, 2020): 908–25, <u>https://doi.org/10.1080/1369118X.2020.1751867</u>, 913.

¹⁵⁸⁸ See for example Debbie Ging, "Alphas, Betas, and Incels: Theorizing the Masculinities of the Manosphere," *Men* and *Masculinities* 22, no. 4 (October 1, 2019): 638–57, <u>https://doi.org/10.1177/1097184X17706401</u>; Winnie Chang,

Therefore, informed consent will not be sought from the people whose online content I will analyze.

I however followed the recommendation of the Data Protection Officer and set up an information notice on my research blog. This message is addressed to manosphere members who wish to know if they are part of the study and be removed from it¹⁵⁸⁹. This message was validated by the DPO before submission and will remain online for the duration of the study and the dissemination phase.

Yet, analyzing online material without consent does not mean that privacy should not be protected. In fact, it makes privacy and data protection concerns even more salient.

3) Privacy and Data Protection

Let us consider the following principles:

The fact that some data are publicly available does not mean there are no limits to their use.

If your research project uses **data from social media networks** and you do not intend to seek the data subjects' explicit consent to the use of their data, you must assess whether those persons actually intended to make their information public (e.g. in the light of the privacy settings or limited to the limited audience to which the data were made available).

It is not enough that the data be accessible; they must have been made public to the extent that the data subjects do not have any **reasonable expectations of privacy**¹⁵⁹⁰.

One broad consideration: the greater the acknowledged publicity of the venue, the less obligation there may be to protect individual privacy, confidentiality, right to informed consent, etc.¹⁵⁹¹

Alternatively: Are participants in this environment best understood as "subjects" (in the senses common in human subjects research in medicine and in the social sciences) – or as authors whose texts/artifacts are intended as public?

If participants are best understood as subjects in the first sense [...], then greater obligations to protect autonomy, privacy, confidentiality, etc., are likely to follow.

If, by contrast, subjects may be understood as authors intending for their work to be public [...], then fewer obligations to protect autonomy, privacy, confidentiality, etc., will likely follow¹⁵⁹².

All material in my corpus is publicly accessible, without any password protection or the like. None of the sites under study require creating an account to view content, nor do they have a

[&]quot;The Monstrous-Feminine in the Incel Imagination: Investigating the Representation of Women as 'Femoids' on /r/Braincels," *Feminist Media Studies* 0, no. 0 (August 5, 2020): 1–17, https://doi.org/10.1080/14680777.2020.1804976.

¹⁵⁸⁹ See this message here: <u>https://mascandsci.hypotheses.org/191</u>. [For security and privacy reasons, this research blog was shut down when preparing the manosphere survey study].

¹⁵⁹⁰ European Commission, *Ethics and Data Protection*, 2018, 13.

¹⁵⁹¹ Association of Internet Researchers, *Ethical Decision-making and Internet Research*, 2002, 5.

¹⁵⁹² Ibid, 7.

gatekeeper. However, people can still be expected to have different expectations of privacy for different content.

Most of the content in my corpus comes from notorious masculinist activists. Their identities and political commitments are public, and their goal is to reach and disseminate their political ideas. They can safely be considered as authors of texts. Therefore, their content will not be anonymized, and no privacy measure will be enforced. Since they willingly give interviews, film themselves or get photographed to promote their ideas, no restrictions will be applied to using pictures of them or screenshots from their videos for example.

On the other hand, pseudonymous Internet users writing on forums or writing comments on articles, posts or videos probably have an expectation of privacy. I will thus treat these messages as personal data. More importantly, much of this content is considered "special category" under GDPR regulation,

'Special categories of personal data' (formerly known as 'sensitive data') are subject to more stringent data-protection safeguards. They include '**personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation**' (Article 9(1) GDPR)¹⁵⁹³.

Even though it is publicly accessible online, I will therefore treat this data as follows,

- It will be fully anonymized, both in my writing, and in my personal file storage.
- No pictures of these pseudonymous Internet users shall be reproduced or published.
- I will only download and store what I need (following the data minimization principle).
- I will not share it with anyone and will only store it on a secure external hard drive.
- I will not mention the site where it was posted, nor provide any direct hyperlink towards it when cited in my dissertation.

The goal of these measures is to prevent re-identification of "natural persons¹⁵⁹⁴" based on the information I share. Although I will cite this content directly, identifying the person behind it would entail finding the website where it was posted (choosing from among the list of websites present in my corpus), then finding the message on that website to identify the pseudonym. Then, the pseudonym would need to be linked to the natural person. Given that "Individuals are not considered 'identifiable' if identifying them requires excessive effort¹⁵⁹⁵", this should be compliant with GDPR regulations.

Below are examples of how I would handle those two types of content in my PhD thesis:

- Public text (participant as author)

¹⁵⁹³ European Commission, *Ethics and Data Protection*, 2018, 5.

¹⁵⁹⁴ This is GDPR terminology.

¹⁵⁹⁵ European Commission, Guidance: How to complete your ethics self-assessment, version 6.0, 2018, 16.

"This is for example the case of Rollo Tomassi, who explains in a blog post entitled 'Equalism and Masculinity' that 'The problem inherent in applying reciprocal solutions to gender relations is the belief that those relations are in any way improved by an equilibrium between both sexes interests.¹⁵⁹⁶"

- No anonymity, direct citation with complete footnote, and hyperlink towards an archived version of the web page.
- Personal data (participant as subject)

"As one MGTOW activist puts it 'Women are more than happy to be grouped with children if it means they get to avoid accountability for their actions.""

- > Anonymous, direct citation with no references.
- 4) Content

While collecting my corpus, I am bound to encounter a lot of data that is deemed sensitive. Among these data are some special cases that need to be considered.

- Criminal activity

As a rule, criminal activity witnessed or uncovered in the course of research must be reported to the responsible and appropriate authorities, even if this means overriding commitments to participants to maintain confidentiality and anonymity. There may be a legal obligation to report criminal activity¹⁵⁹⁷.

I will endeavor to respect this obligation. However, murder or rape fantasies can be quite commonplace in some of the spaces I will browse. Therefore, I will need evidence more tangible than fantasizing to report anything to the authorities, such as motives, place, time, etc. In case that happens, contact will immediately be made with my supervisors and the relevant authorities at my universities to determine the right course of action.

- Suicide

The AoIR mentions another problematic situation for an Internet researcher, that of encountering "information suggesting that their subjects may be engaged in behavior threatening to their own well-being, e.g., a researcher studying bloggers describing self-cutting or manifesting ever greater focus on suicide¹⁵⁹⁸."

¹⁵⁹⁶ Rollo Tomassi, *The Rational Male*, "Equalism and Masculinity", August 20, 2014, <u>https://web.archive.org/web/20201129050951/https://therationalmale.com/2014/08/20/equalism-and-masculinity/</u>, archived November 29, 2020.

¹⁵⁹⁷ European Commission, Ethics in Social Science and Humanities, 2018, 14.

¹⁵⁹⁸ Franzke et al., "Internet Research: Ethical Guidelines 3.0.", 17.

The incel community which I will study has a strong focus on suicide, in fact "direct messages expressing the desire for suicide are quite common¹⁵⁹⁹". This is a well-known fact about incels, and my reporting an occurrence of suicidal declaration is very unlikely to impact anyone's welfare. Moreover, this would need to be done thousands of times, turning my research project into a suicide prevention program. Suicidal declarations will thus not be reported.

- Child pornography/pornography

If conducting data selection automatically, there might be a risk of downloading and storing child pornography, which is illegal. One part of my data selection will be based on random sampling. Before downloading the randomly sampled content I will make sure to carefully screen for any potentially illegal material. Any illegal content will be reported to the competent authorities, and this content will be removed from my sample. A new random selection will then be operated to replace it.

Legal pornography will be present in the corpus, most notably in the form or GIFs or images, while some texts might also fall under certain definitions of pornography. Since it is legal, I will not remove such content from the corpus. I will however start my PhD dissertation with a disclaimer to warn readers about potentially shocking content, especially if they chose to click on hyperlinks. I will also not reproduce any pornographic material in the dissertation itself to prevent issues with minors.

- Hate speech/sexism/racism/antisemitism/slurs/vulgarity, etc.

The abovementioned disclaimer will also warn readers about potentially shocking content, of all the types that are found in my corpus, both in the dissertation quotes, and in the outgoing hyperlinks. However, such content might be quoted verbatim in the dissertation.

- Transparency of quotes

Since the University of Kent is wary of "libellous content, or material which is likely to bring the University into disrepute, or incur liability¹⁶⁰⁰", I will be signaling quotes very clearly throughout the dissertation, to ensure that primary sources are designated as such, and that no sensitive material be seen as originating from me, and thus as endorsed by the University.

5) Researcher Safety

¹⁵⁹⁹ Sylvia Jaki et al., "Online Hatred of Women in the Incels.Me Forum: Linguistic Analysis and Automatic Detection," *Journal of Language Aggression and Conflict* 7, no. 2 (November 25, 2019): 240–68, https://doi.org/10.1075/jlac.00026.jak, 256.

¹⁶⁰⁰ University of Kent: deposit your thesis, https://web.archive.org/web/20210113083555/https://www.kent.ac.uk/guides/deposit-your-thesis/copyright-orsensitive-material-in-your-thesis, archived January 13, 2021.

Protecting researchers is a priority that can be found in all guidelines and official texts. Several researchers in my field have reported fears of hacking or "doxxing¹⁶⁰¹" based on such occurrences that happened to scholars and journalists studying online antifeminism¹⁶⁰².

Given the fact that I study online communities mostly based in the US and around the world, I hold the risk of physical harm to be nil. Moreover, to my knowledge, there is no precedent of physical harm to researchers or journalists emanating from the groups I will study.

Cyber-harassment, however, is quite commonplace, and comprises several risks:

- Death threats or similar threats of physical harm

If such a thing happens, I will immediately report this to my supervisors, my universities, as well as the police. I will also change the email address or social media account which received the threats. Risk assessment of physical harm might need to be reevaluated after this.

- Hacking of research material

To prevent my PhD material and ongoing research from being deleted, I had the University of Kent buy me an encrypted secure hard drive. Once I receive it, all data will be stored there to have secure backup.

- Doxxing

To prevent my private information from being accessed and divulged, I have changed all my personal passwords and replaced them with unique randomly generated passwords. I do not intend to undertake more protection at the moment.

Moreover, no accounts will be created on the studied forums, and nothing will be published or posted on any manosphere platform or website¹⁶⁰³.

I think that I am much less liable to be victim of cyber-harassment than some other scholars or journalists studying the same masculinist groups for three reasons:

- I am a foreigner. Making it harder for them to access information, to reach me or harm me. Were I to study French masculinist groups, I might take more precautions.

¹⁶⁰¹ Merriam-Webster Online Dictionary, "Dox," "to publicly identify or publish private information about (someone) especially as a form of punishment or revenge", <u>https://web.archive.org/web/20241001085313/https://www.merriam-webster.com/dictionary/dox</u>, archived October 1, 2024.

¹⁶⁰² See for example Branthonne and Waldispuehl, "La netnographie pour étudier une communauté masculiniste en ligne : contributions méthodologiques d'un e-terrain.", 16; Lucy Nicholas and Christine Agius, "#Notallmen, #Menenism, Manospheres and Unsafe Spaces: Overt and Subtle Masculinism in Anti-'PC' Discourse," in *The Persistence of Global Masculinism: Discourse, Gender and Neo-Colonial Re-Articulations of Violence*, ed. Lucy Nicholas and Christine Agius (Cham: Springer International Publishing, 2018), 31–59, <u>https://doi.org/10.1007/978-3-319-68360-7_2</u>, 47; Callum Jones, Verity Trott, and Scott Wright, "Sluts and Soyboys: MGTOW and the Production of Misogynistic Online Harassment," *New Media & Society* 22, no. 10 (October 1, 2020): 1903–21, <u>https://doi.org/10.1177/1461444819887141</u>, 16.

¹⁶⁰³ [This was respected for the qualitative corpus study, however, years later, accounts and posts were in fact created to distribute the questionnaire survey – Ethics ID **20221671538022231**].

- I am a man. When studying misogynistic groups, it is understandable that female scholars take more precautions¹⁶⁰⁴. Even though the difference is impossible to exactly determine, I hold the risk for a male researcher to be significantly lower.
- My work does not have an overtly feminist stance. Some social science scholars studying antifeminism regard their research as pertaining to profeminist activism. Some also have public ties with feminist organizations. This makes them designated targets for antifeminist activists. On contrary, I do not publicly belong nor contribute to any feminist organization.
- 6) Summary
- 6)1) Copyright

There should be no copyright issues arising from the publication of my work.

6)2) Consent

Informed consent to retrieve and analyze online content will not be sought.

6)3) Data Protection and Privacy

The corpus will be separated in two categories on case-by-case basis. Content from public figures or clearly intended to be publicly shared and widely circulated will not require particular treatment. On the other hand, personal data will be fully anonymized. They will moreover be stored on a secure hard drive, and not shared with anyone. No hyperlinks towards them will be provided when cited. No pictures of pseudonymous Internet users shall be reproduced or published.

6)4) Content

Any tangible indication of criminal activity, or intent thereof, will be immediately reported to competent authorities. Suicidal declarations will not be reported.

All content will be screened before retrieving to ensure that no illegal material such as child pornography be possessed at any point.

A disclaimer about potentially shocking, pornographic, or hateful content will be added at the beginning of the PhD dissertation, warning about the content of the dissertation, and about the hyperlinks contained in it.

No pornographic content will be reproduced in the PhD dissertation, although it may be linked to.

Quotations will be unambiguously signaled.

6)5) Researcher Safety

The risk of physical harm is held to be nil.

¹⁶⁰⁴ For example, a French researcher told me that, as a woman, she did not feel comfortable contacting French masculinists for her research project, but she encouraged me to do so.

Any threat will be immediately reported to the competent authorities. Secure storage has been purchased to protect research material from hacking. Moderate safety measures are put in place to guarantee protection from doxxing.

Appendix 4: University of Lille Ethics Protocol Approval



Comité d'éthique en sciences comportementales

Présidente : Yvonne DELEVOYE-TURRELL

Président adjoint : Cédric PATIN

Gestionnaire administrative : Stella BOUAMRIRENE Tel : 03 -62- 26- 80- 82 E-mail : Stella Bouamrirene@univ-Lille.fr

Promoteur :

Villeneuve d'Asca, le 22/02/2021

Références comité d'éthique : QSMDC Sigle :

2021-478-591

25/01/2021

Numéro de version et date :

Version 1 du 25/01/2021 ULille/Université du KENT

Responsable Scientifique du projet :

Date de la soumission :

Date de la réunion du comité d'éthique : 16/02/2021

Avis du Comité d'Ethique : Avis favorable avec remarques

Le protocole est accepté en état. Si pour une quelconque raison, vous souhaitez modifier le protocole (en terme de calendrier, inclusion d'un nouveau groupe...), vous êtes tenu d'informer le comité d'éthique par l'envoi d'un avenant expliquant les motivations mais également les modifications apportées au protocole initial. Cet avenant sera réévalué par le comité d'éthiaue.

L'avis du CER-Lille n'exonère pas des formalités réglementaires. A cet égard, il vous appartient notamment, si vous traitez des données se rapportant à un individu directement ou indirectement identifiable, de vous conformer au règlement européen sur la protection des données (RGPD) en vigueur depuis 2018. Pour cela, vous pouvez solliciter les conseils du Correspondant informatique et libertés (DPO) ou du service juridique de votre université ou de votre organisme de recherche. Le comité éthique rappelle l'obligation d'inscrire au registre des traitements de l'université tout traitement de données à caractère personnel conformément à l'article 30 du Règlement Général sur le Protection des données.

Par cet avis favorable, le CER U-Lille ne se prononce pas sur le respect des mesures barrières contre le Covid-19. Afin de protéger les participants et les chercheurs et enseignants-chercheurs, les organismes responsables de la recherche doivent impérativement se mettre en conformité avec les mesures nisées pour toutes recherches sur site et hors site par les tutelles hébergeant les unités de recherche concernées.

> Pr Yvonne DELEVOYE-TURRELL Présidente du comité d'éthique

1.20-2-

Direction de l'Appui à la Recherche Service Partenariats et Structures Bureau 61 Bât A3 59655 Villeneuve d'Ascq Tel 03-62-26-80-82 Uner

Appendix 5: GDPR Compliance Statement



Direction Données personnelles et archives

RÉCÉPISSÉ

DÉCLARATION DE CONFORMITÉ

Délégué à la protection des données (DPO) Jean-Luc TESSIER

Responsable administrative Yasmine GUEMRA

La délivrance de ce récépissé atteste que votre traitement est conforme à la réglementation applicable à la protection des données personnelles. Vous pouvez désormais mettre en œuvre votre traitement dans le strict respect des mesures qui ont été élaborées avec le DPO et qui figurent sur votre déclaration.

Toute modification doit être signalée dans les plus brefs délais: dpo@univ-lille.fr

Responsable du traitement

Nom : Université de Lille - CECILLE (ULR 4074)	SIREN: 13 00 23583 00011
Adresse : 42 rue Paul Duez	Code NAF: 8542Z
59000 LILLE	Tél. : +33 (0) 3 62 26 90 00

Traitement déclaré

Intitulé : Qualitative Study on a Masculinist Discourse Corpus (QSMDC)

Référence Registre DPO : 2021-34

Responsable du traitement / Chargé (e) de la mise en œuvre : M. Constantin BOBAS Interlocuteur (s): M. Louis BACHAUD

Fait à Lille,

Jean-Luc TESSIER

Le 17 février 2021

Délégué à la Protection des Données

Appendix 6: Converting Corpus Documents into a Single Unit

The manosphere corpus contains various document types. In order to estimate the amount of material allocated to each group and section, it was necessary to measure all document lengths with a single unit. This was done with pages as a unit.

Since I read approximately 30 pages/hour when taking notes, this "page" unit represents 2 minutes. While most of the corpus material was easily transcribed into pages, there were some exceptions. For example, online forum threads were captured via screenshot, which made for unusually long pictures. These were converted into an equivalent number of pages, based on estimated reading time. The conversion is detailed below in table A6.1.

For example, one minute of audio or video took approximately four minutes to read and transcribe comprehensively. Therefore, a 30-minute video to watch and transcribe represents two hours of work, or the equivalent of 60 pages. When discussing corpus constitution, "pages" are just meant to represent this *ad hoc* unit. As a consequence, that unit was not used for quantitative analysis of the corpus.

Document	Individual unit	Average time	Equivalent in pages
Books, e-books	Book page	2 minutes	1
Blog articles, wiki	PDF/Word page ¹⁶⁰⁵	2 minutes	1
Reddit	PDF page ¹⁶⁰⁶	2 minutes	1
Video, audio	Minute	4 minutes ¹⁶⁰⁷	2
Forum threads	Web forum page	6 minutes	3

 Table A6.1: Conversion Table Into the "Pages" Unit

¹⁶⁰⁵ Obtained via copy-pasting, or PDF-printing, based on what is most convenient.

¹⁶⁰⁶ Obtained via PDF-printing.

¹⁶⁰⁷ Including written transcription of the audio. These transcriptions were done with the help of AI transcription tool trint.com, see <u>https://web.archive.org/web/20230410182447/https://trint.com/</u>, archived April 10, 2023.

Appendix 7: Random Sampling: Procedure, Schedule and Selected Materials

The Random Sample (RS) section represents 15% of the manosphere discourse corpus, namely 1,350 pages.¹⁶⁰⁸ It is divided equally between the five manosphere branches. For each branch, the random sample is therefore composed of 270 pages. 90% of this sample was selected in 2021 (on all content up to 2021), 5% in 2022 (on content from 2021) and the remaining 5% in 2023 (on content from 2022), as detailed below in figure A7.1.

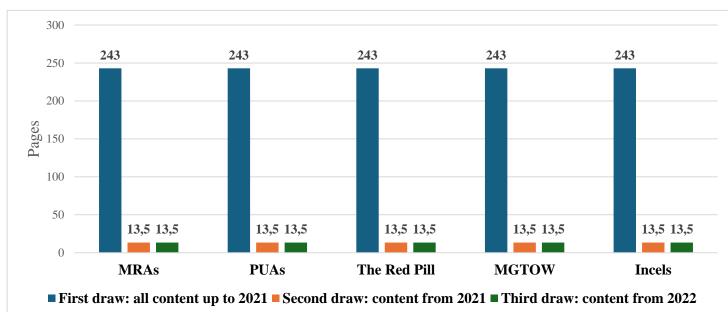


Figure A7.1 : Random Sample Architecture

Inclusion Criteria

This random sample is meant to represent the base, the everyday discussions between ordinary manospherians. Therefore, the random sampling was carried out on websites and platforms where content is user-generated with no editing or selection for publication, i.e. forums and subreddits. From all the platforms included in the CC section (see Appendix 9, 501), all those which fit that criterion were selected. Content also needed to be easily accessible, navigable, and countable.¹⁶⁰⁹

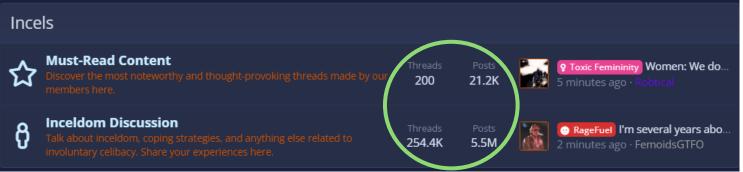
Websites rarely come equipped with a "Random Page" feature; it thus needs to be engineered. There are two types of website architectures in the selected material: forums and subreddits, each requiring different methods.

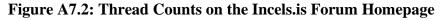
Sampling Procedure: Forums

¹⁶⁰⁸ Please note that all page numbers are \pm 5% since it is impossible to guarantee that documents conform to an exact length, especially if they are to be included in their entirety. Page numbers are determined using the measuring conventions presented in Appendix 6, 480.

¹⁶⁰⁹ Older websites that have been shut down are only very partially archived and almost impossible to navigate properly. Thus, the A Voice for Men, Roosh V, and The Attraction forums were excluded from the Random Sample section, as well as the banned r/incels subreddit.

On forums, threads are contained in broader sections. Fortunately, the number of threads in each section is traditionally indicated (see figure A7.2). Thus, one only needs to add these figures to obtain the total number of threads. Each thread can therefore be considered to have an index number, for example in descending order. This is all that is required to select random threads, which was done with a simple Excel spreadsheet.¹⁶¹⁰





Random selection on forums is made easy by the display of the thread counts.¹⁶¹¹

Each forum features some utility sections (such as the forum rules) which do not provide much information on people's ideas and beliefs. These utility sections were consequently removed from the threads pool before the random draw, as detailed below:

Forum	Title of section	Content
Incels.co	"Ban Appeals"	Where members who were banned from the forum
		can appeal the decision.
MGTOW.com	"Introductions"	Where new members introduce themselves.
MGTOW.com	"Top Gun"	A compilation of best threads, which would create
		duplicates in the pool if included.
Mengtow	"Forum rules and policy"	Self-explanatory.
Mengtow	"Things to know before joining and	Self-explanatory.
	posting"	
Mengtow	"Introduce Yourself"	Where new members introduce themselves.
GYOW	"New Member Intros"	Where new members introduce themselves.
GYOW	"Banned Members"	Recording ban decisions.
PUA forum	"Meet Up & Wing"	For members to arrange real-life seduction sessions.
PUA forum	"PUA Lairs"	For members to find other pickup artists near them.
PUA forum	"Introduce Yourselves"	Where new members introduce themselves.
PUA forum	"Technical Issues and Suggestions"	To contact forum administrators.

¹⁶¹⁰ Thanks to Mathilde Souprayen for helping design the spreadsheet.

¹⁶¹¹ Incels.is homepage, <u>https://web.archive.org/web/20230523211123/https://incels.is/</u>, archived May 23, 2023.

PUA forum	"PUA videos"	This links to exterior content and not to the users'
		discourse and ideas.
PUA forum	"The Pick Up Artist on VH1 with	This links to exterior content and not to the users'
	Mystery"	discourse and ideas.
MPUA forum	"Introduce Yourself"	Where new members introduce themselves.
MPUA forum	"Journals"	Not accessible to non-registered users.
MPUA forum	"Meet Up & Wing"	Not accessible to non-registered users.

Sampling Procedure: Reddit

Apart from forums, most of the user-generated content in the manosphere comes from the website Reddit. Reddit's architecture makes random selection impossible to complete without more elaborate tools. In order to retrieve necessary data from the website, such as number of posts in a given subreddit, one needs to use an API (Application Programming Interface). The most popular Reddit API in social science research is called Pushshift:¹⁶¹²

"Pushshift is a social media data collection, analysis, and archiving platform that since 2015 has collected Reddit data and made it available to researchers. Pushshift's Reddit dataset is updated in real-time, and includes historical data back to Reddit's inception."¹⁶¹³

Fortunately, Reddit hosts a community of Pushshift enthusiasts.¹⁶¹⁴ One of them in particular helped me understand the basic working of the API¹⁶¹⁵. This user kindly helped design a Python algorithm to select random posts. Using the Pushshift dataset, this algorithm selects random Reddit posts on a given period, on a given subreddit.¹⁶¹⁶ Reddit has a unit called "karma" which reflects a post's popularity. To avoid spams and junk submissions while still maintaining the largest pool of messages, only posts with karma superior to one were selected. Once selected via the algorithm, the threads were manually retrieved from the Reddit website.

First Random Draw: February-March 2021

In 2021, the first random draw was carried out. It represents 90% of the Random Sample section. This random draw is detailed below:

¹⁶¹² Please note that as of writing (May 2023), Pushshift has been denied data access by Reddit, and might be permanently discontinued.

¹⁶¹³ Jason Baumgartner et al., "The Pushshift Reddit Dataset," *Proceedings of the Fourteenth International AAAI Conference on Web and Social Media (ICWSM 2020)*, (2020): 830–39, <u>https://doi.org/10.1609/icwsm.v14i1.7347</u>, 830.

¹⁶¹⁴ <u>https://web.archive.org/web/20230522023956/https://www.reddit.com/r/pushshift/</u>, archived May 23, 2023.

¹⁶¹⁵ Special thanks to redditor ATownHoldItDown whose help was invaluable.

¹⁶¹⁶ Special thanks to Mathilde Souprayen for helping me run and refine the program.

Group	Forum or Subreddit	Date of Draw	Ranging from	to
MRAs	r/MensRights	February 24, 2021	March 19, 2008	December 31,
				2020^{1617}
PUAs	r/seduction	February 26, 2021	April 8, 2008	December 31, 2020
PUAs	PUA forum	March 2, 2021	March 2006	March 2, 2021
TRP	r/TheRedPill	February 24, 2021	October 25, 2012	December 31, 2020
MGTOW	r/MGTOW	February 23, 2021	June 4, 2011	December 31, 2020
MGTOW	r/MGTOW2.0	February 26, 2021	June 30, 2017	December 31, 2020
MGTOW	MGTOW.com	March 1, 2021	July 13, 2014	March 1, 2021
Incels	r/IncelsWithoutHate	February 25, 2021	April 9, 2017	December 31, 2020
Incels	Incels.co	March 1, 2021	November 7, 2017	March 1, 2021

Table A7.2: Details of First Random Draw

A particular procedure had to be implemented for the r/braincels subreddit. Since the subreddit was banned at the time of the draw, its content was inaccessible for retrieval on the Reddit website. Yet, some of the subreddit's history was made accessible through a user-generated archive.¹⁶¹⁸ For the r/braincels subreddit, posts were therefore randomly drawn only on the periods for which the archive was accurate, which explains the particularity of the draw as detailed in the table below. A special algorithm was designed for that double period selection.

Table A7.3: r/braincels Random Draw

Group	Subreddit	Date of Draw	Ranging from	Ranging from to		to
Incels	r/braincels	March 1, 2021	October 21, 2017	September 30,	February	June 29,
				2018	16, 2019	2019 ¹⁶¹⁹

Below is a summary of the material selected in the first random draw:

Table A7.4: First Random D	raw Selected Materials
----------------------------	------------------------

Group	Forum or Subreddit	Pages ¹⁶²⁰
MRAs	r/MensRights	243
PUAs	PUA forum	121,5
PUAs	r/seduction	121,5
TRP	r/TheRedPill	243

¹⁶¹⁷ While the forum selection method did not allow for exact tailoring of the time periods (only allowing draws on the whole existence of the forum), the subreddit selection algorithm did. Thus, December 31, 2020, was chosen to make subsequent selections easier.

¹⁶¹⁸<u>https://web.archive.org/web/20201210124552/https://www.reddit.com/r/IncelsWithoutHate/comments/dhvadv/br</u> aincels_archive_itt/, archived December 10, 2020.

¹⁶¹⁹ The r/braincels subreddit was banned on September 30, 2019, thus ending all activity on the subreddit.

¹⁶²⁰ These are the expected number of pages. Actual numbers are within +/-5% of these figures. Indeed, it is highly unlikely that material length would exactly match the expected number of pages. Threads and posts were therefore selected until the total number of pages exceeded the target. Then, the last post drawn was either included or rejected, based on the option that most approached the target number of pages. In case of a tie, the last post was not included.

MGTOW	Mgtow.com	81
MGTOW	r/MGTOW	81
MGTOW	r/MGTOW2.0	81
Incels	Incels.co	81
Incels	r/braincels	81
Incels	r/IncelsWithoutHate	81

Second Random Draw: January 2022

For every forum of the list that was active in 2021, a new random selection was conducted. MGTOW.com was then inaccessible, and there was virtually no more activity on MPUA forum.¹⁶²¹ Moreover, three of the subreddits selected in 2020 were banned in 2021: r/IncelsWithoutHate on March 11, 2021, and the two MGTOW subreddits on August 3, 2021. Although the content in those banned subreddits is now inaccessible, it was archived by manospherians on <u>www.theredarchive.com</u>.¹⁶²² This allowed to conduct the sampling and retrieval of random posts from January 1st to the ban dates, as detailed in Table A7.5 below. For those subreddits that were not banned, a new random selection was conducted as planned:

Table A7.5: Details of Second Random Draw

(subreddits banned during the year are signaled with an asterisk, as is their ban date)

Group	Forum or Subreddit	Date of Draw	Ranging from	to
MRAs	r/MensRights	January 4, 2022	January 1, 2021	December 31, 2021
PUAs	r/seduction	January 4, 2022	January 1, 2021	December 31, 2021
TRP	r/TheRedPill	January 4, 2022	January 1, 2021	December 31, 2021
MGTOW	r/MGTOW*	January 4, 2022	January 1, 2021	August 3, 2021*
MGTOW	r/MGTOW2.0*	January 4, 2022	January 1, 2021	August 3, 2021*
Incels	r/IncelsWithoutHate*	January 7, 2022	January 1, 2021	March 11, 2021*
Incels	Incels.co	January 10, 2022	March 1, 2021	January 10, 2022

Below is a summary of the material selected in the second random draw:

Table A7.6: Second	Random	Draw	Selected	Materials
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Group	Forum or Subreddit	Pages ¹⁶²³
MRAs	r/MensRights	13,5
PUAs	r/seduction	13,5
TRP	r/TheRedPill	13,5
MGTOW	r/MGTOW	6,75
MGTOW	r/MGTOW2.0	6,75
Incels	Incels.co	6,75
Incels	r/IncelsWithoutHate	6,75

¹⁶²¹ Only one thread was created in 2021 in the relevant categories, and there were no answers to that thread.

¹⁶²² https://web.archive.org/web/20220110034622/https://theredarchive.com/, archived January 10, 2022.

 $^{^{1623}}$ As above, these are expected number of pages, see footnote n°1620, 484.

Third Random Draw: January-May 2023

For the only forum sampled in 2022 (incels.is) a new random selection was conducted in early 2023, on the period ranging from the last random draw onwards. Since the MGTOW forums and subreddits previously sampled have all ceased existing, the selection was carried out on two other recently active MGTOW forums: mengtow.freeforums.net and goingyourownway.com. Similarly, the relatively active MPUA forum was added to the selection.

No more subreddits were banned during this period, but the Pushshift API started having bugs and missing data. The random selection carried out in that period might therefore be faulty, and it was decided to wait for updates. However, on April 18, 2023, Reddit announced that it would stop allowing third-party API like Pushshift to access its data.¹⁶²⁴ In that context, the potentially faulty draws were included. The r/seduction subreddit also had technical issues which made retrieval impossible and was consequently removed from the draw.

Group	Forum or Subreddit Date of Draw		Content Ranging	to	
			from		
MRAs	r/MensRights	January 11, 2023	January 1, 2022	December 31, 2022	
PUAs	MPUA forum	May 16, 2023	January 1, 2022	May 16, 2023	
TRP	r/TheRedPill	January 11, 2023	January 11, 2022	December 31, 2022	
MGTOW	Goingyourownway.com	January 13, 2023	January 1, 2022	January 13, 2023	
MGTOW	Mengtow.freeforums.net	January 13, 2023	January 1, 2022	January 13, 2023	
Incels	Incels.co	January 11, 2023	January 11, 2022	January 11, 2023	

Table A7.7: Details of Third Random Draw

Below is a summary of the material selected in the third random draw:

Table A7.8: Third Random Draw Selected Materials

Group	Forum or Subreddit	Pages ¹⁶²⁵
MRAs	r/MensRights	13,5
PUAs	MPUA forum	13,5
TRP	r/TheRedPill	13,5
MGTOW	Mengtow.freeforums.net	6,75
MGTOW	Goingyourownway.com	6,75
Incels	Incels.co	13,5

After those three random draws, the Random Sample (RS) section of the corpus was complete. Below is a summary of all the materials in this section:

Table A7.9: Random Sample Total Selected Materials

¹⁶²⁴ <u>https://www.reddit.com/r/modnews/comments/134tjpe/reddit_data_api_update_changes_to_pushshift_access/</u>, archived May 23, 2023.

¹⁶²⁵ As above, these are expected number of pages, see n°1619, 484.

Group	Website/Platform	Nature	Document	Pages ¹⁶²⁶
MRAs	r/MensRights	Subreddit	Randomly sampled posts, with	270
			comments	
PUA	r/seduction	Subreddit	Randomly sampled posts, with	135
			comments	
PUA	PUA Forum	Forum	Randomly sampled threads	121,5
PUA	MPUA Forum	Forum	Randomly sampled threads	13,5
TRP	r/TheRedPill	Subreddit	Randomly sampled posts, with	270
			comments	
MGTOW	MGTOW.com	Forum	Randomly sampled threads	81
MGTOW	r/MGTOW	Subreddit	Randomly sampled posts, with	87,75
			comments	
MGTOW	r/MGTOW2.0	Subreddit	Randomly sampled posts, with	87,75
			comments	
MGTOW	Goingyourownway	Forum	Randomly sampled threads	6,75
MGTOW	Mengtow	Forum	Randomly sampled threads	6,75
Incels	r/braincels	Subreddit	Randomly sampled posts, with	81
			comments	
Incels	Incels.is	Forum	Randomly sampled threads	101,25
Incels	r/IncelsWithoutHate	Subreddit	Randomly sampled posts, with	87,75
			comments	

Appendix 8: Central Content (CC) Section Material Selection

Disclaimer: these justifications were written in 2020 when constituting the corpus. For transparency of the research process, they have been reproduced as they were then.¹⁶²⁷ Since the time of writing, several of the websites under study have disappeared, and several manosphere communities banned from social media platforms. Some of the affirmations contained might have therefore become outdated/inaccurate. However, all the material selected in 2020 was immediately retrieved and stored on a personal secure hard drive, allowing for analysis of the material regardless of platform bans and migrations.

In her MA thesis on the manosphere, Mary Lily decided to focus on Pickup-Artists and Men's Rights Activists. She explains why the websites for her study were selected:

"I chose the four sites that are most frequently visited or most frequently recognized by manosphere participants and observers as the most influential venues [...]. I selected these blogs because they are very much the public face of the community—those with the most popular, most widely known, faces at the helm, those most frequently written about by observers of the manosphere and journalists, and those most commonly mentioned in the news. My belief is that any person (observer or participant) familiar with the manosphere would agree that these four sites are both highly significant presences in themselves, and broadly representative of the manosphere more generally."¹⁶²⁸

These are the exact aims of constituting this Central Content (CC) section of the discourse corpus: studying the most established, popular, and widely circulated texts in the manosphere. Given the diversity of manosphere communities and content, materials for the CC section were selected on a case-by-case basis. Three criteria were used: (1) recommendations from the communities themselves, since they tend to curate their most popular content, and to recommend other popular websites and platforms; (2) content that had previously been studied by other researchers; (3) metrics or "platform signals," such as number of views on YouTube, or upvotes on Reddit, to select the most popular content.¹⁶²⁹ Below is the group-by-group detail of justifications for inclusion in the CC section.

1) Men's Rights Activists

r/MensRights (www.reddit.com/r/MensRights)¹⁶³⁰

With 285,000 members as of November 2020, the Men's Rights subreddit is a contender for most popular platform in the manosphere. At least on Reddit, it is the largest of the 56

¹⁶²⁷ For the rationale of having a bounded corpus, see Chap. III, A, 142. The links had not been archived in 2020, they have therefore been re-archived in 2023 when possible.

¹⁶²⁸ Mary Lily, "'The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere" (Ottawa, University of Ottawa, 2016), <u>http://dx.doi.org/10.20381/ruor-5184</u>, 35.

¹⁶²⁹ For relevance of using those platform signals to study online communities, see Jack LaViolette and Bernie Hogan, "Using Platform Signals for Distinguishing Discourses: The Case of Men's Rights and Men's Liberation on Reddit," *Proceedings of the Thirteenth International AAAI Conference on Web and Social Media (ICWSM 2019)*, 2019, 323–34, <u>https://doi.org/10.1609/icwsm.v13i01.3357</u>.

¹⁶³⁰ <u>https://web.archive.org/web/20231102170328/https://www.reddit.com/r/MensRights/</u>, archived November 2, 2023.

manosphere subreddits studied by Ribeiro et al.¹⁶³¹ The subreddit administrators have singled out important material, with three links for new members to read, entitled "Frequently Asked Questions," "Reference book of Men's Issues," and "On the differences between the Feminist movement and the Men's Rights movement." These are added to the CC section and represent 113 pages.

- A Voice for Men (<u>www.avoiceformen.com</u>)¹⁶³²

This news and advocacy website is one of the undisputed hubs of the manosphere, and especially of the Men's Rights Movements. It has been studied repeatedly by manosphere researchers.¹⁶³³ It is run by Paul Elam. There is nothing to signal quality or popular archived content from the 11 years the site has been running. However, the homepage links to Paul Elam's books on Amazon. His author profile states that he "has just published the first edition of his collected works, 'Men. Women. Relationships. Surviving the Plague of Modern Masculinity"¹⁶³⁴ As a collection of works by one of the manosphere's most vocal activists, this 208-page book is added to the CC section–representing A Voice for Men's worldview.¹⁶³⁵

- JudgyBitch (now at <u>www.judgybitch.wordpress.com</u>)¹⁶³⁶

This is the blog of antifeminist writer Janet Bloomfield. It was selected as one of the key manosphere venues in Mary Lily's study,¹⁶³⁷ and is recommended in the Red Pill subreddit's "sidebar" (discussed below). It features a "Top Posts and Pages" section, whose ten articles, as of November 24, 2020, are added to the CC section. They represent 68 pages.

- Karen Straughan (www.youtube.com/@girlwriteswhat)¹⁶³⁸

Karen Straughan is probably the most vocal female voice in the manosphere. She operates on several platforms and sites, such as A Voice for Men, Twitter, and YouTube. Her YouTube channel has 215,000 subscribers, and her videos total more than 20 million views.¹⁶³⁹ Her five most viewed videos are added to the CC section, representing 264 pages after transcription.¹⁶⁴⁰

¹⁶³¹ Manoel Horta Ribeiro et al., "The Evolution of the Manosphere across the Web," *Proceedings of the International AAAI Conference on Web and Social Media* 15 (2021): 196–207, <u>https://doi.org/10.1609/icwsm.v15i1.18053</u>. It has also been studied by other researchers, e.g., LaViolette and Hogan, "Using Platform Signals for Distinguishing Discourses: The Case of Men's Rights and Men's Liberation on Reddit."

¹⁶³² <u>https://web.archive.org/web/20231116085223/https://avoiceformen.com/</u>, archived November 16, 2023.

¹⁶³³ Lily, "The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere"; Ribeiro et al., "The Evolution of the Manosphere across the Web."

¹⁶³⁴ Amazon.com, Paul Elam, About the Author, <u>https://web.archive.org/web/20231116084735/https://www.amazon.com/stores/author/B07SNTJRGQ/about,</u> archived November 16, 2023.

¹⁶³⁵ Paul Elam, *Men. Women. Relationships: Surviving the Plague of Modern Masculinity* (London: LPS Publishing, 2019).

¹⁶³⁶ <u>https://web.archive.org/web/20231116085559/https://judgybitch.wordpress.com/</u>, archived November 16, 2023.

 ¹⁶³⁷ Lily, "The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere."
 ¹⁶³⁸ https://web.archive.org/web/20231116090537/https://www.youtube.com/@girlwriteswhat, archived November

^{16, 2023.}

¹⁶³⁹ All numbers as of November 25, 2020.

¹⁶⁴⁰ See Appendix 6, 480, for conversion of YouTube content into a pages unit.

- Shrink4Men (https://shrink4men.com/)¹⁶⁴¹

Dr. Tara Palmatier offers her service as a psychologist for male abuse victims. While her blog might not look especially connected to the manosphere at first, it is linked in r/TheRedPill's sidebar. Palmatier co-authored a book with MRA celebrity Paul Elam entitled *Say Goodbye to Crazy: How to Get Rid of His Crazy Ex and Restore Sanity to Your Life*,¹⁶⁴² which clearly cements her manosphere credentials. Since there is no platform signal to identify popular content on her personal website, I add this 262-page book to the CC section.

Warren Farrell

Lastly, while there are a lot of influential books in the MRA canon, none is more revered and circulated than Warren Farrell's *The Myth of Male Power*.¹⁶⁴³ Although it was originally published in 1993, it has enjoyed reeditions and anniversary editions since, and is still one of the best-known books in the manosphere. It is consequently added to the CC section.

2) Pickup-Artists

Based on the Lily's selection of four key manosphere venues, and on Ribeiro et al.'s listing of manosphere forums and subreddits, several PUA websites were selected.¹⁶⁴⁴ These are:

- RooshV (www.rooshv.com)¹⁶⁴⁵

Daryush Valizadeh alias "Roosh V" is one of the most prominent manosphere writers. So much so that both his personal blog RooshV and the website he edited, Return of Kings, are commonly studied, referred to and recommended.¹⁶⁴⁶ Although he has recently converted to Orthodox Christianity and abjured his PUA past, he still writes about masculinity, lifestyle, and culture from a religiously inspired antifeminist standpoint. He published two collections of his best blog posts in book form. The first one, representing his PUA years, is introduced as follows, "This compilation contains 90 of my favorite blog posts, published between August 2006 and January 2013, from a total of 1,742 that I've written. They best represent my ideas, my thoughts, and my interpretation of the world."¹⁶⁴⁷ This 219-page book is therefore added to the CC section as representative of the blog's central content.

- MPUA forum (<u>www.pick-up-artist-forum.com</u>)¹⁶⁴⁸

¹⁶⁴¹ <u>https://web.archive.org/web/20231116091141/https://shrink4men.com/</u>, archived November 16, 2023.

¹⁶⁴² Tara Palmatier and Paul Elam, Say Goodbye to Crazy: How to Get Rid of His Crazy Ex and Restore Sanity to Your Life (SGTC Press, 2015).

¹⁶⁴³ Warren Farrell, The Myth of Male Power: Why Men Are the Disposable Sex (London: Fourth Estate, 1994).

¹⁶⁴⁴ Lily, "The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere"; Ribeiro et al., "The Evolution of the Manosphere across the Web."

¹⁶⁴⁵ <u>https://web.archive.org/web/20231116092711/https://www.rooshv.com/</u>, archived November 16, 2023.

¹⁶⁴⁶ Branthonne and Waldispuehl, "La netnographie pour étudier une communauté masculiniste en ligne : contributions méthodologiques d'un e-terrain"; Lily, "The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere."

 ¹⁶⁴⁷ Roosh V, *The Best of Roosh: Volume One*, (Self-published, 2013), iii.
 ¹⁶⁴⁸ <u>https://web.archive.org/web/20231116093800/https://www.pick-up-artist-forum.com/</u>, archived November 16, 2023.

This forum was created in 2006 and is still accessible today, although it has just been barely active for the past few years. As one of the oldest surviving venues for online PUA discussion, it contains a great wealth of information. One post by moderator "Chief" is pinned as a "global announcement" on every section of the forum and advertises his 30-page "First Date Blueprint" which is added to the corpus. Other key threads are "stickied" in each section, i.e., pinned and singled out for being especially interesting. However, these posts taken together would represent thousands of pages. Therefore, I just add Chief's small guide to the Central Content section, but will make sure to include the MPUA forum in the Random Sample and to browse its archives carefully for the Other Relevant Material section.¹⁶⁴⁹

- The Attraction (www.theattractionforums.com)¹⁶⁵⁰

This is another pickup forum from the 2000s, now defunct. It was operated by the Love Systems company to market their dating advice seminars, books, etc. It featured both a "Classic Writings" and a "Best Of The Forum" section, which are both too dense to be added entirely to the corpus. However, Nick Savoy, the president of Love Systems, wrote a book called *Magic Bullets* which he presents as the sum of the Love Systems method.¹⁶⁵¹ This 199-page book is thus added to the CC section.

- Alpha Game (<u>www.alphagameplan.blogspot.com</u>/)¹⁶⁵²

This PUA blog recommended in r/TheRedPill's sidebar features a "Top Posts" section, which is added to the CC section. It even more interestingly contains a "Foundations" section highlighting four key texts. This section's content is also added to the CC section.

- Château Heartiste (<u>www.heartiste.wordpress.com</u>, now banned from Wordpress and available at <u>https://heartiste.org/</u>)¹⁶⁵³

One of the most prominent PUA sites, Chateau Heartiste was run by James Weidmann alias "Roissy" or "Heartiste". He is famous for writing foundational texts in the PUA community, most notably "The 16 Commandments of Poon." These are mentioned for example in Rollo Tomassi's *The Rational Male* (discussed below), in r/TheRedPill's sidebar, or linked to in the "Foundations" section of the Alpha Game blog. The thoughts and writing exposed in his now defunct blog are gathered in a 473-page volume entitled *On Game*, which is added to the CC section.¹⁶⁵⁴

Erik Von Markovik, alias "Mistery"

¹⁶⁴⁹ The forum conveniently features a search engine, which allows for quick queries with keywords like "evolution," "Darwin," "genes," etc.

¹⁶⁵⁰ The website is now inactive, for a snapshot of the forum when active, see <u>https://web.archive.org/web/20120601005609/http://www.theattractionforums.com/</u>, archived June 1, 2012. ¹⁶⁵¹ Savoy, *Magic Bullets*, version 1.5, (Self-published, 2007).

¹⁶⁵² <u>https://web.archive.org/web/20231111125437/https://alphagameplan.blogspot.com/</u>, archived November 11, 2023.

¹⁶⁵³ <u>https://web.archive.org/web/20231114185346/https://heartiste.org/</u>, archived November 14, 2023.

¹⁶⁵⁴ Heartiste, On Game, (Self-published, 2019).

Any discussion of Pickup-Artists would not be complete without mentioning Neil Strauss's 2005 bestselling *The Game: Infiltrating the Secret Society of Pickup Artists*.¹⁶⁵⁵ In this memoir, the journalist infiltrates the then nascent online PUA community, before becoming one of the most renowned practitioner and theoretician of "the game" himself. In a way, *The Game* is halfway between a primary source (the author being at some point a PUA) and a secondary source (a journalist infiltrating a community). Moreover, it is mostly narrative, and is thus not the best exposition of PUA theory *per se* – although it might be the best illustration of it. Therefore, I will not include Strauss's memoir in my corpus. However, Strauss's book hinges around the teachings of seduction coach Erik Von Markovik alias "Mistery," whose role in building the PUA community was fundamental. As Donna Zuckerberg writes, "von Markovik created much of the terminology and jargon that is still used today,"¹⁶⁵⁶ and his 2005 *Venusian Arts Handbook*¹⁶⁵⁷ "is a foundational text of the modern seduction community."¹⁶⁵⁸ This 209-page book, also known as "the Mistery Method" is thus added to the CC section.

- r/seduction (www.reddit.com/r/seduction/)¹⁶⁵⁹

With 571,000 members, the r/seduction subreddit on "Seduction, Self-Improvement and Pickup" is probably the largest Internet venue for male seduction advice and guidance.¹⁶⁶⁰ Its tone is more respectful of women than that of other PUA and Red Pill sites, reflecting notable differences in ideology and theory, making it a venue for more moderate aspiring PUAs. These are ample enough reasons to include content from r/seduction in the corpus, as both a representative of a distinct trend, and as remarkably popular platform. One of the moderators has assembled a collection of "Beginner guides & essential material."¹⁶⁶¹ After weeding out all the links that do not redirect to posts from the subreddit, there are 117 pages left which are added to the Central Content section.

3) The Red Pill

- r/TheRedPill (www.reddit.com/r/TheRedPill)¹⁶⁶²

To study Red Pill ideology, the inevitable locus is the r/TheRedPill subreddit, created in 2012. It stands as the uncontested center of this movement, and as such has drawn inquiry from

¹⁶⁵⁵ Neil Strauss, *The Game: Penetrating the Secret Society of Pickup Artists* (New York: Regan Books, 2005).

¹⁶⁵⁶ Donna Zuckerberg, Not All Dead White Men: Classics and Misogyny in the Digital Age (Cambridge, London: Harvard University Press, 2018), 99.

 ¹⁶⁵⁷ Mistery, *The Venusian Arts Handbook*, (Self-published, 2007). This book was notably analyzed by psychologists, Nathan Oesch and Igor Miklousic, "The Dating Mind: Evolutionary Psychology and the Emerging Science of Human Courtship," *Evolutionary Psychology* 10, no. 5 (2012): 899–909, <u>https://doi.org/10.1177/147470491201000511</u>.
 ¹⁶⁵⁸ Zuckerberg, 99.

¹⁶⁵⁹ <u>https://web.archive.org/web/20231031103423/https://www.reddit.com/r/seduction/</u>, archived October 31, 2023.

¹⁶⁶⁰ The "dating advice" subreddit boasts more than 2 million members, but it is not solely dedicated to a male audience, <u>https://web.archive.org/web/20231116101314/https://www.reddit.com/r/dating_advice/</u>, archived November 16, 2023. Membership figures as of writing, on December 7, 2020.

 ¹⁶⁶¹ <u>https://www.reddit.com/r/seduction/comments/erjd6f/beginner_material/</u>, consulted December 7, 2020.
 ¹⁶⁶² <u>https://web.archive.org/web/20231114160322/https://www.reddit.com/r/TheRedPill/</u>, archived November 16, 2023.

researchers, 1663 journalists, 1664 and the Reddit platform itself, which has quarantined the whole forum. 1665

Fortunately, the Red Pill community has been curating its most precious texts and theoretical contributions for years. This sum is gathered in what is called the subreddit's "sidebar." As in a course, each new member on the subreddit is expected to do theory reading before he starts engaging by reading the sidebar: "New here? Read the following threads and the Theory Reading below. Read before participating."¹⁶⁶⁶ Since the subreddit was threatened by Reddit administrators, a user compiled and diffused a PDF copy in March 2020, stating that "The sidebar has perhaps the most important information regarding the TheRedPill, and having it backed up is, therefore, very important."¹⁶⁶⁷ This 270 PDF copy of the sidebar is included in the CC section. It is best understood as a collaborative manifesto written over the years; whose legitimacy is cemented by all members of the community. Indeed, no posts initially belong the sidebar; they must earn it. I cannot imagine any better recommendation to add a text in the CC section of the corpus.

On the sidebar, one also finds a list of "links to the manosphere," redirecting to key blogs and websites. Most are Red Pill venues, while some are PUA blogs, and some are MRA sites, which shows how connected the different manosphere groups are. Making this list of eleven websites on the sidebar means getting wide visibility in the manosphere and is a significant mark of recognition. Content from all these blogs and sites are therefore present in the Central Content section of the corpus.¹⁶⁶⁸ Below is a list of the six recommended Red Pill blogs found in the sidebar:

- The Rational Male (<u>www.therationalmale.com/</u>)¹⁶⁶⁹

This is the personal blog of Red Pill celebrity and chief theoretician Rollo Tomassi. His articles and theories are widely revered and discussed in the Red Pill community. Four of his

¹⁶⁶³ Pierce Alexander Dignam and Deana Rohlinger, "Misogynistic Men Online: How the Red Pill Helped Elect Trump," *Signs: Journal of Women in Culture and Society* 44, no. 3 (2019): 589–612, <u>https://doi.org/10.1086/701155</u>; Van Valkenburgh, "Digesting the Red Pill"; Joseph Mountford, "Topic Modeling The Red Pill," *Social Sciences* 7, no. 3 (March 2018): 42–57, <u>https://doi.org/10.3390/socsci7030042</u>.

¹⁶⁶⁴ E.g., Stephen Marche, "Swallowing the Red Pill: A Journey to the Heart of Modern Misogyny," *The Guardian*, April 14, 2016,

https://web.archive.org/web/20231029221623/https://www.theguardian.com/technology/2016/apr/14/the-red-pill-reddit-modern-misogyny-manosphere-men, archived October 29, 2023.

¹⁶⁶⁵ Reddit site rules state, "Quarantined communities will display a warning that requires users to explicitly opt-in to viewing the content. They generate no revenue, do not appear in non-subscription-based feeds (eg Popular), and are not included in search or recommendations," https://web.archive.org/web/20231011071752/https://support.reddithelp.com/hc/en-us/articles/360043069012,

archived October 11, 2023. Note that the r/TheRedPill subreddit had reached more than 230,000 users before the quarantine, which now makes membership numbers unavailable.

¹⁶⁶⁶ <u>https://web.archive.org/web/20231114160322/https://www.reddit.com/r/TheRedPill/</u>, archived November 16, 2023.

¹⁶⁶⁷ <u>http://archive.vn/A1y2j#selection-2359.126-2359.261</u>, archived March 30, 2020.

¹⁶⁶⁸ I.e., Puerarchy, The Rational Male, Illimitable Men, Dalrock, Alpha Game, Chateau Heartiste, The Red Pill Room, Private Man, A Voice for Men, Shrink 4 Men, and Karen Straughan's blog Owning Your Shit.

¹⁶⁶⁹ <u>https://web.archive.org/web/20231113020807/https://therationalmale.com/</u>, archived November 16, 2023.

articles are in fact featured in the sidebar. While his blog features a "The Best of Rational Male" section, this would still represent thousands of pages. However, Tomassi has also written a Rational Male three-book series. In the introduction of his latest volume, *The Rational Male: Positive Masculinity*,¹⁶⁷⁰ he writes about the first book of the series, "I've come to see *The Rational Male* as a core source book of sorts. *The Rational Male* represents a foundation upon which supplemental volumes might follow."¹⁶⁷¹ As a foundation of his ideas, *The Rational Male*, is thus added to the CC section.

- Illimitable Men (www.illimitablemen.com/)¹⁶⁷²

This well-known blog which boasts more than 29,000 followers features a foundational article entitled "The Red Pill Constitution," singled out in its "Archives" section. This 13-page article is added to the CC section.

- The Red Pill Room (www.theredpillroom.blogspot.com/)¹⁶⁷³

This is the blog of pseudonymous writer Ian Ironwood. Ironwood is credited for popularizing the word "manosphere" with his 2012 e-book entitled *The Manosphere: A New Hope For Masculinity*.¹⁶⁷⁴ This e-book is thus added to the CC section.

- Puerarchy (<u>www.puerarchy.com</u>/)¹⁶⁷⁵

This blog, which was mostly active between 2013 and 2015, is now inaccessible. It featured articles from several Red Pill celebrities. With the Internet Archive, I was able to retrieve all the articles posted on it, which only amount to 53 pages. Those are therefore all included in the CC section.

- Dalrock (www.dalrock.wordpress.com/)¹⁶⁷⁶

This personal blog is different from others because of its Christian perspective. As such it is a representative of what Rollo Tomassi calls the "Christo-manosphere." Yet, since it is linked towards in the Red Pill sidebar, and since Tomassi considers Dalrock a "Red Pill colleague" and even "a sort of Red Pill brother",¹⁶⁷⁷ I include it in the Red Pill section. Conveniently for selecting central content, the blog features a "Top Posts" section, representing 22 pages, which are added to the Central Content section.

- The Private Man (<u>www.theprivateman.wordpress.com/</u>)¹⁶⁷⁸

¹⁶⁷⁰ Rollo Tomassi, *The Rational Male: Positive Masculinity* (Reno: Counterflow Media LLC, 2017).

¹⁶⁷¹ Rollo Tomassi, *The Rational Male: Positive Masculinity* (Reno: Counterflow Media LLC, 2017), 14-15.

¹⁶⁷² <u>https://web.archive.org/web/20231114201026/https://illimitablemen.com/</u>, archived November 14, 2023.

¹⁶⁷³ <u>https://web.archive.org/web/20231116104318/https://theredpillroom.blogspot.com/</u>, archived November 16, 2023.

¹⁶⁷⁴ Ian Ironwood, *The Manosphere: A New Hope for Masculinity* (Red Pill Press, 2012).

¹⁶⁷⁵ <u>https://web.archive.org/web/20200223223619/http://www.puerarchy.com/</u>, archived February 23, 2022.

¹⁶⁷⁶ https://archive.is/Wop9t, archived September 7, 2023.

¹⁶⁷⁷ Tomassi, *The Rational Male: Positive Masculinity*, 391.

¹⁶⁷⁸ <u>https://web.archive.org/web/20230601061600/https://theprivateman.wordpress.com/</u>, archived June 1, 2023.

This blog, whose owner is now deceased, used to give dating advice for divorced singles from a Red Pill perspective, while sometimes veering into social commentary. There is no convenient mechanism on the blog to select quality posts. I therefore compiled the ten posts with the most comments and added them to the CC section, as this is the only available metric to estimate centrality.¹⁶⁷⁹

The five other websites recommended by the sidebar - A Voice For Men, JudgyBitch, Shrink4Men, Alpha Game, and Chateau Heartiste - are dealt with in their relevant sections.

- Return of Kings (<u>www.returnofkings.com</u>)¹⁶⁸⁰

If Mary Lily considers this website as a PUA platform, because of its editor Daryush Valizadeh's involvement in pickup-artistry, its scope is much wider than this.¹⁶⁸¹ In fact, articles about seduction are rather the exception than the norm on Return of Kings, which rather focuses on cultural issues from an unapologetically antifeminist and misogynistic standpoint. Most of its content mirrors Red Pill theory and just searching for "red pill" on the site yields hundreds of results. It is thus included in the Red Pill section of the corpus.¹⁶⁸² As for selecting central content, Valizadeh compiled a "Top 35 Most Important Articles on RoK" list in 2015. These articles are thus all added to the corpus.

As there is some space left in the Red Pill Central content section, I also add the all-time most popular post of the Red Pill subreddit, based on number of "upvotes."

4) MGTOW

As explained in the mgtow.com FAQ,¹⁶⁸³ MGTOW do not have the same tendency to curate their texts as The Red Pill. Indeed, this would run contrary to their principle of self-reliance, which entails that even learning must be a personal endeavor:

"It's been suggested on many separate occasions that we have some kind of a "MGTOW 101" as a sort of guided tour of essential materials, and perhaps there COULD be... but there really shouldn't be. And that's why we haven't created one. Yet.

MGTOW doesn't work as a "pitch". It's an individual lifestyle choice. There's being taught. And then there's learning. <u>And male learning follows it's own path. It always has.</u>"¹⁶⁸⁴

 ¹⁶⁷⁹ I removed three posts which were just requesting comments from readers and had no original content.
 ¹⁶⁸⁰ <u>https://web.archive.org/web/20200419132425/https://www.returnofkings.com/</u>, archived April 19, 2020.

¹⁶⁸¹ Lily, "The World Is Not a Safe Place for Men': The Representational Politics of the Manosphere," 48-49. This is also due to the fact that Lily's four-group taxonomy of the manosphere does not include The Red Pill as a distinct group.

¹⁶⁸² Note that the website was put "on hiatus" by its editor in 2018 and has not resumed its activity since. ¹⁶⁸³ FAQ stands for Frequently Asked Questions.

¹⁶⁸⁴Mgtow.com,"FrequentlyAskedQuestions,"https://web.archive.org/web/20190625223915/https://www.mgtow.com/faq/, archived June 25, 2019.Questions,"

Thus, even though the movement is a major part of the manosphere, it proves harder to locate key texts to understand the ideology. Following the nascent research on the MGTOW movement,¹⁶⁸⁵ it appears that two platforms stand out as most significant for the movement:

- Mgtow.com (<u>www.mgtow.com/forums</u>) – 32 771 members.¹⁶⁸⁶

The mgtow.com website has an "articles" section. There are only fourteen articles in this section, which can suggest particular significance to the movement, strict requirements for posting, or just selection by some of the site's administrators. The content of the "articles" section in my MGTOW corpus, on the condition that they be contemporary manosphere primary sources.¹⁶⁸⁷ All combined, except one stump which I excluded and five articles whose original sources are already included in the corpus, these articles make up 25 PDF pages, which I integrate to my corpus. Mgtow.com also features some content apart from the forums: a brief manifesto defining the movement, a post about "the manosphere," a glossary of MGTOW terminology, a FAQ section and a post entitled "The History of M.G.T.O.W | Men Going Their Own Way." these are pinned on the website's architecture and clearly meant to be read by every newcomer, I include them all in the corpus. They are also well-known to the few scholars who study MGTOW.¹⁶⁸⁸

As for a selection of forum posts themselves, the forum features a "Most Popular" section. Inside that section, however, a lot of threads deal with internal politics and conflicts between administrators and forum users, one of them is just "About the MGTOW Forums", and another to "Say Hello to New Members," while the most popular one contains 75 pages of pictures of ageing female celebrities. I select the two threads from that section that most directly pertain to MGTOW ideology: "What are the worst lies a woman ever told you?" and "MGTOW Covert Special Ops: Behind Enemy Lines" where members infiltrate a feminist website.

- r/MGTOW (<u>https://www.reddit.com/r/MGTOW/</u>)¹⁶⁸⁹ – more than 120 000 members.¹⁶⁹⁰

Like r/TheRedPill, the MGTOW subreddit features a sidebar. However, it does not consist solely of user posts but contains links towards Wikipedia pages, book reviews or e-book PDFs by

¹⁶⁸⁵ Callum Jones, Verity Trott, and Scott Wright, "Sluts and Soyboys: MGTOW and the Production of Misogynistic Online Harassment," *New Media & Society* 22, no. 10 (October 1, 2020): 1903–21, <u>https://doi.org/10.1177/1461444819887141</u>; Scott Wright, Verity Trott, and Callum Jones, "'The Pussy Ain't Worth It, Bro': Assessing the Discourse and Structure of MGTOW," *Information, Communication & Society* 23, no. 6 (May 11, 2020): 908–25, <u>https://doi.org/10.1080/1369118X.2020.1751867</u>; Jie Liang Lin, "Antifeminism Online: MGTOW (Men Going Their Own Way).," in *Digital Environments: Ethnographic Perspectives Across Global Online and Offline Spaces*, ed. Urte Undine Frömming et al. (Bielefeld: Transcript Verlag, 2017), 77–96.

¹⁶⁸⁷ One of the articles is composed of excerpts from Schopenhauer and his thoughts on women.

¹⁶⁸⁸ Jones, Trott, and Wright, "Sluts and Soyboys": "Collectively, these pages provided us with additional information about MGTOW's history, ideology, who they are and insight into the language and rhetoric central to their community. These details were used to complement our analysis of the MGTOW key users on Twitter," 7. The 'About' page is also quoted in Lin, "Antifeminism Online: MGTOW (Men Going Their Own Way)," 17.

¹⁶⁸⁹ subreddit This has been quarantined. https://web.archive.org/web/20201105141020/https://www.reddit.com/r/MGTOW/, archived November 5, 2020. For snapshot of subreddit when it а the was still active. see https://web.archive.org/web/20121122062723/http://www.reddit.com/r/MGTOW, archived November 22, 2023.

¹⁶⁹⁰ Since the server was quarantined in January 2020, membership figures are not publicly displayed, so one can only guess from the pre-quarantine count, which was already above 120,000 people.

philosophers Montaigne and Nietzsche. Contrary to the Red Pill's sidebar, this one is not meant as a collective manifesto, but rather as a varied collection of links that might interest forum users. However, I include in my corpus the few posts and articles from the sidebar which are MGTOW primary sources, for their presence in the sidebar is indicative of curation by the moderators. After excluding Wikipedia pages, non-English speaking sources, dead links, and content whose manosphere origin was uncertain, there are 89 PDF pages left, as well as one hour and twenty-two minutes of YouTube videos, for a total of 253 pages. Moreover, I added the 15 most popular posts of all time on the subreddit, based on number of "upvotes," for a total of 415 pages.

- Sandman (<u>www.youtube.com/channel/UCeCV-XNeZIoHiCGfNYCLh9Q</u>)¹⁶⁹¹

In her paper on MGTOW, Lin mentions Youtuber Sandman 23 times, and his video content is a central part of her MGTOW analysis.¹⁶⁹² Moreover, incels.wiki argues that "Sandman is the most popular <u>MGTOW</u> Youtuber. As of 2018 his channel has over 130,000 subscribers. He is perhaps the most popular content creator in the <u>manosphere</u>."¹⁶⁹³ His videos have been viewed more than 93 million times.¹⁶⁹⁴ I thus include in the CC section his five most popular videos, as proposed by YouTube on his channel's homepage.

- No Ma'am (www.no-maam.blogspot.com/)¹⁶⁹⁵

This blog is sometimes credited with having launched the movement back in 2001 and is undoubtedly one of the earliest manosphere blogs.¹⁶⁹⁶ It contains a MGTOW Manifesto, which is included in the CC section as a founding document of the community. As for the ideas expressed anonymously in the blog from 2001 to 2015, they are conveniently condensed in an e-book entitled The Masculine Principle, which is also added to the CC section.¹⁶⁹⁷

- r/MGTOW2.0 (www.reddit.com/r/MGTOW2)¹⁶⁹⁸

Finally, there exists a r/MGTOW2.0 subreddit which is also remarkably popular, with 34,800 members.¹⁶⁹⁹ Contrary to the main MGTOW subreddit, it strives to avoid negativity and host more moderate elements of the community: "this is a positive space for male progress and life outside women; as such, we do not want hateful or negative posts. We do not want to degenerate into a

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Youtube.com,

@SandmanMGTOW,

https://web.archive.org/web/20231116145141/https://www.youtube.com/channel/UCeCV-XNeZIoHiCGfNYCLh9Q, archived November 16, 2023.

¹⁶⁹² Lin, "Antifeminism Online: MGTOW (Men Going Their Own Way)."

¹⁶⁹³ Incels.wiki, "Sandman," <u>https://web.archive.org/web/20231116144708/https://incels.wiki/w/Sandman</u>, archived November 16, 2023.

¹⁶⁹⁴ As of November 23, 2020.

¹⁶⁹⁵ https://web.archive.org/web/20231116150248/https://no-maam.blogspot.com/, archived November 16, 2023.

¹⁶⁹⁶ E.g., Zuckerberg, Not All Dead White Men: Classics and Misogyny in the Digital Age, 29.

¹⁶⁹⁷ It is in fact a blog structured as a book with a glossary, chapters, etc. See <u>https://web.archive.org/web/20231116150405/https://masculineprinciple.blogspot.com/</u>, archived November 16, 2023.

¹⁶⁹⁸ <u>https://web.archive.org/web/20201119192203/https://www.reddit.com/r/MGTOW2/</u>, archived November 19, 2020.

¹⁶⁹⁹ Membership figure as of February 26, 2021.

negativity echo chamber. If you want to vent, be angry, oher subs will cater to that."¹⁷⁰⁰ The five most upvoted posts of the subreddit are added to the corpus, in order to represent this moderate element of MGTOW.¹⁷⁰¹

5) Incels

- Incels.co (www.incels.co)¹⁷⁰²

When conducting a study on incels, most researchers choose to focus on the incel.co forum.¹⁷⁰³ It is the largest and most popular incel forum. Incels.co has a "Must-Read Section." I select the eleven most-viewed threads of this section and add them entirely to the CC section.¹⁷⁰⁴

- Incels.wiki (www.incels.wiki)¹⁷⁰⁵

The incels.co homepage links to an incel "wiki". On incels.wiki, incels describe their worldview in encyclopedic fashion, drawing on the Wikipedia model. There, one finds their key concepts exposed clearly with many footnotes and references. This type of content is exactly what I aim to include in the Central Content part of the corpus. Thus, I include all the « theory » pages of the wiki's homepage in the CC section.¹⁷⁰⁶ This includes the 165-page seminal "The Scientific Blackpill" entry, which lays out Black Pill theory in detail with a bevy of footnoted scientific articles.¹⁷⁰⁷

- Incel.blog (www.incel.blog)¹⁷⁰⁸

The incels.co homepage also links to a blog at which features a "Most Popular" section, whose six posts are added to the CC section.¹⁷⁰⁹

All the statements of this subsection on incel subreddits are made as of December 11, 2020. According to Ribeiro et al.'s data, the four most popular incels subreddits of all time are the following.¹⁷¹⁰

¹⁷⁰⁰ R/MGTOW2.0, <u>https://web.archive.org/web/20201119192203/https://www.reddit.com/r/MGTOW2/</u>, archived November 19, 2020.

¹⁷⁰¹ Five most upvoted posts as of February 26, 2021.

¹⁷⁰² <u>https://web.archive.org/web/20201112003914/https://incels.co/</u>, archived November 12, 2020.

¹⁷⁰³ Jaki et al., "Online Hatred of Women in the Incels.Me Forum"; Stephane Baele, Lewys Brace, and Travis Coan, "From 'Incel' to 'Saint': Analyzing the Violent Worldview behind the 2018 Toronto Attack," *Terrorism and Political Violence* 33, no. 8 (2019): 1667–91, <u>https://doi.org/10.1080/09546553.2019.1638256</u>.

 $^{^{1704}}$ I initially chose ten but two were tied with the same number of views (32,000 as of December 14, 2020) so I included them both.

¹⁷⁰⁵ https://web.archive.org/web/20230307123916/https://incels.wiki/w/Main_Page, archived March 7, 2023.

¹⁷⁰⁶ As of November 24, 2020.

¹⁷⁰⁷ See <u>https://web.archive.org/web/20201112014635/https://incels.wiki/w/Scientific_Blackpill</u>, archived November 12, 2020.

¹⁷⁰⁸ https://web.archive.org/web/20211211041557/https://incel.blog/, archived November 12, 2021.

¹⁷⁰⁹ Six "Most Popular" posts as of November 25, 2020.

¹⁷¹⁰ Ribeiro et al., "The Evolution of the Manosphere across the Web." Their dataset is available at: <u>https://web.archive.org/web/20230410122903/https://docs.google.com/spreadsheets/d/1oKRyLGyVhZKzE680i3Erv</u> <u>d KcCsbL8c-sV5bMeAGoRk/edit#gid=1025927260</u>, archived April 10, 2023. However, this file mistakenly confused

the "number of users" column with the "number of posts" column, which the author kindly confirmed via email.

- r/incels (banned in 2017): (<u>www.reddit.com/r/incels</u>)¹⁷¹¹

The Pushshift dataset enables to retrieve comments and submissions from this banned subreddit. It contains all Reddit content since 2015.¹⁷¹² However, it is not convenient for reading posts and comments, but rather suited to mass data analysis, or precise keyword searches. I still use it to retrieve the 100 most popular original posts of 2016 and 2017, based on number of upvotes.¹⁷¹³ Those are added to the CC section.

- r/braincels (banned in 2019): (www.reddit.com/r/braincels)¹⁷¹⁴

Someone compiled an archive to backup all of this subreddit "from its inception up to the quarantine" and posted it on another incel subreddit.¹⁷¹⁵ This is an invaluable source of information since content from r/braincels is now unavailable due to the ban. Moreover, the Internet Archive's archiving of these platforms is irregular and the Pushshift dataset inconvenient to browse. I will thus use this user-made backup archive. To select central content, I select the top two posts for each of the sixteen months of the archive, based on number of upvotes, for a total of 463 pages.¹⁷¹⁶

r/ForeverAlone (active, 148,000 users): (www.reddit.com/r/ForeverAlone/)¹⁷¹⁷

On this subreddit, users share their experience of unwanted celibacy. It is unclear whether this should be considered as an incel forum. Indeed, the subreddit rule n°4 "No incel speak or references" states that "This is not an incel sub, any incel references, slang, or inference will be deemed hate speech and met with a ban."¹⁷¹⁸ Moreover, the incels.wiki article about r/ForeverAlone states that "some subsets of the incelosphere refer to it as a semi-incelospherian forum."¹⁷¹⁹ It then adds that "it is dual-gendered" and "somewhat pro-feminist."¹⁷²⁰ As a dual-gendered and feminist-friendly venue, which also clearly refuses to be associated with the "incel" label, I decide not to include r/ForeverAlone in my manosphere corpus.

r/IncelsWithoutHate (active, 29 200 users): (<u>www.reddit.com/r/IncelsWithoutHate/</u>)¹⁷²¹

¹⁷¹¹ For a snapshot of the subreddit when it was active, see <u>https://web.archive.org/web/20170720054700/https://www.reddit.com/r/incels/</u>, archived July 20, 2017. ¹⁷¹² Jason Baumgartner et al., "The Pushshift Reddit Dataset," *Proceedings of the Fourteenth International AAAI*

Conference on Web and Social Media (ICWSM 2020), 2020, 830–39, https://doi.org/10.1609/icwsm.v14i1.7347.

¹⁷¹³ Unfortunately, posts can only be retrieved without their comments. According to Incels.wiki, although r/incels was created in 2013, it remained dormant until activity started in 2016. <u>https://incels.wiki/w/R/incels</u>, consulted December 18, 2020.

¹⁷¹⁴ For a snapshot of the subreddit when it was active, see <u>https://web.archive.org/web/20180331171151/https://www.reddit.com/r/Braincels/</u>, archived March 31, 2018. ¹⁷¹⁵<u>https://web.archive.org/web/20201210124552/https://www.reddit.com/r/IncelsWithoutHate/comments/dhvadv/br</u>aincels archive itt/, archived December 10, 2020.

¹⁷¹⁶ Excluding posts made incomplete during the archival process.

¹⁷¹⁷ <u>https://web.archive.org/web/20231004184557/https://www.reddit.com/r/ForeverAlone/</u>, archived October 4, 2023.

¹⁷¹⁸ Ibid.

¹⁷¹⁹ Incels.wiki, "ForeverAlone," <u>https://web.archive.org/web/20201028024202/https://incels.wiki/w/ForeverAlone</u>, archived October 28, 2020.

¹⁷²⁰ Ibid.

https://web.archive.org/web/20201129220431/https://www.reddit.com/r/incelswithouthate, archived November 29, 2020.

This is the largest remaining self-described incel platform on Reddit. As its name indicates, it tries to avoid the fate of its forebears by avoiding hateful speech. According to incels.wiki, it "has been growing recently due to the banning of smaller and less prominent incel splinter subreddits and has become a home for refugees that wish to stay on Reddit."¹⁷²² In fact, it has quadrupled its user base since Ribeiro et al. measured it in April 2019.¹⁷²³ As a moderated anti-hate platform, it will bring a much-needed counterpoint in my incel corpus. Its 15 most popular posts as of December 15, 2020, are added to the CC section.¹⁷²⁴

- Elliot Rodger: My Twisted World

Before committing the infamous Isla Vista killings and murdering six people, Elliot Rodger emailed an autobiographical narrative entitled *My Twisted World* to his acquaintances and family, which became famous around the Internet as his "manifesto."¹⁷²⁵ Based on browsing forums, I assume that many if not most incels are familiar with this text. For example, a forum poll entitled "Have you read 'My Twisted World'?" has 68.8% of respondents answering positively, plus 18.8% stating that they have not read it yet but intend to do so.¹⁷²⁶ It is thus added to the CC section of the corpus.

1722

Incels.wiki,

"Incelswithouthate,"

https://web.archive.org/web/20210116142810/https://incels.wiki/w/Incels.withouthate, archived January 16, 2021. ¹⁷²³ Membership figure as of December 11, 2020, as compared to Ribeiro et al.'s data, available at: https://web.archive.org/web/20230410122903/https://docs.google.com/spreadsheets/d/1oKRyLGyVhZKzE680i3Erv d_KcCsbL8c-sV5bMeAGoRk/edit#gid=1025927260, archived April 10, 2023.

¹⁷²⁴ The second most popular post's comments are not accessible, nor are they present on the Internet Archive, so this post ("We outlasted IncelTears") was removed from the sample.

¹⁷²⁵ A PDF of the document has been hosted online ever since, Eliott Rodger, *My Twisted World*, 2014, <u>https://web.archive.org/web/20231015204831/https://www.documentcloud.org/documents/1173808-elliot-rodger-</u> manifesto, archived October 15, 2023.

¹⁷²⁶ Blackpill Club, "Have you read 'My Twisted World'?," November 24, 2020, <u>https://web.archive.org/web/20201127104116/https://blackpill.club/blackpill/index.php?threads/have-you-read-my-</u> <u>twisted-world.2701/</u>, Archived November 27, 2020. Note that the number of respondents for this poll is very low.

Section	Group	Source/Author	Document	Nature	Pages 1727
Central Content	MRAs	Paul Elam	Men. Women. Relationships.	Book/E-Book	208
(CC)			Surviving the Plague of		
			Modern Masculinity		
CC	MRAs	Judgy Bitch	"Top Posts and Pages"	Blog Post	75
CC	MRAs	Karen Straughan	Five most popular videos	YouTube Video	264
CC	MRAs	Paul Elam, Tara Palmatier	Say Goodbye to Crazy: How to Get Rid of His Crazy Ex and Restore Sanity to Your Life	Book/E-Book	262
CC	MRAs	r/MensRights	Content linked in the subreddit's sidebar	Web Article	113
CC	MRAs	Warren Farrell	The Myth of Male Power	Book/E-Book	331
Random Sample (RS)	MRAs	r/MensRights	Randomly sampled posts, with comments	Reddit Post	277
Other Related Material (ORM)	MRAs	Angry Harry	Relevant Selection	Blog Post	68
ORM	MRAs	A Voice For Men	Relevant Selection	Web Article	145
ORM	MRAs	The American Gentleman	Relevant Selection	Blog Post	4
ORM	MRAs	Roy Den Hollander	Relevant Selection	Mixed ¹⁷²⁸	52
CC	PUA	Roosh V	The Best of Roosh: Volume One	Book/E-Book	219
CC	PUA	Michael Chief	First Date Blueprint	Book/E-Book	30
CC	PUA	Nick Savoy	Magic Bullets	Book/E-Book	199
CC	PUA	Alpha Game	"Top Posts" section, and "Foundations" section	Web Article	22
CC	PUA	Heartiste	On Game	Book/E-Book	473
CC	PUA	Mistery	The Venusian Arts Handbook	Book/E-Book	209
CC	PUA	r/seduction	"Essential guides and beginner material"	Reddit Post	117 ¹⁷²⁹

¹⁷²⁷ Number of pages after the original material was retrieved, archived, and video content transcribed, into PDF/Word form, see Appendix 6, 480 for conversion into pages. ¹⁷²⁸ 9 pages of web articles, and 43 of excerpts from his online autobiography: *Stupid Frigging Fool*.

¹⁷²⁹ 106 of which include only reddit original posts (no comments), and 11 of which are comprised of reddit posts with their subsequent conversation.

RS RS	PUA	r/seduction	Randomly sampled posts,	Reddit Post	134
RS			with comments		134
	PUA	PUA Forum	Randomly sampled threads	Forum	120
				Thread	
RS	PUA	MPUA Forum	Randomly sampled threads	Forum	12
				Thread	
ORM	PUA	r/seduction	Relevant Selection	Reddit Post	105
ORM	PUA	The Attraction Forums	Relevant Selection	Forum Thread	6
ORM	PUA	MPUA Forum	Relevant Selection	Forum	20
				Thread	
ORM	PUA	Roosh V	Relevant Selection	Mixed ¹⁷³⁰	139
CC	TRP	r/TheRedPill	The Red Pill Sidebar	Web Article	248
CC	TRP	Rollo Tomassi	The Rational Male	Book/E-Book	286
CC	TRP	Illimitable Men	"The Red Pill Constitution".	Web Article	13
CC	TRP	Ian Ironwood	The Manosphere: A New	Book/E-Book	282
			Hope for Masculinity		
CC	TRP	Puerarchy	All articles from the	Web Article	53
			website's history		
CC	TRP	Dalrock	"Top Posts" section	Blog Post	22
CC	TRP	The Private Man	Top 10 most popular posts of all time	Blog Post	15
CC	TRP	Return of Kings	"Top 35 Most Important Articles on RoK"	Web Article	142
CC	TRP	r/TheRedPill	Most popular post of the subreddit, with comments	Reddit Post	143
RS	TRP	r/TheRedPill	Randomly sampled posts, with comments	Reddit Post	279
ORM	TRP	r/TheRedPill	Relevant Selection	Reddit Post	151
ORM	TRP	TRP.RED	Relevant Selection	Web Article	38
ORM	TRP	The Rational Male	Relevant Selection	Blog Post	6
ORM	TRP	The Private Man	Relevant Selection	Blog Post	13
ORM	TRP	Gynocentrism.com	Relevant Selection	Web Article	6
ORM	TRP	Return of Kings	Relevant Selection	Web Article	59

¹⁷³⁰ 136 pages of blog posts, 1 page of interview (web article), and 2 pages of excerpts from one his book: *The Best of Roosh: Volume 2*.

Section	Group	Source/Author	Document	Nature	Pages
CC	MGTOW	r/MGTOW	All the MGTOW content	Mixed ¹⁷³¹	253
			from the subreddit sidebar		
CC M	MGTOW	r/MGTOW	Top 15 popular posts of all	Reddit Post	415
			time, with comments		
CC	MGTOW	MGTOW.com	All articles from the articles	Web Article	25
			section		
CC	MGTOW	MGTOW.com	Pinned pages	Mixed ¹⁷³²	72
CC	MGTOW	MGTOW.com	Two threads from the "Most	Forum	132
			Popular" section	Thread	
CC	MGTOW	SandMan	Five most popular videos	YouTube	110
				Video	
CC	MGTOW	Anonymous	"The MGTOW manifesto"	Web Article	3
CC	MGTOW	r/MGTOW.2.0	Top 5 popular posts of all	Reddit Post	82
			time, with comments		
CC	MGTOW	Anonymous	The Masculine Principle	Book/E-Book	198
RS	MGTOW	MGTOW.com	Randomly sampled threads	Forum	78
				Thread	
RS	MGTOW	r/MGTOW	Randomly sampled posts,	Reddit Post	92
			with comments		
RS	MGTOW	r/MGTOW2.0	Randomly sampled posts,	Reddit Post	91
			with comments		
RS	MGTOW	Goingyourownway	Randomly sampled threads	Forum	6
				Thread	
RS	MGTOW	Mengtow	Randomly sampled threads	Forum	6
				Thread	
ORM	MGTOW	CS MGTOW	Relevant Selection	YouTube	190
				Video	
ORM M	MGTOW	Goingyourownway	Relevant Selection	Forum	48
				Thread	
ORM	MGTOW	Mengtow	Relevant Selection	Forum	21
				Thread	
ORM	MGTOW	No Ma'am	Relevant Selection	Web Article	11
CC	Incels	Incels.is	"Must-Read Section", eleven	Forum	204
			most popular threads	Thread	

¹⁷³¹ 89 pages of web articles, and 82 minutes of YouTube videos.
¹⁷³² 42 pages of web articles, and 15 minutes of YouTube video.

Section	Group	Source/Author	Document	Nature	Pages
CC	Incels	Incels.wiki	All "Theory" pages from the	Encyclopedia	213
			homepage	Entry	
CC	Incels	Incels.blog	"Most Popular" articles	Blog Post	24
CC	Incels	r/incels	100 most popular posts from	Reddit Post	64
			2016 and from 2017, without		
			comments		
CC	Incels	r/braincels	Two most popular posts for	Reddit Post	463
			each month of the subreddit's		
			history, with comments		
CC	Incels	r/IncelsWithoutHate	15 most popular posts of all	Reddit Post	150
			time, with comments		
CC	Incels	Elliot Rodger	My Twisted World	Book/E-Book	137
RS	Incels	r/braincels	Randomly sampled posts,	Reddit Post	81
			with comments		
RS	Incels	Incels.is	Randomly sampled threads	Forum	99
				Thread	
RS	Incels	r/IncelsWithoutHate	Randomly sampled posts,	Reddit Post	90
			with comments		
ORM	Incels	Incels.wiki	Relevant Selection	Encyclopedia	96
				Entry	
ORM	Incels	Blackpillclub	Relevant Selection	Forum	48
				Thread	
ORM	Incels	Incels.net	Relevant Selection	Forum	18
				Thread	
ORM	Incels	Incels.is	Relevant Selection	Forum	91
				Thread	
ORM	Incels	Non-cucks-united	Relevant Selection	Forum	3
				Thread	
ORM	Incels	r/IncelsWithoutHate	Relevant Selection	Reddit Post	10
ORM	Incels	r/braincel	Relevant Selection	Reddit Post	1
ORM	Incels	Incels.wiki Twitter	Relevant Selection	Tweet	2
ORM	Incels	Incels.is Twitter	Relevant Selection	Tweet	1

Appendix 10: Template for Corpus Document Classification and Analysis

Document Information				
Reference:				
Title:				
Author:				
Date:				
Nature: Choisissez un élément.				
Length (in pages):				
Group: Choisissez un élément.				
Link:				
Quotes (with page number)				
References to evolution:				
References to genes:				
References to animals:				
References to the brain and hormones:				
Sex differences:				
Other references to science, life sciences, rationality, etc.:				
Sources of the scientific knowledge/information about its propagation:				
In-group/Out-group controversies:				
General Information				
Key information about the group:				
General manosphere information:				
Other/Miscellaneous:				
Summary/Analysis				
Interest: Choisissez un élément.				
Summary:				
Analysis:				
Other Potential Data				

Appendix 11: Word Count Study of Deterministic Vocabulary

As discussed in Chapter IV, manosphere science is rife with certain images that evoke behavioral inflexibility and an ultra-deterministic view of instincts. The terms identified are "hardwired," "wired," and "imperative" (used as a noun). In Table A11.1 below is the group-by-group detail of occurrences of these terms in the manosphere corpus.¹⁷³³ For each one, I determined whether the term was used to discuss male or female behavior.

Term	"Har	dwired" and	l variants		"Wired"	,		"Imperativ	ve"
Context of use	Men	Women	Generic/ Both	Men	Women	Generic/ Both	Men	Women	Generic/ Both
MRAs	1	1	5	2	0	0	0	0	4
PUAs	1	5	3	2	2	2	3	0	1
TRP	0	3	7	1	4	2	19	163	17
MGTOW	3	10	8	2	0	1	2	2	12
Incels	2	8	6	2	5	0	0	0	4
TOTALS	7	27	29	9	11	5	24	165	38

Table A11.1: Ultra-Deterministic Word Counts in the Manosphere Discourse Corpus

Although rarer, brain metaphors are also used to depict evolved behavioral mechanisms. Their occurrences and contexts of use are presented in Table A11.2 below:

Term		Lizard Br	ain		ndbrain (one rained" incl		-	ian Brain (c brain" inclu	-
Context of use	Men	Women	Generic/ Both	Men	Women	Generic/ Both	Men	Women	Generic/ Both
MRAs	0	0	0	0	0	0	1	0	1
PUAs	2	3	0	2	5	1	3	1	1
TRP	0	1	0	0	6	0	0	0	0
MGTOW	0	0	0	0	0	0	0	0	2
Incels	1	1	1	1	1	0	1	0	0
TOTALS	3	5	1	3	12	1	5	1	4

Table A11.2: Brain Metaphor Counts in the Manosphere Discourse Corpus

¹⁷³³ Due to frequent bans, platform migrations, and archival issues, all content from the manosphere corpus's Random Sample section could not be saved in a format which could be easily parsed. This section was thus excluded from this analysis, which only concerns the Central Content and Other Related Material sections.

Appendix 12: Manosphere Survey Questionnaire

Start of Block: Informed Consent

Online Men's Group Life Sciences Test Informed Consent

You are being invited to participate in a research study titled *Online Men's Group Life Sciences Test*. This study is being done by researchers from the University of Kent (UK).

The purpose of this research study is to assess the level of scientific knowledge of several online men's groups and the sources of their knowledge. It is a 20-question science quiz designed by academics in the fields of genetics, endocrinology, biology, and behavioral sciences, which will take you approximately 20 minutes to complete. **You will be given your score** immediately after the test.

You will also be asked some information about your age, sex, education, and favorite scientific content.

Your participation in this study is **anonymous**, entirely voluntary and you are free to discontinue participation at any time. You do not have to answer any questions you do not want to. **Please only take part if you are over 18.** You can only take the survey once.

We ask you to please refrain from consulting outside resources to answer the quiz.

Aggregated results may be disseminated in standard academic outlets. You will not be identifiable in any report or publication.

For additional information about the study, feel free to contact us at: contactsciencestudy@kent.ac.uk

By starting this survey, you are consenting to participate in this study.

Data Protection Privacy Notice: We Are Protecting your Data!

The data controller for this project will be The University of Kent (registration number Z6847902).

Some answers collected in the questionnaire are considered to be personal data. This is the case for answers about age, level of education, and other personal matters.

We rely on the following lawful basis as allowed by the UK GDPR for processing your personal data as this is necessary for the performance of a task carried out in the public interest (Article 6(1)(e)). The public task being scientific research purposes.

Your personal data will be processed so long as it is required for the research project - which should not exceed three years. It will be **anonymous and does not comprise identifiable data**. Your IP address and location data are not collected by the questionnaire software. The processing will consist of statistical analysis of the aggregated questionnaire responses.

If you are concerned about how your personal data is being processed, please contact the University's Data Protection : <u>dataprotection@kent.ac.uk</u>.

End of Block: Informed Consent

Start of Block: Sociodemographics

To start with, just a few questions about yourself and your education. This <u>anonymous</u> step is needed to conduct statistical analysis.

What is your sex? (Sex)

O Male

O Female

What is your age? (Age)

Do you think of yourself as belonging to one of these communities? (Group)

O Incels

O Men's Rights' Activists (MI)	RAs)
--------------------------------	------

○ MGTOW

O Pickup Artists (or the seduction community)

O Pro-feminist men (such as NOMAS or Men's Lib)

O The Red Pill

O Other - (you can specify)

 \bigcirc I do not identify with any

What is your highest level of education? (Edu)

- O Some high school
- High school diploma or equivalent
- Some undergraduate education (college or university)
- Trade/Technival/Vocational training
- O Undergraduate college/university degree
- Some postgraduate education
- O Completed postgraduate education (masters or doctorate)

How many college/university science courses did you complete? (CollSci) Such as physics, mathematics, biology, chemistry, etc.

○ None

○ 1-3 courses

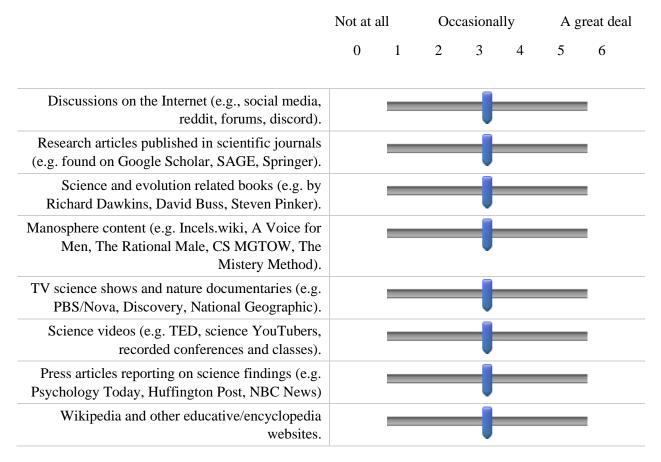
 \bigcirc 4 or more courses

End of Block: Sociodemographics

Start of Block: Online Circulation of Science

Before starting the quiz, we would be interested to know more about the way you discover and share scientific knowledge.

Do you learn about science through: (Source)



Was there any resource (book, YouTube video, article, course, etc.) on evolution, biology, and natural sciences that was particularly instructional for you? (BestSource)

• Yes. Please specify, try to be as precise as you can (3 items maximum).

 \bigcirc No/I cannot think of any.

How often do you engage in the following activities: (OnlineActivity)

	Never		Sometimes		s	A great deal	
	0	1	2	3	4	5	6
Sharing scientific content on social media, forums, reddit.	-					_	
Citing scientific content and data to prove your points.	-						
Analysis and discussion of scientific theories and concepts.	-						

What do you think about the following statement: "Human beings, as we know them, developed from earlier species of animals." (EvoAccept)

O Definitely false

O Probably false

O Probably true

- O Definitely true
- O Don't know/Not sure

End of Block: Online Circulation of Science

Start of Block: Intro text

And now, let the science quiz begin! You will be asked twenty multiple-choice questions on genes, hormones, natural selection, evolutionary psychology and general scientific reasoning. For each of these, there is only <u>ONE CORRECT ANSWER</u>. You will be given your score at the end. End of Block: Intro text

Start of Block: Genetics and Endocrinology

Genetics and Endocrinology

Just a few questions on genes and hormones!Whatis the relationship among genes, DNA, and chromosomes? (Gen1)What

• Genes are composed of DNA and lie within chromosomes.

• Genes are separate entities from either DNA or chromosomes.

• Genes are found only in chromosomes and not DNA.

• Chromosomes are composed of genes but not DNA.

Which of the following is a characteristic of mutations in DNA? (Gen2)

O They are usually expressed and result in positive changes for the individual.

O Those that occur in the body cells of a parent are usually passed on to their children.

- O They usually occur at very high rates in most genes.
- O They result in different versions of a gene within the population.

Regarding complex traits such as IQ, lung cancer, prostate cancer, etc, how do geneticists describe the contributions of ones' genetic makeup and the environment? (Gen3)

• Each person inherits a genetic potential; how much of that potential is realized depends upon the environment.

• Geneticists typically accept that most traits are determined heavily by genetics with the environment having little effect on complex traits.

• The environment plays a major role in determining complex traits, with genetics playing a relatively minor role.

• Genetic differences among humans are so minor that essentially all variations observed among individuals are due to the environment in which they were reared.

Hormones are secreted: (Horm1)

 \bigcirc by every cell in the body.

- \bigcirc into the circulatory system by glands.
- \bigcirc into the synaptic cleft (between neurons) by ducts.
- only during prenatal development.

Which of the following is correct regarding testosterone: (Horm2)

• Male fetuses secrete testosterone in the womb, causing them to develop penises and testes, while female fetuses secrete estrogens, causing them to develop vaginas and ovaries.

• Testosterone is not found in women.

• Regardless of environmental conditions, injecting testosterone in men causes them to behave increasingly dominant and aggressive.

O Testosterone is found in both male and female birds, fish, and mammals.

End of Block: Genetics and Endocrinology

Start of Block: General Scientific Literacy

General Science Identifying valid scientific data, arguments, sources, and uses of research.

Which of the following is <u>NOT</u> an example of an appropriate use of science? (Lit1)

• A group of scientists who were asked to review grant proposals based their funding recommendations on the researcher's experience, project plans, and preliminary data from the research proposals submitted.

Scientists are selected to help conduct a government-sponsored research study on global climate change based on their political beliefs.

• The Fish & Wildlife Service reviews its list of protected and endangered species in response to new research findings.

• The Senate stops funding a widely used sex-education program after studies show limited effectiveness of the program.

Why do researchers use statistics to draw conclusions about their data? (Lit2)

O Researchers usually collect data (information) about everyone/everything in the population.

 \bigcirc The public is easily persuaded by numbers and statistics.

O The true answers to researchers' questions can only be revealed through statistical analyses.

O Researchers are making inferences about a population using estimates from a smaller sample.

Creators of the Shake Weight, a moving dumbbell, claim that their product can produce "incredible strength!" Which of the additional information below would provide the <u>STRONGEST EVIDENCE</u> supporting the effectiveness of the Shake Weight for increasing muscle strength? (Lit3)

Survey data indicates that on average, users of the Shake Weight report working out with the product 6 days per week, whereas users of standard dumbbells report working out 3 days per week.

Compared to a resting state, users of the Shake Weight had a 300% increase in blood flow to their muscles when using the product.

Survey data indicates that users of the Shake Weight reported significantly greater muscle tone compared to users of standard dumbbells.

Compared to users of standard dumbbells, users of the Shake Weight were able to lift weights that were significantly heavier at the end of an 8-week trial.

Which of the following research studies is <u>LEAST LIKELY</u> to contain a confounding factor (variable that provides an alternative explanation for results) in its design? (Lit4)

Researchers randomly assign participants to experimental and control groups. Females make up
 35% of the experimental group and 75% of the control group.

• To explore trends in the spiritual/religious beliefs of students attending U.S. universities, researchers survey a random selection of 500 freshmen at a small private university in the South.

• To evaluate the effect of a new diet program, researchers compare weight loss between participants randomly assigned to treatment (diet) and control (no diet) groups, while controlling for average daily exercise and pre-diet weight.

• Researchers tested the effectiveness of a new tree fertilizer on 10,000 saplings. Saplings in the control group (no fertilizer) were tested in the fall, whereas the treatment group (fertilizer) were tested the following spring.

The <u>MOST IMPORTANT</u> factor influencing you to categorize a research article as trustworthy science is: (Lit5)

O The presence of data or graphs.

O The article was evaluated by unbiased third-party experts.

 \bigcirc The reputation of the researchers.

 \bigcirc The publisher of the article.

End of Block: General Scientific Literacy

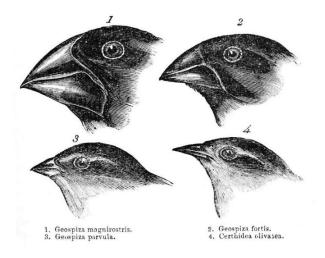
Start of Block: Evolutionary Biology

Evolutionary Biology

How well do you understand natural selection?

Scientists have long believed that the 14 species of finches on the Galapagos Islands evolved from a single species of finch that migrated to the islands one to five million years ago. Different species live

on different islands. One of the major changes in the finches is their beak sizes and shapes, as shown in this famous sketch by Charles Darwin.



Fitness is a term often used by biologists to explain the evolutionary success of certain organisms. Which feature would a biologist consider to be most important in determining which finches in a population were the ''most fit''? (EvoBio1)

O Large body size and ability to fly away quickly away from predators.

• Excellent ability to compete for food.

 \bigcirc High number of offspring that survived to reproductive age.

O High number of matings with many different females.

How did the different beak types first arise in the Galapagos finches? (EvoBio2)

The changes in the finches' beak size and shape occurred because of their need to be able to eat different types of food to survive.

Changes in the finches' beaks occurred by chance, and when there was a good match between beak structure and available food, those birds had more offspring.

The changes in the finches' beaks occurred because the environment induced the desired genetic changes.

• The finches' beaks changed a little bit in size and shape with each successive generation, some getting larger and some getting smaller.

In the finch population, what are the primary changes that occur gradually over time? (EvoBio3)

- O The traits of each finch within a population gradually change.
- The proportion of finches having different traits within a population change.
- O Successful behaviors learned by finches are passed on to offspring.
- \bigcirc Mutations occur to meet the needs of the finches as the environment changes.

Are you familiar with Richard Dawkins's "Selfish Gene" idea?

- I've never heard about it.
- O Somewhat familiar.
- O I know it well.

Which of the following best describes Richard Dawkins's "Selfish Gene" idea? (EvoBio4)

• Genes code for behavior that tend to make organisms selfish. Those organisms prioritize their own survival and reproduction to ensure replication.

Organisms possess genes that proved more successful than other versions (alleles) in replicating over time.

O Behaving in a selfish way is the best way to replicate one's genes.

• Natural selection can be understood as a struggle between the selfish interest of genes, and the collective survival interests of species.

Which of the following is correct regarding male mammals? (EvoBio5)

Since males usually invest less in offspring than females, there tends to be more competition among them for reproductive access to females.

O In all mammalian orders, adult male size is on average equal to or larger than female size (Scientists have organized mammals into about 26 orders based on characteristics and structure).

Since species could continue propagating with fewer males, it remains an evolutionary puzzle why there is an equal proportion of males and females.

O Since men are male mammals, they have a lower reproductive value than women and are consequently perceived as more disposable across cultures.

End of Block: Evolutionary Biology

Start of Block: EP Questions

Evolutionary Psychology

Please choose the <u>one answer</u> that best reflects how an evolutionary psychologist would think about each question. Read each option <u>carefully</u>.

Quick question before starting. Are you familiar with Evolutionary Psychology?

○ I've never heard about it.

○ I know some elements of it.

○ I know the basic concepts and principles.

O I know it well.

Which of the following is correct regarding evolved heterosexual mate preferences? (EP1)

• Women tend to find taller men more attractive, which is likely to be the result of generations of their female ancestors having the same preferences.

O There are no consistent worldwide patterns or tendencies in male or female mate preferences.

• Men look for a healthy mate to bear children and propagate their genes, which is why they tend to select women with long hair, because hair length is correlated with health.

O By highlighting the mate preferences that have been selected over time, evolutionary science can help people know what to look for in a mate.

Which of the following is correct regarding infidelity or "extra-pair mating"? (EP2)

C Like other male mammals, men have an unconscious biological imperative to reproduce as much as possible, making extra-pair mating an evolutionary advantageous behavior.

• Seeking extra-pair mating has little fitness benefit for women, because their propension to spread genes is limited by their childbearing ability.

• Given the large potential reproductive advantages of short-term mating for men, selection has probably favored mechanisms to pursue this behavior in the right circumstances.

O Studies have repeatedly demonstrated a sharp increase in seeking extra-pair mating for women who are in the peak fertility phase of their ovulatory cycle.

Which of these criticisms of evolutionary psychology is valid? (EP3)

• People behave in ways that are clearly not adaptive, they use contraception and refrain from having many children, showing that reproductive interest cannot predict behavior.

As long as the neuronal and genetic bases for psychological adaptations are not isolated, evolutionary psychology remains speculative.

Modern humans have modified their environment to a point where natural selection does not operate: they care for they sick, poor and old, and have enough resources for everyone. Thus, evolutionary psychology is not applicable to them.

O Innate factors have a very limited influence on behavior in a complex species such as ours. Focusing on cultural forces is the only way to reliably explain human behavior.

Which of the following is correct regarding sex differences? (EP4)

Since men were historically in charge of public affairs and women of domestic affairs, the moral sense of women is less sensitive to moral norms and the common good.

• Men and women have evolved some different physical and behavioral traits to face their respective reproduction and survival challenges.

Over evolutionary history, human groups which developed a sexual division of labor prospered and those that did not failed, explaining how this would have spread to the whole population.

Since evolutionary psychology reveals the innate propensities of each sex, it can show men and women which activities are personally more suited for them.

In a study led by evolutionary psychologist David Buss, people from 37 cultures across the world were asked to rank the traits they found desirable in a mate. Women ranked "Good Earning Capacity" higher than men, while men placed "Physically Attractive" higher than women. The authors write: "*These were the characteristics that showed the largest effects for sex. Indeed, these sex differences were statistically significant with nearly every sample, and appear to be among the most robust sex differences yet documented across cultures.*"

What logical deduction can be made from their statements? (EP5)

• Men ranked physical appearance as one of the most desirable traits in mates while women ranked earning potential as one of the most desirable traits in mates.

• Across the world, men tend to select good-looking mates while women tend to select high-earning mates.

• The difference in these male and female results is probably not due to chance, and could be replicated in other similar studies.

On average, women ranked "Good Earning Capacity" as a more desirable trait than "Physically Attractive".

End of Block: EP Questions

Start of Block: Scoring Messages

Display This Message:

If Score > *17*

You had between 90% and 100% correct answers!

Congratulations, the quiz questions were tested on science education professionals (such as high school biology teachers), and you performed as well as they did!

Display This Message: If Score > 14 And Score < 18

You had between 75% and 85% correct answers! Congratulations, you showed a good understanding of evolutionary science!

```
Display This Message:
If Score = 12
Or Score = 13
Or Score = 14
```

You had between 60% and 70% correct answers!

Congratulations, you showed a fine understanding of evolutionary science.

```
Display This Message:
If Score = 11
Or Score = 10
```

You had between 50% and 55% correct answers! Passing your degree!

```
Display This Message:
If Score = 8
Or Score = 9
```

You had between 40% and 45% correct answers. Almost passing your degree!



You had between 25% and 35% correct answers. You are lucky, you still have a lot of room for improvement!

```
Display This Message:
If Score < 5
```

You had between 0% and 20% correct answers. You are lucky, you still have so much to learn!

End of Block: Scoring Messages

End of Survey Message

We thank you for taking the time to help our research!

Although we cannot divulge the answers to the quiz while the study is still taking place, we will post the full answers before the end of 2023 at: <u>https://twitter.com/EvoStudyKent</u>

Appendix 13: Counterparts Questionnaires

This appendix documents the differences between the manosphere survey questionnaire and the counterpart questionnaire taken by Prolific respondents.

The survey was slightly modified in order to fit Prolific's requirements. This includes adding a clear Yes/No consent question at the beginning of the survey, automatically collecting respondent's Prolific ID, and redirecting them to the Prolific website after survey completion.¹⁷³⁴ As is common online survey practice, two "attention checks" were also included, i.e., nonsensical or impossible-to-fail questions to make sure that participants pay attention.¹⁷³⁵

The question on manosphere group self-identification was removed from the sociodemographic section. Mentions of the manosphere were also removed from the consent form which stated instead, "The purpose of this survey is to assess the level of scientific knowledge among the population, as well as the most common sources of scientific knowledge." The binary "Male/Female" sex identification question was changed into a gender self-identification question, as is common practice. Non-binary respondents could specify their gender through an open-ended question:

"What is your gender?

Male
Female
Other _____"

The science quiz was not modified.

Finally, the end-of-survey message stated, "Thank you for taking part in this study. Please click the button below to be redirected back to Prolific and register your submission."

¹⁷³⁴ For complete details on the steps taken to integrate the Qualtrics questionnaire into Prolific, see Prolific, "Qualtrics integration guide": <u>https://web.archive.org/web/20230406133504/https://researcher-help.prolific.co/hc/en-gb/articles/360009224113-Qualtrics-integration-guide</u>, archived April 6, 2023.

¹⁷³⁵ For Prolific's attention check policy, see <u>https://web.archive.org/web/20230525010952/https://researcher-help.prolific.co/hc/en-gb/articles/360009223553-Prolific-s-Attention-and-Comprehension-Check-Policy</u>, archived May 24, 2023.

Appendix 14: Distractors and Misconceptions in the Science Quiz

Misconception 1736	Distractor	Code	Question	Answer #
Extreme Environmentalism	"Genetic differences among humans are so minor that essentially all variations observed among individuals are due to the environment in which they were reared."*	EE1	Gen3	4
Extreme Environmentalism	"There are no consistent worldwide patterns or tendencies in male or female mate preferences."	EE2	EP1	2
Extreme Environmentalism	"Innate factors have a very limited influence on behavior in a complex species such as ours. Focusing on cultural forces is the only way to reliably explain human behavior."	EE3	EP3	4
Extreme Biological Determinism	"Geneticists typically accept that most traits are determined heavily by genetics with the environment having little effect on complex traits." *	EBD1	Gen3	2
Extreme Biological Determinism	"Regardless of environmental conditions, injecting testosterone in men causes them to behave increasingly dominant and aggressive."	EBD2	Horm2	3
Extreme Biological Determinism	"Like other male mammals, men have an unconscious biological imperative to reproduce as much as possible, making extra- pair mating an evolutionary advantageous behavior."	EBD3	EP2	1
Intentionalistic Fallacy	"Genes code for behavior that tend to make organisms selfish. Those organisms prioritize their own survival and reproduction to ensure replication."	IF1	EvoBio4	1
Intentionalistic Fallacy	"Men look for a healthy mate to bear children and propagate their genes, which is why they tend to select women with long hair, because hair length is correlated with health."	IF2	EP1	3
Intentionalistic Fallacy	"People behave in ways that are clearly not adaptive, they use contraception and refrain from having many children, showing that reproductive interest cannot predict behavior."	IF3	EP3	1

Table A14.1: Distractors in the Science Quiz

¹⁷³⁶ Those misconceptions are defined below on page 526.

Misconception	Distractor	Code	Question	Answer #
Sex	"Testosterone is not found in women."	SD1	Horm2	2
Differentialism				
Sex Differentialism	"In all mammalian orders, adult male size is on average equal to or larger than female size (Scientists have organized mammals into about 26 orders based on characteristics and structure)."	SD2	EvoBio5	2
Sex	"Across the world, men tend to select good-	SD3	EP5	2
Differentialism	looking mates while women tend to select high-earning mates."			
Group Selectionism	"Natural selection can be understood as a struggle between the selfish interest of genes, and the collective survival interests of species."	GS1	EvoBio4	4
Group Selectionism	"Since species could continue propagating with fewer males, it remains an evolutionary puzzle why there is an equal proportion of males and females."	GS2	EvoBio5	3
Group Selectionism	"Over evolutionary history, human groups which developed a sexual division of labor prospered and those that did not failed, explaining how this would have spread to the whole population."	GS3	EP4	3
Naturalistic Fallacy	"By highlighting the mate preferences that have been selected over time, evolutionary science can help people know what to look for in a mate."	NF1	EP1	4
Naturalistic Fallacy	"Since evolutionary psychology reveals the innate propensities of each sex, it can show men and women which activities are personally more suited for them."	NF2	EP4	4
Manosphere Beliefs	"Since men were historically in charge of public affairs and women of domestic affairs, the moral sense of women is less sensitive to moral norms and the common good."	MB1	EP4	1
Manosphere Beliefs	"Studies have repeatedly demonstrated a sharp increase in seeking extra-pair mating for women who are in the peak fertility phase of their ovulatory cycle."	MB2	EP2	4
Male Disposability	"Since men are male mammals, they have a lower reproductive value than women and are consequently perceived as more disposable across cultures."	MD	EvoBio5	4

(*Distractors marked with an asterisk were taken from pre-existing questionnaires)

Defining the Misconceptions

Extreme Environmentalism: the belief that human behavior is almost exclusively determined by environmental factors (also called "the Blank Slate").

Extreme Biological Determinism: the belief that human behavior is almost exclusively determined by genetically heritable factors.

Intentionalistic Fallacy: the belief that humans intentionally act to increase their Darwinian fitness. This confuses the proximate and ultimate levels of behavioral explanation: humans are equipped with mechanisms that had the consequence of increasing their ancestors' fitness (ultimate), which does not imply that fitness consciously drives people's behavior (at the proximate level).

Sex Differentialism: the exaggeration of sex differences. It usually occurs by taking an average difference on traits/behavior between the sexes and turning it into an exclusive generality which erases any overlap (i.e., "men do this, and women do that").

Group Selectionism: explaining the evolution of a trait/behavior by its sole capacity to have been beneficial for its community's or entire species' fitness in the past, without regard for gene-level natural selection.

Naturalistic Fallacy: the belief or intuition that what is natural (i.e., the product of evolution) is therefore good or desirable.

Male Disposability: the idea that humans have evolved the propension to see men as disposable and to prioritize women's wellbeing, because this was beneficial for group/species survival over evolutionary history (it is an example of Group Selectionism).

Appendix 15: Platforms and Websites Where the Survey Was Advertised Table A15.1: Manosphere Communities Where the Survey Was Advertised

Platform	Community	Group/Affiliation	Moderator Approval ¹⁷³⁷
Reddit	r/Egalitarianism	Men's Rights Activists	Yes
Reddit	r/LeftWingMaleAdvocate	Men's Rights Activists	Yes
Reddit	r/MensRightsScience	Men's Rights Activists	Yes
Reddit	r/pickup	Pickup artists	Yes
Reddit	r/PickUpArtists	Pickup artists	Yes
Reddit	r/datingadviceformen	Pickup artists	Yes
Reddit	r/WellsOfInk	Incels	Yes
Reddit	r/WhereAreTheGoodMen	General antifeminism	Yes
Reddit	r/PurplePillDebate	Debates around (anti)feminism	Yes
Discord	The Red Pill	The Red Pill	No
Discord	Men's Hub	Men's Rights Activists	No
Discord	Mens Rights Activists	Men's Rights Activists	No
Discord	Men's Human Rights	Men's Rights Activists	Yes
Discord	The Fraternity for Fairness	Men's Rights Activists	Yes
Discord	Individuals Going Their	MGTOW	No
	Own Way		
Discord	Chad University	Pickup artists	Yes
Discord	Suave Society	Pickup artists	Yes
Discord	wolf	Incels	No
Discord	Vanta's Citadel	Incels	Yes
Discord	Debate Incels	Incels	No
Independent forum	Mengtow forum	MGTOW	Yes
Independent forum	MPUA forum	Pickup Artists	Yes
Independent forum	BasedSpace	Incels	Yes
Communities.win	Incel	Incels	No
Communities.win	MGTOW	MGTOW	No
Gab	Men's Rights Activism 💢	Men's Rights Activists	No
	"The Manosphere"		
Gab	MGTOW and Men's Rights	Men's Rights Activists and	No
	Activism	MGTOW	
Gab	#MGTOW	MGTOW	No
Gab	Men Going Their Own	MGTOW	No
	Way (MGTOW)		

¹⁷³⁷ When possible, moderators were contacted to ask permission for posting the survey. In case of negative answer or absence of answers, the survey was not posted. In unmoderated and free-speech communities, the survey was posted directly.

Platform	Community Group/Affiliation		Moderator
			Approval
Gab	Incels	Incels	No
Gab	Manosphere	General Antifeminism	No
Gab	ANTIFEMINISM MRA	General Antifeminism	No
	MGTOW RED PILL		
Element.io	Men's Rights	Men's Rights Activists	No
Element.io	MGTOW Philosopgy [sic	MGTOW	No
Element.io	MGTOW-central-matrix	MGTOW	No
Element.io	Welcome to the MGTOW	MGTOW	No
	Riot Community!		
Element.io	r/TheRedPill	The Red Pill	No
Element.io	Rabbit Hole	Incels	No

Table A15.2: Non-Manosphere Communities Where the Survey Was Advertised

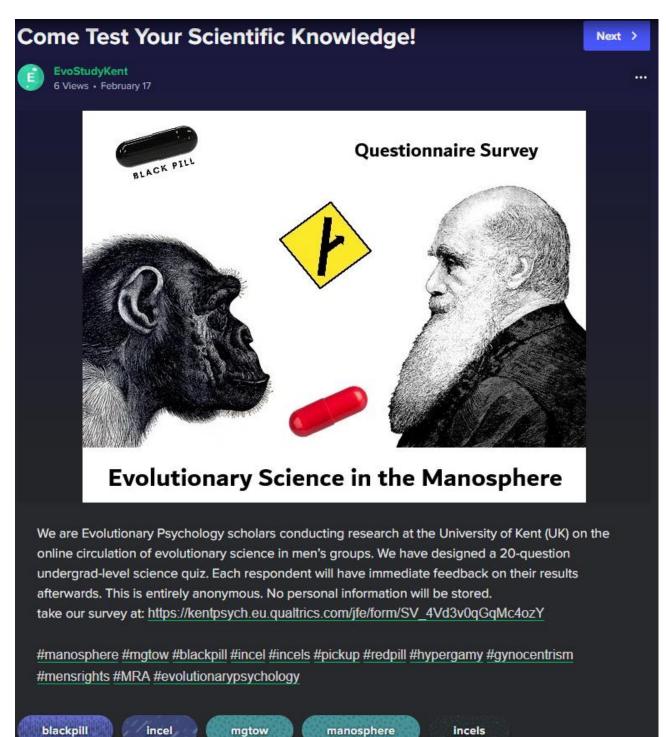
Platform	Account/Community	Description	Reaching Manospherians
		"A place for	Specifying this survey is aimed
Reddit	r/SampleSize	surveys and polls	at people participating in the
		to be posted"	manosphere
		"Post and take	Specifying this survey is aimed
Reddit	r/takemysurvey	surveys!"	at people participating in the
			manosphere

Table A15.3: Social Media Accounts Created to Advertise the Survey

Platform	Description	Account	Reaching
			Manospherians
Twitter	Mainstream social media platform	@EvoStudyKent	Hashtags and tags
Parler	Free-speech/Conservative social	Evolutionary Science Study	Hashtags
	media platform		
Gab	Free-speech/Conservative social	<pre>@EvoStudyKent</pre>	Hashtags and tags
	media platform		
Mastodon	Ad-free, privacy oriented, liberal-	@EvostudyKent@mastodon	Hashtags
	leaning social media platform	.social	
Imgur	Image-hosting and sharing	EvoStudyKent	Hashtags
	platform		
Pinterest	Image-hosting and sharing	@EvoStudyKent	Hashtags
	platform		

Appendix 16: Example of Social Media Survey Advertising

With the use of hashtags (#manosphere, #mgtow, etc.), people browsing for manospherespecific content might see this post. However, without a pre-existing popular account on the platform (Imgur) nor financial means to advertise the post, its success was very limited (only six views).



Appendix 17: Messages Sent to Manosphere Communities

1) Messaging Gatekeepers

This was the template for the message to gatekeepers, asking for permission to post the survey in their online groups. It was slightly adapted depending on groups and platforms:

"Dear Moderators and Administrators,

We are Evolutionary Psychology (EP) scholars conducting research at the University of Kent (UK) on the online circulation of evolutionary science in men's groups. Given the importance of EP in some of this forum's discussions, we are particularly interested in your community.

We have designed a questionnaire in undergrad-level evolutionary biology, genetics, endocrinology, and general scientific reasoning. Would you allow us to share a link towards this questionnaire on the server? Each respondent will be able to measure their scientific knowledge and have immediate feedback on their results afterwards.

This is completely anonymous. No personal information will be stored outside of the questionnaire's responses. A clear consent form will inform them of their rights and measures ensuring data protection. If you want to see the questionnaire beforehand or to ask for any additional information about this, please don't hesitate.

Thanks for taking the time to read this, your help would be greatly appreciated. Best Regards."

2) Advertising the Study

Below is an example of the posts made on manosphere platforms to advertise the study. It was slightly adapted depending on groups and platforms:

"Hello Debate Incels

We are Evolutionary Psychology scholars conducting research at the University of Kent (UK) on the online circulation and knowledge of life sciences in men's groups. Given the importance of Evolutionary Psychology in the blackpill, we are particularly interested in incels. For that purpose, we have designed a 20-question quiz in undergrad-level evolutionary biology, genetics, endocrinology, and general scientific reasoning.

Each respondent will be able to measure their scientific knowledge and have immediate feedback on their results afterwards.

This is entirely **anonymous**. No personal information will be stored outside of the questionnaire's responses. A clear consent form will inform you of your rights and measures to ensure data protection.

Please find the link to the questionnaire below: https://kentpsych.eu.qualtrics.com/jfe/form/SV_4Vd3v0qGqMc4ozY

Thanks for taking the time to read this, your help would be greatly appreciated.

For more details, you can reach out to us at: contactsciencestudy@kent.ac.uk

PS: if you could avoid discussing answers with people who haven't taken the quiz yet, that would obviously be appreciated \mathfrak{S} "

Appendix 18: Manosphere Reactions to the Survey

This is a thematic selection of reactions encountered when distributing the survey in the manosphere.

1) Privacy Concerns

Some manospherians did not feel comfortable clicking the link:

- "Omg a random link ofc I gonna click It cause i can trust anyone on the inter net" (incel, 2023)
- "IP grabber"; "I'm simply not clicking it, the link that is" (incel, 2023)
- "Probably a link which downloads malware on your computer. Don't fall for it boys." (MGTOW, 2023)

Unfortunately, the Qualtrics survey dissemination link was not compatible with TOR, which is a popular privacy-protection software:

- "I might participate anyway. 😇

Or would, if I could access via Tor, which the link does not work with." (MGTOW, 2023)

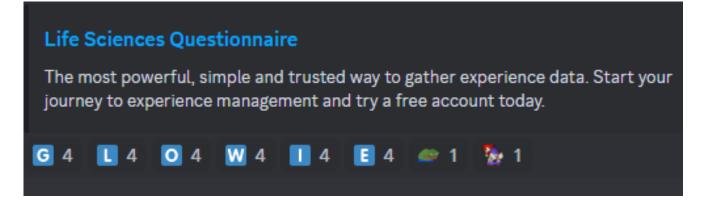
- "I tried Tor too, access denied. Hmm?" (MGTOW, 2023)

This made manospherians suspicious of my claims to privacy protection. After I wrote to one, "As explained in the consent form, IP addresses are **not collected** by the survey. Thanks for the interest taken in the study," another one chimed in, saying, "if so, why is tor disabled?" (incel, 2023)

Some people also suggested, probably in jest, that this was an FBI operation:

"Just kidding. It's the FBI again." (MGTOW, 2023)

In fact, on an incel Discord server, the link to the questionnaire was labelled by incels with the term "glowie", a popular epithet for online undercover FBI agents.¹⁷³⁸



¹⁷³⁸ Wiktionary, "glowie," "(Internet slang, derogatory, far-right) A government agent or informant infiltrating an online political space, with the supposed intention of surveilling violent extremists or provoking entrapment," <u>https://web.archive.org/web/20230407123733/https://en.wiktionary.org/wiki/glowie#</u>, archived April 7, 2023.

2) Political Concerns

The most common reaction was one of suspicion as a lot of manospherians thought than any data collected would be used to criticize, discredit, and belittle them and their movement:

- "Respondents can expect that any information given will be twisted to suit predetermined conclusions one of which (which we have seen bruted elsewhere) is that MGTOW are 'sick'" (MGTOW, 2023)
- "It's more 'fake' studies to brand us as school shooters by feminists. They've used this trick many times. All answers will be used negatively as 'criticism'." (MGTOW, 2023)
- "In reality, nothing like this is about giving a shit. Merely to paint all MGTOW (and all men) as stupid and therefore 'bad'." (MGTOW, 2023)
- "The likely output from the survey is political ammunition against our community." (PUA, 2023)

This is grounded in a context of extreme defiance towards social science and academia:

- "Academia is hostile toward men, especially masculine men. We have no reason to trust you won't twist this into another weapon to attack us." (PUA, 2023)
- "Keep in mind, your answers literally can't matter, because the positions they're allowed to have once they get back are pre-determined by student and staff conduct policies. (MGTOW, 2023)
- "Also, when you say this is "academic approved" that means, 'man hating feminists' as all social sciences nonsense is political propaganda and pointless. There has not now, nor will be ever, any study showing women in any negative way." (MGTOW, 2023)
- "These clowns have run regular surveys for years, always asking how well men understand *whatever* (usually sex). That's always been a suspicious premise as academia is politically homogeneous and we are the sort of men they hate. Somehow I've never heard what studies they've published, they only come here to recruit." (PUA, 2023)
- "There's a very strong "Conspiracy Theory" research crew at Kent. I poked around a bit.
 Probably, MGTOW is regarded as a "Conspiratorial" group, and I stand by my original skepticism." (MGTOW, 2023)
- "British University = Marxist brainwash.
 Academic standards began to fall in the 1960's and have been in freefall ever since. You don't last long in a British university if you don't subscribe to the Leftist agenda." (MGTOW, 2023)

After reassuring them about my academic freedom and ambition to treat the data fairly, reactions did not change much:

- "EvoPsych may have a good reputation but academia has generally been used to attack and denigrate our community and men in general. Unless we know who's behind a study from some University, it's prudent to treat it as hostile." (PUA, 2023)
- "that doesn't stand for much given the corruption of academia." (MGTOW, 2023)

- "Dear ma'am, Already checked school policies, promoted activities, hosted papers, and attempts to control opinions expresses on campus by student groups and academics, so your statements about freedom are irrelevant." (MGTOW, 2023)

3) Extremely Hostile Reactions and Trolling

A few reactions were violent, although it is hard to gauge their earnestness:

- "A little questionnaire for you:
 - 1. Do you wish for total nigger death?" (incel, 2023)
- "kill urself" (MGTOW, 2023)
- "All of #academia and #campus needs to be burnt to the ground. #Universities are a rotting cesspit of anti man hate misandry, anti white hate and global communism.

Your kind of people made me utterly sick, your pompous verbose language used, is essentially just hiding behind your real devious intentions.

I hope you 'die suddenly' from your covid vaxx jab." (MRA, 2023)

4) Comments on the Survey

People often shared their own score on the quiz and commented on the survey design:

- "I got about 75-85% right, which isn't shabby given this was not an easy quiz. Lots of extremely similar sounding answers with one word that disqualifies or makes one statement less true than others. Also, lots of answers that are arguably true but just slightly overgeneralized." (PUA, 2023)

"Mine said I got 90-100%
 I wouldn't call myself an Evolutionary Biologist, but my PhD is in Molecular Biology, and
 I daresay I know a little bit about evolution. Still, I had to stop and think about how a couple of these questions were worded." (MRA, 2023)

"Anyone who took their biology courses in a non-English language might trip much more easily on English terminology. I had probably been advisable to include a question on the language background of participants? I never took any course on Biology in English. Things can be inferred, but it takes a bit of more digging in the brain and a bit of guessing.
 I'm also a bit bummed I cannot get a more detailed response as to which of the questions I

I'm also a bit bummed I cannot get a more detailed response as to which of the questions I had wrong, or which categories. Is the 75-85% a default response?" (MRA, 2023)

- "Just a couple notes, first, you'll want to stay away from loaded or leading terms like 'incel' and "manosphere." Terms like that tend to bias some of the responses which will impact your results.

Second, a few of your questions require prior knowledge that people might now have that are geographically based. Having a question that some people might get wrong because they aren't familiar with one specific part of the world makes it a bad question." (MRA, 2022)

- "This survey is basically like

Let's see how dumb the manosphere community is" (PUA, 2023)

- "None of these things were taught here at school. This test is very anglo centric" (MRA, 2022)

5) Appreciative Reactions

Some community moderators were enthusiastic and helpful towards our research:

- "Please, by all means feel free to make a post about the study. Cheers!" (MRA, 2023)

On Discord, two moderators even helped advertise the study by calling other members to participate:

"@everyone Greeting fellow pickup artists, I'd like to ask each one of you to spend ten minutes of your time to answer this short questionnaire made by a few scholars." (PUA, 2023)

A few people reported enjoying taking the test, or being happy with their quiz score:

- "I would have liked the opportunity to review any questions I got wrong so I could learn something new, though it was nice to find out where I fit in the general population. Really cool questions" (MRA, 2022)
- "Well, this was fun. My score 'You had between 90% and 100% correct answers!'" (MRA, 2022)
- "BTW is was a nice test. Looks like some questions were on wokeness ⁽²⁾. I have never given or seen any genetics evolution related test, it was something new and exciting for me. Nice questions and some new information and terminology too, great ⁽⁴⁾/₍₂₎" (MRA, 2022)
- "90-100%

Not surprising. I have a master's degree in Biology.

This is good though. I infer from your questions that your hypothesis is something along the lines of "Absolutist views of hypergamy/male disposability predict MRA affiliation" or something similar." (MRA, 2022)

- "Cool I did it. I got 60 70 percent. Nice" (incel, 2022)
- "I got 75% to 85%, can't wait to see the results to see where I got wrong!

I thought the test was fair and balanced. I do agree with another redditor though, it would be easy to cheat.

Edit: Although, having said that... Some questions require a certain level of logical thinking (are more applied essentially) and so attempting to look up the answers would prove difficult." (MRA, 2022)

- "The was kind of fun. I guessed on a few but must have gotten lucky. My one complaint was that I found it difficult to categorize myself for the demographics portion." (MRA, 2022)
- "Hey hey! Got results in the top tier. Not shabby for a homemaker with a bachelor of arts degree!" (MRA, 2022)

Characteristics		Participants (r
Age	(Range=18–64)	
<u></u>	18-20	10
	21-25	50
	26-30	15
	31-35	25
	36-40	23
	41-45	9
	46-50	5
	51-60	4
	61+	1
	Unreported	6
	Mean=30.6	
	Median=29	
	Std. Deviation=9.620	
Sex	Male	142
<u></u>	Female	3
	Unreported	3
Level of Education	Some high school	4
	High school diploma or equivalent	18
	Some undergraduate education	31
	Trade/Technical/Vocational training	6
	Undergraduate college/university degree	44
	Some postgraduate education	11
	Completed postgraduate education	33
	Unreported	1
Number of College	0	34
Science Classes	1-3	34
	4+	80
Manosphere Group ¹⁷³⁹	Men's Rights Activists	96
<u></u>	Pickup-Artists	8

Appendix 19: Demographics of Survey Respondents

Table A19.1: Manosphere Respondents Demographic Information (n=148)

¹⁷³⁹ After re-categorization of "Other" responses as detailed in Appendix 20, 537.

The Red Pill	12
MGTOW	11
Incels	19
General Manosphere	2

Table A19.2: Prolific	Respondents Demograph	ic Information (n=151)

<u>Characteristics</u>		Participants (n)	
Age	(<i>Range</i> =18–72)		
	18-20	5	
	21-25	30	
	26-30	29	
	31-35	23	
	36-40	20	
	41-45	10	
	46-50	11	
	50-60	15	
	61+	7	
	Unreported	1	
	Mean=35.67		
	Median=33		
	Std. Deviation=12.278		
Gender	Man	73	
	Woman	73	
	Other	5 ¹⁷⁴⁰	
Level of Education	Some high school	1	
	High school diploma or equivalent	17	
	Some undergraduate education	39	
	Trade/Technical/Vocational training	5	
	Undergraduate college/university degree	61	
	Some postgraduate education	9	
	Completed postgraduate education	19	
Number of College	0	26	
Science Classes	1-3	65	
	4+	60	

¹⁷⁴⁰ Including four respondents who self-identified respectively as "Genderqueer," "Agender," "Bigender," and "Transmasculine," and one who did not elaborate.

Appendix 20: Re-categorization of Unaffiliated Manosphere Survey Respondents

Respondents on the manosphere survey were allowed to provide group self-identification if they did not identify with one of the five manosphere group categories proposed (Men's Rights Activists, Pickup-Artists, The Red Pill, MGTOW, and incels). In total, 42 respondents chose that option. Out of these 42 respondents, 11 did not meet the criteria for survey completion—i.e., answering at least 15 of the 20 science questions—and were removed from the dataset. One chose that answer but did not provide any alternative identification. There remained 30 respondents who provided an alternative classification.

On a case-by-case basis, these alternative classifications were examined, to answer two questions: (1) can this respondent be considered a manospherian? (2) if yes, should he be recategorized as belonging to one of the five main manosphere branches?

In respondents' classifications, there were three recurring scenarios:

1) Left-Wing Male Advocates

The survey was distributed on the r/LeftWingMaleAdvocates subreddit, where it drew some attention.¹⁷⁴¹ Unsurprisingly, six respondents on the survey decided to identify as "Left Wing Male Advocates," "LWMA," or the like. Presumably, they did not appreciate the Men's Rights label, which is increasingly associated with right-wing ideology and hate. I consider them as part of the broad constellation of the manosphere, and as representatives of the liberal/egalitarian tradition in the men's movements, as described in Chapter II.¹⁷⁴² Given their focus on men's issues, and their criticism of feminism, these were re-categorized as MRAs. Indeed, it is crucial to include those more liberal or moderate segments of the manosphere to avoid painting a biased picture.

2) Egalitarians

The survey was also distributed on the r/Egalitarianism subreddit. It thus collected answers from eight respondents who identified as "egalitarians." I assume those respondents came from the r/Egalitarianism subreddit. While this subreddit does not seem to concern men specifically, a lot of its discussions in fact revolve around common men's issues (false sexual assault allegations, divorce laws, male victims of domestic violence, and anti-male discrimination in general). It is also "Male Positive Network" of subreddits, advertised as part of а including r/LeftWingMaleAdvocates, r/Intactivism, r/MRA_TitleIX, or r/everydaymisandry, showing its emphasis on men's issues.¹⁷⁴³ I consider its members and discussions as part of the broader manosphere, and these respondents were therefore re-categorized as MRAs. While they no doubt

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r/LeftWingMaleAdvocates,

https://web.archive.org/web/20231120132740/https://www.reddit.com/r/LeftWingMaleAdvocates/?rdt=64680, archived November 20, 2023. ¹⁷⁴² Chap. I, A, 33.

¹⁷⁴³Seehomepage,r/Egalitarianism,https://web.archive.org/web/20231120132605/https://www.reddit.com/r/Egalitarianism/,archivedNovember20,2023.

would have criticisms towards the more virulent aspects of the Men's Rights movements, I included these respondents in a drive to include the more moderate segments of the manosphere.

3) Respondents Who Fit the Definition But Dislike the Label

Given the critical media and academic coverage of the manosphere, and the negative publicity provided by some events, in particular mass shootings in the US, it is no wonder that some respondents do not want to be associated with any manosphere group label. Yet, some of them avowedly fit the definition, such as this man who identifies as: "Close.to dictionary definition of incel.but not a racist misogynist and people irl can't fell [presumably 'tell']." Another example is a man who identifies as "Not pick up artist but self improvement with a focus on attracting women." Here again, it seems like this person fits the definition of the movement, yet dislikes the label. Those respondents were re-categorized as belonging to the group they dissociate from. The goal is not to dismiss their self-identification, which is addressed here, but to include more moderate or group-critical manospherians in the analysis.

Do you think of yourself as belonging to one of	Dismissed/	Reason
those communities – Other – (you can specify)	Re-categorized	
Men in general. Just normal men.	Dismissed	No link with the manosphere
Socialism	Dismissed	No link with the manosphere
Skeptic	Dismissed	No link with the manosphere
Categorising people into identitarian/	Dismissed	No link with the manosphere
sociopolitical categories is a blight on the science		
you purport to study.		
femboy communities	Dismissed	No link with the manosphere
Feminist, but also considering discrimination	Dismissed	Primarily identifies as feminist
against men.		
Not sure what a NOMAS is but I'm definitely a	Dismissed	Primarily identifies as feminist
feminist		
I like reading sites like Art of Manliness and	Dismissed	Affiliation with the manosphere
Centre for Male Psychology		not strongly stated
Most of these terms are ill-defined. While I agree	Dismissed	Affiliation with the manosphere
with aspects of some of them, I think their		not strongly stated
definition is fluid.		
Mum of boys concerned about men's issues	Dismissed	Affiliation with the manosphere
		not strongly stated
Humanitarian	Dismissed	Affiliation with the manosphere
		not strongly stated (although
		probably an equivalent for
		"egalitarianism")
Left wing male advocats	Men's Rights	See 1) above
	Activists	

 Table A20.1: Case-by-case Re-categorization of Unaffiliated Respondents (n=30)

Left Wing Male Advocates	Men's Rights	See 1) above
	Activists	
Left wing male advocate	Men's Rights	See 1) above
	Activists	
LeftWingMaleAdvocates	Men's Rights	See 1) above
	Activists	
Left Wing Male Advocate	Men's Rights	See 1) above
	Activists	
LWMA	Men's Rights	See 1) above
	Activists	
Egalitarian	Men's Rights	See 2) above
	Activists	
Egalitarian	Men's Rights	See 2) above
	Activists	,
Egalitarian	Men's Rights	See 2) above
C C C C C C C C C C C C C C C C C C C	Activists	
Egalitarian	Men's Rights	See 2) above
	Activists	
Egalitarianism	Men's Rights	See 2) above
	Activists	
Egalitarian, Transhumanist, futurist	Men's Rights	See 2) above
	Activists	
Egalitarian	Men's Rights	See 2) above
	Activists	
Egalitarian secular humanist, who firmly believes	Men's Rights	Intactivism is part of Men's
in intactivism and thinks feminism fails to address	Activists	Rights Activism + critical of
the issue. Brian David Earp is a big influence.		feminism
Not pick up artist but self improvement with a	Pickup Artists	See 3) above
focus on attracting women.		
Close.to dictionary definition of incel.but not a	Incels	See 3) above
racist misogynist and people irl can't fell		
Pro fem men & the red pill	The Red Pill	Although The Red Pill
		community as a group is fiercely
		antifeminist, some can believe in
		its self-improvement tenets and
		its vision of social-sexual
		dynamics without being
		necessarily antifeminist. Since
		this user identifies with TRP, he
		is re-categorized as such.
I see myself as embodying some elements from	General	A "General Manosphere"
each but I am wholly none.	Manosphere	category was created for this
		respondent, based on his

		knowledge of, and partial identification with the five manosphere communities.
Mens self improvement activist	General Manosphere	This man could be for example focused on male mental health, or dating and relationships. As such, it is impossible to categorize him. Yet, his self- identification as an "activist" leads me to consider him as a manospherian.

Appendix 21: Survey Answers on the BestSource Open-Ended Question

Answer	Type of Source	Count
The Magic of Reality by Richard Dawkins amd a textbook from an		2
Anthropology course	Books	2
Masters degree from MIT	College Courses	1
Selfish gene (Richard Dawkins) The Moral Animal (Robert Wright) La		2
sculpture du vivant (Jean-Claude Ameisen)	Books	3
Darwin - Origin of Species Dawkins- The Selfish Gene Dawkins- The	Books	3
Blind Watchmaker		
the selfish gene, supercooperators, guns germs and steel	Books	3
Red Queen; Sex After Dawn;	Books	2
youtube interviews with david buss & william costello and their works	Videos	2
"The Mating Mind" by Geoffrey Miller	Books	1
Sapiens by Yuval Noah Harari	Books	1
The Story of the Human Body: Evolution, Health, and Disease by Daniel Lieberman	Books	1
The Selfish Gene	Books	1
Richard Dawkins - The Selfish Gene	Books	1
Vertebrate Palaeontology, 4th edition; Evolution: What the Fossils Say and Why it Matters, 2nd edition; Convergent Evolution: Limited Forms Most Beautiful; the "Evolution 101" section of University of California Berkely's website.	Books	3
Cosmos a spacetime odyssey	TV	1
The Science of the Discworld	Books	1
Econimage is one of my favorite places to learn about economics. I work in the data science field so towards data science publication is a pretty great place to learn about how to think/assess data I find online	Videos	2
I took a course on Evolutionary Ethics	College Courses	1
On the Origin of Species by C. Darwin	Books	1
Neil degrasse Tyson	Unspecified (Tyson has the press, books, hos shows, etc.)	
The Selfish Gene by Richard Dawkins Darwin's Dangerous Idea by Daniel Dennett Animal Signalling Theory by John Maynard Smith	Books	3
Kurzgesagt YouTube channel	Videos	1
I found the course "Invisible" made by David Tian to be quite insightful regarding building self confidence that lasts as well as a bunch of content made by Mystery, my favourite one being his book Revelations. I also	Manosphere Content	3
really loved reading the mystery method.	Books	1
really loved reading the mystery method. The Selfish Gene	Books Manosphere Content	1
really loved reading the mystery method.	Books Manosphere Content College Courses	1 2 1

Table A21.1: Manosphere Answers on the Open-Ended BestSource Question

1. The book Behave by Robert Sapolsky. 2. The video lectures in the Philosophy of Science playlist from the youtube channel Kane B. 3. The	Books	2
book The Secret of Our Success by Joseph Henrich.	Videos	1
The Selfish Gene	Books	1
sex b4 dawn	Books	1
Robert Sapolsky's video series on human behavioral biology	Videos	1
Mostly my school and college classes. Otherwise it's different things here and there I look into out of curiosity. Dawkins and Bill Nye in debates were especially helpful in convincing me that the young earth views I was	College Courses	1
raised with were completely false. The Bill Nye vs Ken Ham debate was the final straw in my adherence to creationism and largely my religious beliefs as well.	Videos	1
Nova on PBS	TV	1
YouTube, podcasts	Videos	1
•	Other	1
Youtuber Sabine Hossenfelder: https://www.youtube.com/@SabineHossenfelder	Videos	1
Pbs space time, whole Audible	TV	1
	Books	1
PBS's space time series covers various advanced physics topics every well.	TV	1
used to watch RSD videos about evolutionary psych (years ago) To this	Videos	2
day i watch lots of Biology videos, mainly from PBS and MothLightMedia	Manosphere Content	1
book of pook	Manosphere Content	1
Uh, my fucking Science textbooks at uni? Operating Systems by Andrew	College Courses	1
Tannebaum?	Books	1
This question reveals you are frauds. I got my scientific education from Cal which was several upper division statistic coursesyou are listing sources of facts: sources of facts are irrelevant to your research interests. So you are stupid. Surprising. A cocksucker leads this study (notice no sexism here).	College Courses	1
Joe Rogan YouTube video about Venice and climate change Shredded science	Videos	2

Source Type	Individual Sources Listed
Internet Discussion	0
Papers	0
Books	33
Manosphere Content	7
TV	4
Videos	14
Press	0
Wikis	0
College Courses	6
Other	1

Table A21.2: Total Manospherians' Types of Content Listed on the BestSource Question

Table A21.3: Counterpart Group Answers on the Open-Ended BestSource Question

Answer	Type of Source	Count
Werner Herzog- Encounters at the end of the world.	Other (Film)	1
SciShow Veritasiam Sixty Symbols	Videos	3
Vsauce YouTube channel	Videos	1
law of attraction aquatic science biology	Unknown	
GAILILEO	Unspecified	
The Bill Nye the Science Guy TV show	TV	1
Believe it or not, while he is somewhat of a controversial figure,	Videos	1
Martin Shkreli has a fantastic Chemistry course for free on		
YouTube. It is very interesting and informative and I have learned a		
lot from it.		
Vinesauce Cosmos Richard Dawkins	Videos	1
	TV	1
book, youtube, video	Books	1
	Videos	1
The great courses	College Courses	1
YouTube in general I watched constantly	Videos	1
After I had read The God Delusion by Richard Dawkins, I found	Books	1
myself delving more into his biology and other scientific works.		
books for sure	Books	1
Anything by David Attenborough	Unspecified	
Dr Carolyn Leaf	Unspecified	
Courses such as developmental biology and neurobiology that I	College Courses	2
have taken at my university have been very informative and		
instructional.		
TedEd was really helpful for me.	Videos	1
NYTimes The History of Time Into to Oceanography	Press	1

	Books	2
khan academy dirty medicine ninja academy [unknown]	Videos	2
Bozeman Biology, Khan Academy	Videos	2
Amoeba Sisters	Videos	1
Kurzgesagt	Videos	1
Bill Nye	Unspecified	
mit opencourseware	College Courses	1
AP BIOLOGY	College Courses	1
The Selfish Gene by Richard Dawkins	Books	1
Discussions with educated individuals I have met/known such as	Other (Live	1
my mother (RN) and doctors.	Discussions)	
College courses, specifically related to Biopsychology, health	College Courses	3
psychology, and cognitive psychology. I have learned a lot about		
the nervous a system and brain health.		
I thought chemistry was a lot of fun and easy to understand at the	College Courses	1
time.		
PBS Eons	TV	1
No, just go look up articles on PubMed	Papers	1

Table A21.4: Total Counterpart Types of Content Listed on the BestSource Question

Source Type	Individual Sources Listed
Internet Discussion	0
Papers	1
Books	6
TV	3
Videos	15
Press	1
Wikis	0
College Courses	9
Other	2

Appendix 22: Correlations Between Sources of Scientific Content

	Social	Papers	Books	Manosphere	TV	Videos	Press	Wikis
	Media			Content				
Social Media (n=140)	N/A	0,05	0,05	0,32***	0,07	0,14*	0,24***	0,20**
Papers (n=134)	0,05	N/A	0,21**	-0,07	0,02	-0,04	0,08	0,07
Books (n=127)	0,05	0,21**	N/A	-0,01	0,05	0,07	0,17*	0,10
Manosphere Content	0,32***	-0,07	-0,01	N/A	0,13	0,01	0,12	0,04
(n=99)								
TV (n=129)	0,07	0,02	0,05	-0,13	N/A	0,32***	0,26***	0,29***
Videos (n=138)	0,14	-0,04	0,07	0,01	0,32***	N/A	0,28***	0,33***
Press (n=138)	0,24***	0,08	0,17*	0,12	0,26***	0,28***	N/A	0,27***
Wikis (n=140)	0,20**	0,07	0,10	0,04	0,29***	0,33***	0,27***	N/A

Table A22.1: Correlation Matrices for Media in the Manosphere (Source)

Table A22.2: Correlation Matrices for Media among Prolific Respondents (Source)

	Social	Papers	Books	TV	Videos	Press	Wikis
	Media						
Social Media (n=151)	N/A	0,01	-0,05	0,11	0,33***	0,05	0,25***
Papers (n=150)	0,01	N/A	0,45***	0,24***	0,19**	0,21**	0,19**
Books (n=145)	-0,05	0,45***	N/A	0,24***	0,23***	0,20**	0,19**
TV (n=149)	0,11	0,24***	0,24***	N/A	0,35***	0,24***	0,31***
Videos (n=151)	0,33***	0,19**	0,23***	0,35***	N/A	0,23***	0,25***
Press (n=151)	0,05	0,21**	0,20**	0,24***	0,23***	N/A	0,21**
Wikis (n=150)	0,25***	0,19**	0,19**	0,31***	0,25***	0,21**	N/A

p < .05 = *; p < .01 = **; p < .001 = ***

Kendall rank correlations coefficients—usually called Kendall's T (Greek = Tau). This non-parametric test is used to measure correlations between ranked ordinal variables. The statistic can be interpreted similarly to the more common Pearson's r statistic used for correlations between two continuous variables.

Appendix 23: Questions for Warren Farrell

Preparatory questions for the interview conducted on May 12, 2023.

About the Men's Liberation Movement of the 1970s

- In the Men's Liberation Movement, a lot of books were released in a short period of time, between 1974 and 1976 (by Jack Nichols, Marc Fasteau, Joseh Pleck, Jack Sawyer, and Robert Brannon). Were there links between authors? Did you know each other?
- What did the National Task Force on the Masculine Mystique consist of? What were its actions and prerogatives?
- In 1976, Herb Goldberg released a book rather similar to Male Liberationist themes, but critical of the movement, how did you react to it? Did you know him?

On the divorce with feminism (circa 1980s)

- Was it primarily shared custody that drove the wedge between the two? Other issues?
- Did you participate in the ERA (Equal Rights Amendment) campaign? What was your take on it? Did you participate in Man for ERA?
- You were both associated with the NCFM and NOCM. Tell me about your time at NOCM. How did they react to *the Myth of Male Power*? Do you have any ties with NOMAS (National Organization for Men Against Sexism) these days?

On the 1990s

• What was your take on the Mythopoetic Men's Movement? Were you involved in it?

On Life Sciences

- In *the Myth of Male Power*, you create this concept of male disposability, and ground it in cultural factors (education, movies, toys, games, etc.). Yet, in the Men's Rights movement, it is now increasingly framed as being a biological dynamic. What do you make of this?
- What are your thoughts on the concept of "hypergamy" and its use in online men's groups?
- What are your thoughts on Evolutionary Psychology?

Contemporary Issues and Activism

- You have gone from leading consciousness raising groups to giving relationship-building seminars. Can you tell me about this transition?
- Your latest seminar advertisement makes a lot of references to biology, where do you get those ideas/knowledge from?
- You give seminars geared specifically towards Christians. Why Christians?
- Contemporary online men's movements revolve a lot around sex (incels, Pickup Artists, MGTOW, The Red Pill): what's your take on that?
- More generally, how do you think the advent of the Internet has shaped public debate, especially men's groups and gender activism?
- What is the highlight of your activist career?
- What is the place for Men's Rights in the current polarized American landscape?
- How has your advocacy to create a White House Council on Men and Boys been received by the last administrations? Obama/Trump/Biden?

Appendix 24: Questions for Michael Mills

As sent to the interviewee on May 30, 2023, two days before the interview.

I am interested in interviewing you because of your participation on Stardusk's and CS MGTOW's YouTube channels. Along with Dr Glenn Geher's similar participation, this appears to be the sole example of evolutionary psychologists addressing manosphere communities directly. I thus listened to and transcribed those videos extensively, which is why I would have liked to have your behind-the-scenes take on this. Moreover, I'd be curious to have your takes on my analyses surrounding those. My research deals with three areas: scientific literacy in the manosphere (how knowledgeable are they?), appropriation of research (how does evo research fit their values, narratives, life stories, etc.), and circulation of research (where do people online get their science? through what channels, etc.).

1) Logistics of interview (third area – circulation of research).

I am very interested to get the details of your participation in those YouTube channels. How were you contacted? By whom? How did they present themselves? How was the experience of chatting with them? What was your perception of their knowledge/interest in Evo Psych? How did the subsequent videos happen? Who chose the theme/topic? Was it planned beforehand?

Did you research MGTOW before accepting? What do you make of the group's ideas and position, either based on that research/or on your discussions with them?

> If you still have their contacts, I would potentially be very interested in interviewing them.

2) Manosphere Concepts (scientific literacy/understanding)

The manosphere is very keen on Warren Farrell's idea of "male disposability", which at first appeared as a social/cultural construct in his books. Yet, it started becoming "naturalized" on the Internet, with people thinking this (or "gynocentricism") being an evolved psychological mechanism. I interviewed Farrell recently and asked what he made of this, and he seemed to think that his concept had always been rooted in biology. Manospherians relate this to parental investment, explaining that the higher female investment implied gynocentrism, or adaptations that would lead males to value females above themselves, to put them on pedestals, etc.

Yet I thought parental investment theory only predicted higher competition (and dimorphism in size, etc.) among the lesser investing sex for access to the other sex; the manosphere position sounds a little like group selectionism in fact. I would have liked to discuss these concepts/arguments with you, since you discussed them on YouTube with MGTOW. Similarly, the concept of hypergamy is one I am interested in discussing with you as regards the EP literature and empirical findings.

3) Evolutionary Psychology in discussions of sex and gender (appropriation)

I am interested to discuss the broader findings from my research, and the potential misunderstandings/misappropriations of EP by both antifeminists and feminists in the ideological culture wars surrounding sex and gender.

Appendix 25: Signed Consent Forms for Qualitative Interviews a) Warren Farrell

Consent to take part in research

- 1. Warren Farrell voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I have had the purpose and nature of the study explained to me in writing and I have had the
 opportunity to ask questions about the study.
- I understand that participation involves answering interview questions.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that extracts from my interview may be quoted in academic publications, and in a PhD dissertation.
- I understand that signed consent forms, original audio recordings, and a transcript of my
 interview, will be retained in the researcher's secure hard drive for the next three years.
- I understand that I am entitled to access the information I have provided at any time while it is
 in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Signature of research participant

Signature of participant

12-23

Signature of researcher

I believe the participant is giving informed consent to participate in this study

Signature of researcher

5-12-2023 Date

The research is being conducted at the Universities of Kent (UK) and Lille (France), by Louis Bachaud. Contact: <u>louis.bachaud@gmail.com</u>. Under the supervision of Dr Sarah Johns, and Dr Hélène Quanquin.

b) Michael Mills

Consent to take part in research

, Michael Mills

- I understand that even if I agree to participate now, I can withdraw at any time or refuse to
 answer any question without any consequences of any kind.
- I have had the purpose and nature of the study explained to me in writing and I have had the
 opportunity to ask questions about the study.
- I understand that participation involves answering interview questions.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that extracts from my interview may be quoted in academic publications, and in a PhD dissertation.
- I understand that signed consent forms, original audio recordings, and a transcript of my
 interview, will be retained in the researcher's secure hard drive for the next three years.
- I understand that I am entitled to access the information I have provided at any time while it is in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Signature of research participant

Michael Mills Digitally signed by Michael Mills Officeneer Millis Date: 2023,05.33 10,2150 007007

Signature of participant

5/31/2023 Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study

Signature of researcher

6/01/13

Date

The research is being conducted at the Universities of Kent (UK) and Lille (France), by Louis Bachaud. Contact: <u>louis.bachaud@gmail.com</u>. Under the supervision of Dr Sarah Johns, and Dr Hélène Quanquin.

c) Macken Murphy

Consent to take part in research

- I, Macken Murphy, voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to
 answer any question without any consequences of any kind.
- I have had the purpose and nature of the study explained to me in writing and I have had the
 opportunity to ask questions about the study.
- I understand that participation involves answering interview questions.
- I understand that I will not benefit directly from participating in this research.
- I agree to my interview being audio-recorded.
- I understand that extracts from my interview may be quoted in academic publications, and in a PhD dissertation.
- I understand that signed consent forms, original audio recordings, and a transcript of my
 interview, will be retained in the researcher's secure hard drive for the next three years.
- I understand that I am entitled to access the information I have provided at any time while it is
 in storage as specified above.
- I understand that I am free to contact any of the people involved in the research to seek further clarification and information.

Signature of research participant

May 31, 2024

Signature of participant

Date

Signature of researcher

I believe the participant is giving informed consent to participate in this study

May 31, 2024

Signature of researcher

Date

The research is being conducted at the Universities of Kent (UK) and Lille (France), by Louis Bachaud. Contact: <u>louis.bachaud@gmail.com</u>. Under the supervision of Dr Sarah Johns, and Dr Hélène Quanquin.

Appendix 26: Short Survey of the Evolutionary Behavioral Sciences Community

Start of Block: Informed Consent

Informed Consent

You are being invited to participate in a research study conducted by researchers from the University of Kent (UK).

As part of a broader research project on the online uses and circulation of evolutionary science in online antifeminist communities, we want to quickly assess the level of awareness and concern found in the Evolutionary Behavioral Sciences academic community.

You will also be asked some information about your age, gender, education, and field of study.

The whole survey should take approximately three minutes. Your participation in this study is anonymous, entirely voluntary and you are free to discontinue participation at any time. You do not have to answer any questions you do not want to. You can only take the survey once.

Aggregated results may be disseminated in standard academic outlets. You will not be identifiable in any report or publication.

For additional information about the study, feel free to contact us at: lb769@kent.ac.uk

By starting this survey, you are consenting to participate in this study.

End of Block: Informed Consent

Start of Block: SocioDemographics

What is your gender?

O Male

O Female

• Non-binary / Other (you can specify)

What is your age?

What field do you specialize in? (e.g. Evolutionary Psychology, Behavioral Ecology...)

What is your academic level?

O Undergraduate or Master's Student	
O PhD Student	
O PhD Holder	
O Other - please specify	
End of Block: SocioDemographics	

Start of Block: Survey

Are you familiar with the following term: "manosphere"

 \bigcirc Never heard of it

○ Somewhat familiar

O I know it well

Are you familiar with the following term: "incels"

O Never heard of it

○ Somewhat familiar

O I know it well

Are you familiar with the following term: "pickup-artists"

- O Never heard of it
- O Somewhat familiar
- O I know it well

Are you familiar with the following term: "The Red Pill"

- O Never heard of it
- O Somewhat familiar
- O I know it well

Are you familiar with the following term: "MGTOW (Men Going Their Own Way)"

- O Never heard of it
- O Somewhat familiar
- O I know it well

Are you familiar with the following term: "Men's Rights' Activists (MRAs)"

- O Never heard of it
- O Somewhat familiar
- O I know it well

To your knowledge, has your research ever been interpreted or appropriated for ideological/extrascientific purposes?

O Yes

O No

Are you worried about evolutionary scientific research being used to fuel sexist discourse and ideology?

O None at all

O A little

○ A moderate amount

○ A lot

O A great deal

Are you worried about evolutionary scientific research being used to fuel racist discourse and ideology?

O None at all

O A little

• A moderate amount

O A lot

• A great deal

Feel free to share any additional thoughts and remarks on these issues

End of Block: Survey

Appendix 27: Use of the Manosphere Corpus by Computer Scientists



Department of Computer Science, & Information Sciences Institute

School of Engineering

September 21, 2023

To: Louis Bachaud PhD Student School of Anthropology and Conservation University of Kent

From: Keith Burghardt Computer Scientist USC Information Sciences Institute 4676 Admiralty Lane #1001 Marina del Rey, CA 90292

Dear Louis Bachaud,

This letter is to confirm that I analyze the data you have collected from your paper "Use and misuse of evolutionary psychology in online manosphere communities: The case of female mating strategies", published in Evolutionary Human Sciences in 2023. I further confirm that I will not be publishing identifiable information on the people associated with the data you will share. Data will either be aggregated, or we will use appropriate privacy methods, such as differential privacy, if aggregation does not sufficiently protect user privacy. In cases we show example data, all identifiable information will be removed.

Sincerely,

Keith Burghardt

Keith Burghardt Computer Scientist USC Information Sciences Institute

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#	Group	Behavior/Trait	Adaptationist Hypothesis/ Fitness Benefits	Evolutionary Processes	Sex Diff.	Marks of Hypothesis	Evidence Provided
1	MRAs	Women wearing high-heeled shoes as beauty enhancement.	They make feet look smaller, which is correlated with high estrogen levels, and therefore signals fertility to potential mates.	Sexual selection	Yes	No	None
2	MRAs	Women have a strong automatic in-group preference for other women, including empathizing and relating, while men lack such a propension for gender-based solidarity.	The history of male warfare and intra-sexual competition means that men did not develop this tendency (or that those possessing it were weeded out by natural selection).	Natural selection	Yes	No	None
3	MRAs	Women act and look like children: they have high- pitched voices, not much body hair, and throw tantrums.	Projecting childlike vulnerability and weakness to manipulate men into mating with them, not harming them, and protecting them.	Sexual selection	Yes	No	Secondary Scientific Source
4	MRAs	The Western education system is failing to provide high educational standards because it focuses too much on pupils' emotions rather than on their mental capacities and achievements.	In the past, societies that cared too much about emotions were swiftly annihilated by other competitors, who focused on intellectual pursuits leading to creation, inventions, and progress.	Group selection Mismatch	No	No	None

Appendix 28: Just-So Stories in the Manosphere Corpus

5	MRAs	Higher male variability on height, weight, personality, intelligence.	Male mammals are more disposable than females for the reproductive interest of the species. Therefore, male variability is nature's experiment for the species. When male traits are disadvantageous, they are selected out without harm to the species; when they enhance fitness, they spread to the whole species.	Group selection	Yes	No	Scientific Paper, Secondary Scientific Sources
6	MRAs	Practices concerning women such as Islamic veiling, Chinese foot-binding, or female genital mutilation.	These are not imposed by men as a measure of mate-guarding. They are rather intra-sexual competition strategies used by women to display their chastity and fidelity to potential high-value mates.	Sexual selection	Yes	No	None
7	MRAs	Women are less intelligent than men, with their brains getting progressively atrophied.	Women's brain atrophy by lack of challenges and stimulation. Since they are more prone to texting and gossiping, but less likely to solve hard intellectual problems, their brains are less tested than men's. This is even truer of stay-at-home wives who are provided for. This is also accentuated by the strong emphasis put on women's beauty rather than brains.	Unclear: Lamarckism Natural selection Sexual selection	Yes	No	Wikipedia

8	MRAs	There is lower tolerance for men's complaining, than for children's and women's.	This "taboo" enforces male hierarchies, to stop unsuccessful low-rank males from complaining and begging for what sexual selection denies them.	Unclear: Group selection Sexual selection	Yes	No	None
9	MRAs	Women have more pleasure from sex than men do, even though they often pretend the opposite.	If this greater propension for pleasure had not evolved, it is hard to fathom why women would engage in sex, and endure the risks and pains of pregnancy, childbirth, and child- rearing.	Sexual selection	Yes	No	None
10	MRAs	Women are incapable of sexual fidelity.	Since ancestral women depended on male providing and protection, especially during and after pregnancy, it was too risky to invest all in one man. Women had a lot to gain by securing alternate mates if their primary mate died.	Sexual selection	Yes	No	None
11	MRAs	(Corollary) The evolution of the propension for sexual infidelity in men was a response to that of women.	As women started cheating on men, paternity certainty declined for men, and they grew more promiscuous to maximize their reproductive success.	Sexual selection	Yes	No	None
12	MRAs	Men are less likely than women to abuse positions of power.	This is tautologically "explained" by the fact that evolution granted men this capacity to handle positions of authority.	Unclear: Group selection	Yes	No	None

13	MRAs	Women are better dancers than men.	Displaying their bodies around ancestral campfires might have been a successful mating strategy.	Sexual selection	Yes	Yes	None
14	MRAs	Women have higher manual dexterity than men.	It helped ancestral women gather berries while their male counterparts were hunting.	Natural selection	Yes	No	None
15	MRAs	Women have faster eye movements than men.	This helped them watch over children while gathering food.	Natural selection	Yes	No	None
16	MRAs	Men are more intelligent (as measured by cognitive abilities and IQ) than women.	This evolved through the preference of women for men who were more intelligent than them.	Sexual selection	Yes	Yes	None
17	PUAs	Contemporary women have become more promiscuous. By going to nightclubs, they end up having sex with lots of men, who are not really interested in long-term mating.	Women's preference for high-status men evolved when humans lived in smaller communities, and everyone knew each other's status. Pairing with high-status men was a beneficial strategy. In modern cities, women are following the same preferences, although genuine status has nowadays been replaced with seduction techniques ("game") to simulate this status, making their preference maladaptive, and making them have sex with mates who do not want to commit to a relationship.	Sexual selection Mismatch	Yes	No	None

18	PUAs	Men have low flirting skills.	The sex ratio was skewed enough in favor of ancestral men that they did not need to meet women's romantic preferences.	Natural selection	Yes	No	None
19	PUAs	Women are unable to engage in self- criticism and have stronger feelings of entitlement.	This is a logical consequence of their more valuable role in reproduction.	Unclear: Natural selection	Yes	Yes	Scientific Paper
20	PUAs	Endorsing political ideologies is just motivated by status-seeking.	It is a mismatch in today's environment, where an individual's political involvement does not bring them happiness, nor does their vote end up deciding elections.	Mismatch	No	No	None
21	PUAs	Women's capacity for love decreases as they grow older.	Love evolved to assist the formation of pair- bonds and enhance reproductive success during peak fertility years. As women grow older and their reproductive value decreases, these feelings lose their intensity.	Natural selection	Yes	No	None
22	PUAs	Women tend to be more opportunistic than men.	This comes from an evolutionary history of relying on men for resources and avoiding the dangers of fending off predators and violence.	Natural selection	Yes	No	None

23	PUAs	Men are expected to initiate romantic and sexual interactions.	This comes from a female preference for men who protect them from risks. By taking on the risks of getting rejected in his sexual advance, a man therefore signals his ability as a protector.	Sexual selection	Yes	No	None
24	PUAs	Women have a mate preference for relaxed shoulder positions.	This is an honest signal of confidence and capacity. By mating with men with relaxed shoulders, women therefore ensured having more reproductively successful offspring.	Sexual selection	Yes	No	None
25	PUAs	80% of men's mate preferences concern women's reproductive success, and only 20% concern their survival success. On the other hand, 80% of women's mate preferences concern men's survival success, and only 20% concern their reproductive success.		Sexual selection	Yes	No	None
26	PUAs	Mothers are particularly good at judging the desirability and suitability of their son's mates.	In terms of fitness, there is a lot to gain by having one's sons pass on as many genes as possible, which is predicated upon sons' reproducing with healthy/fertile/dependab le women.	Natural selection Inclusive fitness	Yes	No	None

27	PUAs	Women dislike laziness, as well as addictive and/or depressive behavior in potential mates.	This preference evolved to keep men on their best behavior for the survival of the tribe/species. This also allowed those women to guarantee their mate would not be too lazy and thus put them at risk.	Group selection/ Sexual selection	Yes	Yes	None
28	PUAs	Women often experience anxiety before having sex for the first time with a new mate.	This emotional response is one of the mechanisms of female choosiness, which is explained by their higher parental investment.	Sexual selection	Yes	No	None
29	PUAs	Men experience strong anxiety when approaching a woman they find attractive.	This is based on a fear of rejection evolved when humans lived in smaller groups, which in ancestral times would have meant lowering one's mate value to all the women in the group. Moreover, approaching a woman who already had a mate entailed physical danger. In modern urban settings, this anxiety is maladaptive since a man can just approach a woman and move on if rejected.	Natural selection Sexual selection Mismatch	Yes	No	None

30	PUAs	Men experience strong anxiety when approaching a woman they find attractive.	Given the dangerous nature of life over evolutionary history, emotions evolved to keep humans safe, and have them avoid deadly threats. Today's environment is much less dangerous, but emotions are not designed to be felt in moderate amounts, proportional to today's threats. Hence the intense nervousness before approaching an attractive woman.	Natural selection Mismatch	Yes	No	None
31	PUAs	Men experience strong anxiety when approaching a woman they find attractive. This is mostly caused by fear of rejection.	When humans lived in smaller groups, openly flirting with pair-bonded or high-status women might have resulted in getting cast out of the group, which would dramatically lower chances of survival. Hence this intense anxiety, which is maladaptive in contemporary society.	Natural selection Mismatch	Yes	Yes	None
32	PUAs	Men are expected to initiate romantic and sexual interactions.	Societies evolved this way because women have higher fear of rejection than men. Indeed, getting cast out of the group in ancestral times would have been even more dangerous/disadvantage ous for women.	Unclear: Cultural evolution Group selection	Yes	Yes	None

33	PUAs	In a heterosexual seduction context,	They evolved to be perceptive of men's	Sexual selection	Yes	No	Secondary Scientific
		body language is the first thing women pay attention to.	emotional state, of which body language is the outer manifestation.				Source (Press)
34	TRP	Contemporary women mistakenly believe that men are attracted to women who are high-achieving and thus challenging to seduce.	In ancestral times, women had to chase after successful alpha males who were the main meat providers. They are thus wired with a desire for a successful and challenging mate. Nowadays, in egalitarian societies, they believe than men have a similar desire, when in fact men only desire compliant mates.	Sexual selection; Mismatch	Yes	No	None
35	TRP	The most beautiful people are those living in the former Roman Mediterranean territories	This is caused by a lot of genetic mixing between populations in this area which has historically been a cultural crossroads.	Genetic Recombinatio n leading to averaging out of phenotypic features	No	No	None
36	TRP	Men are more competitive than women. And they dislike including women in their competitive endeavors.	This is a by-product of sexual selection. Men evolved to compete between each other for access to women. In terms of fitness, they had no competition with women.	Sexual selection	Yes	No	None
37	TRP	Most women enjoy matchmaking, pairing eligible men they know with women they know.	This improves her social standing with her female acquaintance, all the while removing that acquaintance from the competition for other mates.	Natural selection Sexual selection	No	No	None

38	TRP	Women are more punctual than men.	Given the time-limited nature of female fertility and beauty, women evolved to be keenly aware of the passing of time in order to establish their sexual strategies.	Sexual selection	Yes	Yes	None
39	TRP	Women are more Machiavellian and manipulative than men.	They evolved this propension due to their lower size and muscularity.	Natural selection	Yes	No	None
40	TRP	Men have a logical, problem-solving way of thinking. Women operate on more emotional and intuitive bases.	This comes from an evolutionary history of men having to overcome obstacles and break through barriers, and women being primarily invested in nurturing activities.	Natural selection	Yes	No	None
41	TRP	Women are less intelligent than men.	Reproduction, childbearing, and rearing take a lot of energy, but they do not require much intellect. On the other hand, men, freed from this burden, evolved more intelligence to achieve demanding tasks.	Natural selection	Yes	No	David Stove's Book
42	TRP	Through pheromones, women living in close proximity synchronize their menstrual cycles.	This fosters fertility and social support.	Natural Selection	Yes	Yes	None

43	TRP	Male masturbation lowers sexual interest, testosterone, and raises oxytocin. Women unconsciously notice behavioral and chemical cues (pheromones) of this in their mate selection process.	Over evolutionary history, men with less mating opportunities would have been prone to masturbate more, and thus be chronically depleted of testosterone. These were "pheromonal beta" males. Women evolved the ability to pick up on cues to avoid them, and select sexually assertive, higher testosterone, alpha males instead.	Sexual selection	Yes	Yes	None
44	TRP	Women have a stronger sense of self-preservation and self-interest. They are better at cutting emotional ties and moving on from former attachments.	This comes from an evolutionary history of tribal warfare, where women were often captured and integrated into other tribes after conquest.	Natural selection	Yes	No	None
45	TRP	Women often challenge men with inconsequential or nonsensical requests or remarks.	These evolved so that women could assess men's fitness by gauging their reaction. A strong, desirable man would ignore these "fitness tests".	Sexual selection	Yes	No	None
46	TRP	Women are constantly looking for security, with a stronger sense of self-interest and self-preservation (i.e., "female solipsism")	This propension evolved to preserve the survival of the species.	Group selection	Yes	No	None

47	TRP	Women have a strong tendency to submit to the commands of dominant men.	This comes from an evolutionary history of tribal warfare, where women were often captured and integrated into other tribes after conquest. Those who were defiant were selected out, while the obedient ones continued reproducing in their new tribes.	Natural selection	Yes	No	None
48	TRP	Women have a less developed sense of personal responsibility.	Men evolved the ability to know when they wronged someone, in order to strategically make enemies or avoid conflict. Women did not evolve this propension.	Natural selection	Yes	No	None
49	TRP	Humans have a hard time differentiating between objective reality and their leaders' rules. This can explain religions or dictatorships.	In ancestral times, leaders ("alpha males") created rules that defined reality, and humans evolved in that context.	Natural selection	No	No	None
50	TRP	Subordinate men ("beta males") seek idealized leaders among other men.	They evolved a subconscious desire to be led by an archetypal and omnipotent "alpha male" figure, which was designed by evolution to emotionally guide men towards the man that could best protect and lead them.	Natural selection	Yes	No	None
51	TRP	Men have a latent desire to have sex with all women.	This comes from an unconscious desire to be the archetypal "alpha male." (see above).	Natural selection	Yes	No	None

52	TRP	Emotions linked to dominance hierarchies overpower all other emotions, as well as rational thinking.	Dominance hierarchies were the most important factor in ensuring survival of ancestral humans.	Natural Selection	No	No	None
53	TRP	Humans are inclined to allocate all resources to women. Women want to extract resources, and men are happy to oblige.	This comes from a long evolutionary history wherein female reproduction used to be the limiting factor for survival of the species. As a result, female well- being acquired supreme importance.	Group selection	Yes	No	None
54	TRP	Men do not have the same in-group preference for other men that women have for other women. In fact, they tend to side with women when the two come in contention.	This might have allowed men who sided with women to raise their reproductive success.	Sexual Selection	Yes	Yes	None
55	TRP	Men experience strong anxiety when approaching a woman they find attractive.	Children are vulnerable without their parents. Fear of abandonment by parents thus evolved to protect them. Approach anxiety is a by-product of this adaptation: men unconsciously perceive the women they approach as their mothers, and their fear of maternal abandonment is triggered.	Natural selection	Yes	Yes	None

56	TRP	In a heterosexual seduction context, when a man hesitates or asks a woman for her consent, this is a	The woman assumes that this is a signal of low dominance and fear of rejection, and that this signals "bad genes," which deter her from	Sexual selection	Yes	No	None
57	TRP	turnoff for her. Children experience physiological reactions to rejection.	mating. This comes from an evolutionary history in which exclusion from the group meant death.	Natural selection	No	No	None
58	MGTOW	Women are scatterbrained, and have lower capacity for focused attention.	Ancestral women did not need to focus to survive in the wild. This selection pressure was weaker for them.	Natural selection	Yes	No	None
59	MGTOW	Islamic veiling such as the burqa worn by women.	This practice allows women to thwart male mate choice by concealing esthetic, bodily features. It allows the more unattractive women to attract mates.	Unclear: Cultural evolution	Yes	Yes	None
60	MGTOW	Rationality and intelligence are decreasing in humans.	With sexual liberation, and the weakening of enforced monogamy and marriage in the West, women's mate choice has less constraints. Women are now following their preference for animalistic men, which is gradually selecting out intelligence from the species.	Sexual selection	No	No	None

61	MGTOW	Rather than act on reality itself, people	Emotions evolved as signals, adaptive	Natural selection	No	No	None
		change their	reactions to the	selection			
		perception of	environment. However,				
		reality in order to	people are not conscious				
		feel better and	of this, and often alter				
		satisfy certain	their perception of				
		emotions.	reality to satisfy their				
			emotions, regardless of the function of the				
			emotion.				
62	MGTOW	Women are	If a woman can	Sexual	Yes	No	None
		extremely	convince a man to	selection			
		manipulative.	provide for children that				
			are not his, there can be				
			massive fitness benefits, especially if the children				
			come from a father with				
			"good genes."				
63	MGTOW	Women dislike	Ancestral women	Natural	Yes	No	None
		loneliness much	needed others for	selection			
		more than men.	provision, in particular				
			when pregnant. On the other hand, men could				
			fare better alone.				
			Tare better arone.				
64	MGTOW	Women tend to lose	The man's part in	Group	Yes	Yes	None
		interest in their	reproduction being	selection			
		long-term mate	done, investing in her				
		after having had	children becomes a				
		children with him.	woman's priority for the				
			survival of the species.				
65	MGTOW	Women are better	This helped them care	Natural	Yes	No	None
		at multi-tasking	for children while	selection			
			accomplishing other				
			tasks.				
66	MGTOW	Women are more	Women have evolved to	Natural	Yes	No	None
		emotional than	be more in tune with the	selection			
		men, and more	non-spoken, emotional				
		emotionally	type of communication				
		perceptive.	of the children they were caring for.				
			were caring 101.				

67	MGTOW	Men do better than women at every task except child rearing.	Men have evolved this ability to best perform these tasks so they could be useful to women.	Unclear: Sexual selection Group selection	Yes	No	None
68	MGTOW	Men have stronger and more durable feelings of love than women do.	Women's fitness benefits from losing romantic interest after a while (four years) and seeking a new mate. Men's does not. Their infatuation remains, prompting them to protect and provide for their mate and offspring.	Unclear: Sexual selection Group Selection	Yes	No	Scientific Paper
69	MGTOW	Women are more deceitful than men.	Men are competing in dominance hierarchies, where power and ability matter, and cannot be feigned. They have nothing to gain from pretending.	Natural selection	Yes	No	None
70	MGTOW	Men are better than women at most tasks.	Women spend much of their adult years pregnant, making them unable to perform these tasks.	Natural selection	Yes	No	None
71	MGTOW	Women want a stable provider for long-term relationships, but an exciting "bad boy" for short-term relationships. Likewise, men do not consider intellect for short- term mating, but want to marry intelligent women.	This is because male children inherit their intellect mostly from their mothers, and only sexual or aggressive tendencies from their fathers.	Sexual selection	Yes	No	Secondary Scientific Source (Researcher Blog)

72	MGTOW	Women resent male-only clubs, as well as men who do not want to interact with them (such as MGTOW).	This comes from an evolved need to belong and its associated fear of rejection, which evolved to ensure women had stable social environments to rear their children in.	Natural selection	Yes	No	None
73	Incels	Men have a mate preference for nice women, while the opposite is not true.	Maybe men could better ensure their paternity certainty by selecting well-behaved and controllable women.	Sexual selection	Yes	Yes	Scientific Paper
74	Incels	Women have a mate preference for omnivorous rather than vegetarian men.	This may be partly because of the importance and nutritiousness of meat in human evolutionary history, as well as the fact that men conducted most of the hunting.	Sexual selection	Yes	Yes	Scientific Paper
75	Incels	Racism.	If humans evolved to appreciate subtle cues of emotional expressiveness, this could explain racism as different populations may be attuned to different specific cognitive ornaments.	Sexual selection	No	Yes	None

76	Incels	Men with Autism Spectrum Disorder (ASD) reproduce less than women with ASD.	Women with ASD, being potentially more socially awkward, might trigger specific male mate preferences. For example, a preference for youth (neoteny), which would have been beneficial for men as monopolizing a woman's sexuality from an early age ensured paternity certainty. Moreover, awkward women may appear as easier to seduce.	Sexual selection	Yes	Yes	Scientific Paper
77	Incels	Women use less condoms with more attractive men.	This might be explained by the sexy son hypothesis. Since very attractive male offspring could potentially sire many more offspring (and since attractiveness is heritable,) women evolved the desire to mate with very attractive men.	Sexual selection	Yes	Yes	Scientific Paper
78	Incels	There is an unescapable loop by which dominant males become more dominant and subordinate males more subordinate.	Bodies of men, like incels, who do not mate, adapt by lowering their testosterone level and adopting a lower position in the dominance hierarchy. The opposite is true for sexually successful men. This creates a feedback loop that reinforces both dominance and subordination.	Natural selection	Yes	No	Secondary Scientific Sources

79	Incels	People go to great lengths to save face, even to the point of waging war.	These might be adaptations to evade intra-sexual competitive gossip and maintain status.	Sexual selection	No	Yes	None
80	Incels	Women like flowers more than men.	This might come from a history of beauty enhancement through ornamental flowers, which would have been attractive to men (sweet scent, bright colors, etc.).	Sexual Selection	Yes	Yes	Scientific Paper
81	Incels	Vegetarian men are seen as less masculine than non-vegetarians.	This might come from an ancestral link between male reproductive success and hunting prowess, which gave access to meat. On the other hand, male gatherers or unsuccessful hunters were less reproductively successful. Thus, a mental association between meat and masculine desirability might have been selected.	Unclear: Sexual selection	Yes	Yes	Scientific Paper

82	Incels	Women have a mate preference for men who bully	Men's tendency for bullying may have been subject to Fisherian	Sexual selection	Yes	Yes	Scientific Paper
		others.	runaway selection. Bullying has been shown to associate with greater reproductive success. Women might therefore have evolved a preference for this behavior. If both the				
			behavior and the preference are heritable, then there might have been runaway selection by positive feedback.				
83	Incels	Women devote more mental energy towards thinking about sex, and analyzing situations in relation to sex than men. As a result, men can devote more energy to philosophy, art, and science.	This increased attention to sex might be a response to the prevalence of rape over humans' evolutionary history.	Natural selection	Yes	No	None
84	Incels	The rise in modern inceldom.	Over most of evolutionary history, arranged marriage was more common than free mate choice, which might have led to the evolution of a desire to be coupled by one's parents. In the current environment, this desire has become maladaptive and remains unfulfilled.	Natural selection Mismatch	No	Yes	Scientific Paper

85	Incels	Men of Asian descent have a hard time competing in modern Western mating markets. They are less physically attractive than white men.	Arranged marriage is more common in Asia. Therefore, there was much less sexual selection pressure on men's physical attractiveness.	Sexual selection	No	No	None
86	Incels	Men report much less rape than women do, although there is evidence of similar rates of victimization.	Since women have mate preferences for high- status men, it would logically follow that they are aggregately attracted to only a small subset of men. These men would be the only ones experiencing sexual abuse by women, thus explaining the smaller rate of men reporting rape.	By-product Sexual selection	Yes	Yes	Scientific Paper
87	Incels	Men have larger jaws to consume more food, larger intestines, more testosterone which helps with intestinal mobility. They also have a different fecal microbiota, causing their fecal matter to be more odorous.	This sexual dimorphism might have been sexually selected by female preference for men producing more feces. In ancestral times, women might have fed men who explored new territories, leading these men to defecate more, and thus fertilize more land.	Sexual selection	Yes	Yes	Scientific papers, Secondary Scientific Sources, Press
88	Incels	Men have a sexual fetish for lesbian women.	In ancestral polygynous times, wives who sought additional sexual pleasure from each other rather than from other men would have been preferred, for this did not compromise the husband's fitness.	Sexual selection	Yes	Yes	None

89	Incels	Women are emotionally unstable.	Over evolutionary history, men overlooked flaws in female character in order to reproduce. There was less selective pressure on women's emotional dependability and stability.	Sexual Selection	Yes	Yes	Scientific Paper
90	Incels	Women tend to be more involved than men in cases of mass hysteria.	This may come from women's higher dependence on resources. Acting in a helpless, dependent manner, might help them manipulate others into providing for them.	Sexual selection	Yes	Yes	Scientific Paper
91	Incels	Twerking by women, and its arousing effect on men.	This is a vestigial remnant of the lordosis behavior, by which some mammal female signals receptivity for copulation. Such back- arching has been shown to be attractive to both men and women. As a rhythmic movement, twerking must have evolved in the context of sex orgies involving drums and musicians. Male preference for shaky buttocks was thus sexually selected.	Sexual selection	Yes	Yes	Scientific Paper, Wikipedia, Press

92	Incels	Women's erotic	Several hypothetical	Sexual	Yes	Yes	Scientific
		rape fantasies.	explanations are	selection			Paper,
			proposed, which are not				Wikipedia
			mutually exclusive.				
			Firstly, the ability to				
			rape might be an honest				
			signal of desirable traits,				
			such as physical				
			strength. Women's				
			reluctance to have sex				
			and desire to be coerced				
			might have evolved as a				
			test of male strength.				
			Secondly, this might				
			have evolved through				
			Fisherian runaway				
			selection, if both the				
			tendency to rape (at				
			least in certain				
			opportunistic contexts)				
			and the rape fantasies				
			were heritable and				
			beneficial in terms of				
			fitness.				
93	Incels	More men	Female-on-male IPV	Natural	Yes	Yes	Scientific
		experience intimate	might be linked to	selection			Paper
		partner violence	women's higher neoteny	Sexual			-
		(IPV) than women.	and neuroticism,	selection			
			causing them to throw				
			childish tantrums, which				
			might be an adaptation				
			to ensure getting fed.				
			Moreover, this might				
			also be a way to test				
			their partner's strength.				
			By violent testing, they				
			ensure that their partners				
			could produce strong				
			offspring and physically				
			compete with other men.				
			compete with other men.				
					1		

94	Incels	Being Asian in the USA is a primary predictor of 'never being kissed.'	Asian have a greater level of neoteny, which might advantage women in the mating market, but be detrimental to men. It might also be that Asian populations exhibit slower life history strategies resulting in later physical maturation and onset of sexual behavior.	Sexual selection Natural selection	No	Yes	Scientific Paper
95	Incels	Asian women in the USA have the highest rate of exogamous interracial marriage.	"This phenomenon may in part be explained by East Asian women's high degree of neoteny acting as a super stimulus to men of other races."	Sexual selection	Yes	Yes	Scientific Paper
96	Incels	Humans' unique intellectual capacities.	In a highly polygynous ancestral past, subordinate men rebelled and overthrew the dominant male's hold on female reproduction. They established a monogamous social contract on condition that everyone contribute to the group, which drove evolution towards higher intellectual faculties.	Unclear: Natural selection Cultural evolution	No	No	None

97	Incels	Physical dominance	This was found in a	Unclear:	Yes	Yes	Scientific
		among male	study whose authors	Sexual			Paper
		university students	suggest that this reveals	selection			
		is a better predictor	a greater importance of	Natural			
		of mating success	male intrasexual	selection			
		than attractiveness.	(physical) competition	Cultural			
		than attractiveness.	over female mate choice	evolution			
			in sexual selection.	evolution			
			However, this could also				
			be explained in other				
			ways. Firstly, women's				
			choice might be more based on dominance				
			status than women				
			admit. This also				
			provides evidence for				
			the contemporary				
			reversal of humans' life				
			history strategy towards				
			faster strategies, more				
			based on physical				
			dominance and				
			formidability, and less				
			based on elaborated				
			courtship, thus reviving				
			ancient adaptations in				
			female mate choice.				

00	Incolo	More nevel on othic	Woman favor man with	Correct	Vac	Vac	Scientific
98	Incels	More psychopathic men tend to receive higher attractiveness ratings from women.	Women favor men with traits unsuited for long- term relationships, which might indicate that for most of their evolutionary history, their long-term mate choices were arranged by their parents (selecting for provider traits). Moreover, women's preference for antisocial or even psychopathic men points to a legacy of intra- sexual male competition in which those traits helped men subdue others and prevail in dominance hierarchies.	Sexual selection	Yes	Yes	Scientific Paper
99	Incels	Women lose interest in sex faster than men once cohabiting in a stable relationship.	Several evolutionary hypotheses for this faster decline in sexual interest are offered. 1) Women have experienced less selective pressure than men, and their sexuality might be more reminiscent of ancestral environments where a fast history strategy was useful. 2) This loss of interest might be explained by the mate switching hypothesis. 3) They are testing for other men to ensure their current partner is the most dominant (bodyguard hypothesis). 4) Higher female choosiness means that they are more aware of flaws and dissatisfied sooner in relationships.	Sexual selection	Yes	Yes	Scientific Paper, Secondary Scientific Source (Research Blog)

	5) Women may have
	evolved in a polygynous
	context where they lived
	in harems with other
	wives, so cohabitation
	with their husband may
	be an evolutionary
	mismatch. 6)
	"Dissatisfaction,
	boredom, and fickleness
	are neotenous traits
	which men select for."
	7) Men have the greater
	incentive to keep up
	sexual activity to
	increase paternity
	certainty. 8) In a long-
	term pair bond, women
	gain certainty to have
	secured their partner's
	resources and have less
	need to keep up the
	sexual activity.

Appendix 29: Evolutionary Hypotheses in Buss, *Evolutionary Psychology* (2019)

Hypothesis **Sex Difference Evolutionary Processes** Sperm competition hypothesis Sexual selection Yes Disease avoidance hypothesis Natural selection Yes Yes Embryo protection hypothesis Natural selection Cooking hypothesis No Natural selection Natural selection Antimicrobial hypothesis No Hunting hypothesis Natural selection No Frugivory byproduct hypothesis **By-product** No Provisioning hypothesis Natural selection Yes Show-off hypothesis Sexual selection Yes Gathering hypothesis Natural selection Yes Natural selection No Savanna hypothesis Evolved suicide adaptation hypothesis/Burdensomeness-to-Natural selection Yes kin hypothesis Maladaptive by-product hypothesis (for suicide) No **By-product** Male choice hypothesis Sexual selection Yes Natural selection Yes Female fertility hypothesis Mating effort hypothesis Sexual selection Yes Sexual competition hypothesis (for eating disorders) **By-product** Yes Kin altruism hypothesis (for male homosexuality) Kin selection Yes Paternity confusion hypothesis Natural selection Yes Status-enhancement hypothesis Natural selection Yes Sexy son hypothesis Yes Sexual selection Mate expulsion hypothesis Sexual selection Yes Short-term for long-term goals hypothesis Yes Sexual selection **Resource accrual hypothesis** Natural selection Yes Mate switching hypothesis Sexual selection Yes Yes Good genes hypothesis Sexual selection Mate skill acquisition hypothesis Sexual selection Yes Paternity uncertainty hypothesis Natural selection Yes Mating opportunity cost hypothesis Natural selection Yes Primary caretaker hypothesis Natural selection Yes Attachment promotion hypothesis Natural selection Yes Fitness threat hypothesis Natural selection Yes Healthy baby hypothesis Natural selection Yes Trivers-Willard hypothesis Natural selection No Grandmother hypothesis Kin selection Yes

Table A29.1: Evolutionary Hypotheses in Buss, 2019

Absent father hypothesis	Kin selection	Yes
Alliance hypothesis	Natural selection	No
Status elevation hypothesis	Natural selection	Yes
Crazy bastard hypothesis	Natural selection	Yes
"Slip-up" hypothesis	By-product	Yes
Mate deprivation hypothesis	Sexual selection	Yes
Bodyguard hypothesis	Sexual selection	Yes
Sperm competition hypothesis (for rape)	Sexual selection	Yes
Double-shot hypothesis (for infidelity)	Natural selection	Yes
Mismatch hypothesis (for Testosterone levels as status	Natural selection	Yes
indicators)		
Frequentist hypothesis	Natural selection	No
Social gossip hypothesis	Natural selection	No
Social contract hypothesis	Natural selection	No
Scheherazade hypothesis	Sexual selection	No
Ecological Dominance/Social Competition hypothesis	Natural selection	No
Deadly innovations hypothesis	Natural selection	No
Father-absent hypothesis	Natural selection	Yes
Display hypothesis	Sexual selection	Yes

Methodology: virtually every study in the evolutionary behavioral sciences tests one or several competing hypotheses, each pertaining to the evolutionary history and potential fitness benefits of a given trait or behavior. Recording all the hypotheses in an evolutionary psychology textbook would therefore be a Sisyphean task. A proxy for this is to record all the hypotheses which are explicitly named, such as the "grandmother hypothesis" which posits that menopause could have evolved in women if the fitness benefits of grandmaternal care to grandchildren outweighed those of continued fertility in old age. All the unique nominal compounds ending in "hypothesis" and pertaining to a specific evolutionary hypothesis were retrieved (n=56). For each one, it was determined whether the hypothesis implied a sex difference, and what the underlying evolutionary process was.

Three hypotheses were excluded. One is the "structural powerlessness hypothesis," because it comes from the social sciences and is not based in evolutionary theory. And the other two—the "predator confusion" and "parental investment" hypotheses—because they exclusively concern non-human animals (squirrels).

Aggregated features of these hypotheses are summarized in Table A29.2 below.

Characteristics of	<u>Cases (%)</u>		
Sex Difference	Yes	39 (74%)	
	No	14 (26%)	
Evolutionary Process	Natural selection	31 (58%)	
	Sexual selection	15 (28%)	
	By-product	4 (8%)	
	Kin selection	3 (6%)	

Table A29.2: Features of the Evolutionary Hypotheses in Buss, 2019

Appendix 30: Glossary of Manosphere Terms

Throughout the dissertation, manosphere jargon is often cited and discussed. In this appendix, I provide definitions which are reproduced verbatim from existing manosphere glossaries and encyclopedias. The following four sources were used:

- 1) Neil Strauss, *The Game: Infiltrating the Secret Society of Pickup Artists* (New York: Regan Books, 2005), "Glossary," 439-448 (PUA)
- 2) Mgtow.com, "Glossary of Terms," <u>https://web.archive.org/web/20210104143807/https://www.mgtow.com/glossary/,</u> <u>archived January 4, 2021 — (MGTOW)</u>
- 3) R/TheRedPill sidebar, "All-in-One Red Pill 101,"-(TRP, 2014)
- 4) Incels.wiki, "Incel Glossary," <u>https://web.archive.org/web/20240703151628/https://incels.wiki/w/Incel_Glossary</u>, archived July 3, 2024 — (incels)

This appendix is not meant as an exhaustive glossary of all manosphere jargon, which is extremely rich and varied between communities. It is meant as a reference for readers of the dissertation and only include terms cited therein. The source of each definition is indicated at the end of each entry.

AF/BB: Alpha fucks / beta buxx. Refers to a woman who gets fucked by alphas and settles down with a beta. The term is inspired by a concept in evolutionary psychology, known as strategic pluralism. The strategic pluralism hypothesis maintains that women are evolutionary adapted (in certain circumstances) to cheat on their male long-term partners with men that possess "good genes" in order to both receive provision and protection from the beta while getting the "good genes" for their offspring from attractive men. (4)

Alpha Male: The opposite of a beta male. Takes on risk and confrontation, is confident, a leader, high status, and attractive to women. Part of the sociosexual hierarchy innovated by PUAs. (1)

Anchor 1. *noun*: an external stimulus (a sight, sound, or touch) that triggers a specific emotional or behavioral response, such as a song that makes one happy because it's reminiscent of a positive life event. Anchors are used by pickup artists to associate themselves with a woman's feelings of attraction. 2. *verb*: the act of creating an association between an external stimulus and an emotional or behavioral response. Origin: Richard Bandler and John Grinder. (1)

Approach Anxiety: A combination of fear of rejection and stage fright, aka "Love Shyness" (3)

Ascend: When an incel moves on to get laid or gain a relationship, in some instances it refers to an incel improving their SMV [Sexual Market Value—see entry below] dramatically (generally argued to be a prerequisite for 'ascending' in the first sense). (4)

AWALT: *"All Women Are Like That".* (The opposite of NAWALT: *"Not All Women Are Like That"*) (2)

Beta Male: A beta male is an average male, aka someone who is not a leader, not very physically strong, not rich, not super hot, unassertive, and is subordinate to alpha males in terms of mate access. (4)

Betabux: Also betabuxing. When a male financially provides for a partner. Frequently used to imply that a woman is only with a man due to his provisioning capabilities, and not out of any real attraction. (4)

Blackpill: A collection of harsh truths about dating and relationships backed by sociological studies. Alternative, a fatalist position about dating, generally born from a belief in gender essentialism. Often, but not necessarily is concomitant with existential nihilism. (4)

Blue Pill: Used to describe something that does not agree, understand, or acknowledge the harsh realities of the world, specifically about dating. (4)

Briffault's Law: The female, not the male, determines all the conditions of the animal family. Where the female can derive no benefit from association with the male, no such association takes place. (3)

Chad: Chad is to the SMP [Sexual Marketplace—see entry below] what rich kids are to the regular economy. You cant really understand SMP-dynamics without knowing Chad. He is the unmistakable archetypal bad boy, college jock/bully/douche. Often oblivious and purposely condescending or cruel to his fellow man. He has absolutely no clue about why whatever he does works. (2)

Cold Approach: A PUA term that refers to approaching an unknown woman in public to initiate a romantic relationship. Alternative to approaching in a social situation like a party or within a group of friends, which is a 'warm approach'. (4)

Cuck: A man with an unfaithful girlfriend/wife, also used as an insult, to refer to someone with (perceived) progressive political beliefs or weak and ineffectual men. (4)

Field Report *noun*: a written account of a pickup or a night out picking up women, usually posted online. Also: FR. Other types of reports include an OR (outing report), LR (lay report), FU (fuckup report), and TR (threesome report). (1)

Foid/Femoid; A derogatory term for human females. Stemmed from female and -oid (as in android or humanoid). Used to suggest that females are not fully human. (4)

Game: Game is pick-up-artist lingo for the skillful manipulation of mental states ("frame") to help with courtship and seduction. In practice, game means different things to different pick-up artists, but all use 'game' as part of a broader meritocratic philosophy of gamifying life, complete with 'winners' and 'losers.'¹⁷⁴⁴

¹⁷⁴⁴ This definition was extracted from the specific incels.wiki entry, as none of the glossaries provided a satisfactory one, incels.wiki, "Game," <u>https://web.archive.org/web/20240408191857/https://incels.wiki/w/Game</u>, archived April 8, 2024.

Gynocentrism: Dominated by or emphasizing feminine interests or a feminine point of view. The female values have become the values of America(nized countries). (2)

Hypergamy: Every woman's innate urge (and willingness) to sleep with a male of higher status than the one she's currently settling for – virtually guaranteeing that her boyfriend or husband is never her first choice. (2)

Land Whale: Also known as a "womanatee" or "hambeast", a *Land Whale* is an an extremely obese female with blubbery tricep overhang parked the all-you-can-puke buffet table. (2)

Lookism: Prejudice or discrimination based on one's looks. (4)

LTR: *noun* [long-term relationship]: a girlfriend. (1)

Neg 1. *noun*: an ambiguous statement or seemingly accidental insult delivered to a beautiful woman a pickup artist has just met, with the intent of actively demonstrating to her (or her friends) a lack of interest in her. For example "Those are nice nails; are they real?" 2. *Verb*: to actively demonstrate a lack of interest in a beautiful woman by making an ambiguous statement, insulting her in a way that appears accidental, or offering constructive criticism. Also: neg bit. Origin: Mystery. (1)

Normie: An average everyday boring person. Sometimes used to refer to people that are "average" in looks in contrast to Chad and incel. A "high-tier normie" refers to a person who is- above average in attractiveness (but not as attractive as Brad or Becky). A "low-tier normie" refers to a person who is below average in attractiveness. (4)

Omega Male: The bottom of the barrel loser. A David Futrelle.¹⁷⁴⁵ A Manboob. The kind of failure who couldn't get a woman's attention if his life depended on it. Men disrespect him, and women are not even aware of his existence. (2)

Pattern(ing) *noun*: a speech, usually scripted, that is based on a series of neurolinguistic programming phrases designed to attract or arouse a woman. (1)

Peacock *verb*: to dress in loud clothing or with flashy accoutrements in order to get attention from women. Peacocking items include bright shiny shirts, light-up jewelry, feather boas, colorful cowboy hats, or anything else that makes one stand out in a crowd. Origin: Mystery. (1)

Player: A man who has mastered the art of getting sex from a woman without having to give resources in return, or a woman who has mastered the art of getting resources from a man without having to give sex in return. (2)

Rationalization Hamster: Analogy for the thought processes used by women to turn bad behavior and bad decisions into acceptable ones to herself and her friends. When a woman makes a bad decision, the hamster spins in its wheel (the woman's thinking) and creates some type of acceptable reasons for that bad decision. The crazier the decision, the faster the hamster must spin in order to successfully rationalize away the insanity. (3)

¹⁷⁴⁵ David Futrelle is a feminist freelance journalist who has been an observer and vocal critic of the manosphere.

Red Pill: The Red Pill is a direct reference to a scene from the hugely successful 1999 film "*The Matrix*", and symbolizes a preference for truth – no matter how painful it may be. The protagonist "Neo" (Keanu Reeves) is presented with a choice to continue living in the blue pill world that is pulled over his eyes to blind him from the truth, or to take the red pill with no other incentive offered – except the truth itself.

"You take the blue pill, the story ends. You wake up in your bed and believe whatever you want to believe. You take the red pill, you stay in Wonderland.... and I show you how deep the rabbit hole goes."

Heavily inspired by Lewis C. Carroll's novel "*Alice in Wonderland*" including direct reference to "the white rabbit", Alice's journey is about a girl who falls asleep and tumbles into an alternate and skewed reality by accident, and she awakes in her previous life. The Matrix story is the reverse. Neo (male) makes a conscious choice to journey to the real world and "wakes up" to discover his own stream of consciousness – ultimately realizing his full potential.

Context: "*MGTOW are fundamental seekers of the truth, and are therefore Red Pill Men*". (2)

Sarging *verb*: to pick up women, or to go out to try and meet women. (1)

Shit Test: Subtle (and sometimes not so subtle) tests women do on purpose or subconsciously to test men. (3)

Soy: The official drink of anti-incels according to masculinist incels. There have been studies that suggest, but do not prove, that soy lowers testosterone. Masculinist incels use this to suggest someone is low testosterone, therefore less of a man. (4)

SJW: Acronym for *Social Justice Warrior*. Delusional plebs operating online who believe they are making a difference in the world by tweeting an image, or creating a hashtag. (2)

SMP (Sexual Marketplace): The sexual economy of supply and demand for sex and relationships.(3)

SMV (Sexual Market Value): One's worth in the sexual marketplace; often conflated with one's attractiveness. (3)

Stacy: A female counterpart of Chad. A white attractive female with an hourglass figure. (4)

Suicide Fuel (Suifuel): Short for, 'suicide fuel', or something deeply depressing. (4)

Toilet: A pejorative term for a woman that reduces a woman to a sex object that exists solely for male sexual gratification. (4)

Truecel: Kiss-less and touch-less virgin -- has never had any sort of physical interaction with a member of the opposite sex because of his repulsive ugly appearance. another word is permacel. (4)

Appendix 31: Details and Results of the Linear Regression Model

To assess which variables were the strongest predictors of the score on the science quiz, a linear regression model was run with score as the dependent variable, and age, sex/gender, education, college science education, creationism, and manosphere/control as explanatory variables.

- Assumptions and Variable Computing

Linear regression models cannot handle missing values. As a results, assumptions were made:

- The six manosphere respondents who did not specify their age were attributed the mean age of the other 142 respondents (30.6 years old).
- The one Prolific respondent who did not specify their age was attributed the mean age of the other 150 respondents (35.7 years old).
- The three manosphere respondents who did not specify their sex were assumed to be male.
- Answers on the Edu survey item were computed into a binary variable, with those who had no college degree coded as 0 and those who had one coded as 1.
- Answers on the EvoAccept survey item about creationism were computed into a binary variable, with those who answered "Definitely False"; "Probably False"; and "I don't know" coded as 0, and those who answered "Probably True"; and "Definitely True" coded as 1.
- The variable about the number of science courses taken in college (Collsci) was treated as a three-level categorical factor. One for those who have taken between 1 and 3 college science courses (CollSci2) and one for those who have taken more than four such courses (CollSci3). As for those who reported no science courses, they are included in the intercept.
- Lastly, a binary variable was added to differentiate between manosphere respondents (1) and Prolific respondents (0).
- Respondents who did not answer on either Edu, CollSci or EvoAccept were dismissed.

	Estimate	Std. Error	t value	p value	Significance level
(Intercept)	7.37	0.92	8.05	2.47e-14	***
Manosphere	4.14	0.45	9.23	7.06e-18	***
Sex2 (Female)	0.04	0.50	0.08	0.94	
Age	0.02	0.02	1.05	0.29	
Edu1	1.08	0.44	2.48	0.01	*
CollSci2	0.04	0.57	-0.06	0.95	
CollSci3	1.10	0.59	1.87	0.06	
EvoAccept1	1.13	0.63	1.78	0.08	

Table A31.1: Results of the Linear Regression

Appendix 32: Details of Manosphere Survey Participants Exclusion

417 answers were collected on the manosphere survey, yet only 148 were retained for analysis. Below is a detailed summary of the exclusions.

Reasons for exclusion	Survey Variable	Number of participants
Minors	Age < 18	14
Non-manospherians	Group = "I don't identify	195
	with any"+ Group = N/A	
	+ Group = "Other –	
	please specify" if the	
	open-ended answer is not	
	clearly affiliated with the	
	manosphere (see	
	Appendix 20 for details of	
	decisions)	
Did not complete the	<15 answers provided on	155
science quiz	the 20-item science quiz	

Table A32.1: Summary of Manosphere Survey Participants Exclusion

- Note that respondents could cumulate several reasons for exclusion.

French Summary of the Work

In order for PhD candidates writing in non-French languages to obtain their degree, French universities require that an extensive summary of the work be provided in French.

Résumé Substantiel (Français)

En juillet 2017, un ingénieur de Google nommé James Damore partagea sur un serveur interne à l'entreprise un document intitulé « la chambre d'écho idéologique de Google ». Dans ce texte, le jeune employé remettait en cause la politique d'embauche et de discrimination positive du géant du numérique californien. Pour lui, l'entreprise commettait l'erreur de partir du principe que l'absence de femmes des postes à responsabilité était forcément due à la discrimination. Citant des articles scientifiques dans les notes de bas de page de son argumentaire, Damore proposa une explication alternative : peut-être les différences de carrière entre hommes et femmes étaient dues à des différences biologiques. « Je dis juste que la distribution des préférences et des capacités entre les hommes et les femmes est en partie liée à des causes biologiques, et que ces différences pourraient expliquer pourquoi on retrouve moins de femmes dans les postes à responsabilité », écrivait-il alors.¹⁷⁴⁶ Par « biologique », Damore entendait que ces différences ne pouvaient pas être simplement « socialement construites », car elles se retrouvaient dans toutes les cultures, étaient héritables génétiquement, et pouvaient par exemple être liées aux niveaux de testostérone très différents entre les sexes. Et Damore de conclure son argument : ces différences sont « exactement celles que l'on prédirait du point de vue de la psychologie évolutionnaire. »

Après la fuite du document interne sur les réseaux sociaux et le tollé qui s'ensuivit, Damore fut licencié par Google. Dans une note à ses employés, le PDG Sundar Pichai expliquait la décision : « suggérer qu'un groupe de nos collaborateurs puisse avoir des traits qui les rendent moins biologiquement adaptés au travail est blessant, ce n'est pas acceptable. » Damore devint rapidement une célébrité médiatique, écrivant son histoire pour le Wall Street Journal, interviewé par le Guardian, ainsi que par de nombreux influenceurs conservateurs tels que Jordan Peterson. Des scientifiques donnèrent leur avis sur les arguments du document produit par le jeune homme, certains les soutenant, et d'autres les rejetant. L'affaire du mémo Google se retrouva ainsi enchâssée dans des débats politico-scientifiques beaucoup plus vastes au sujet de la biologie des différences sexuées. D'un côté, l'on retrouvait Google, qui représentait la perspective socioconstructionniste progressiste, d'après laquelle la discrimination et les facteurs sociaux pouvaient expliquer la plupart, si ce n'est toutes les différences de personnalité, de choix, et de carrière entre les genres. Cette position est souvent appelée par ses critiques « l'ardoise blanche », c'est-à-dire l'idée que le comportement humain peut s'expliquer uniquement par des facteurs socioculturels, et que la biologie n'est pas pertinente pour comprendre le comportement de notre espèce unique et complexe. De l'autre côté, les commentateurs conservateurs rejoignaient Damore, et avançaient que les différences innées entre les sexes pouvaient expliquer les différences de carrière. Et bien souvent, c'était la psychologie évolutionnaire, qui, comme dans le mémo de James Damore, était leur discipline scientifique de choix.

Cette affaire pose le contexte de notre travail : un clivage idéologique étatsunien extrêmement polarisé, notamment autour des questions de genre, et l'appropriation de disciplines scientifiques comme caution pour des arguments d'un bord ou de l'autre. Du côté conservateur,

¹⁷⁴⁶ Toutes les traductions en français sont les miennes.

c'est la psychologie évolutionnaire qui est en vogue. Mais contrairement à ce qu'il prétend, Damore ne s'est pas uniquement inspiré de l'état de la recherche dans les sciences évolutionnaires pour son mémo. En effet, on y retrouve par exemple l'idée que Google se soucie d'égalité de genre au travail parce que les humains seraient « généralement biaisés par l'envie de protéger les femelles », ce qui d'après lui aurait « probablement évolué car les mâles sont biologiquement dispensables. » Et pourtant, cet argument ne provient pas de la biologie évolutionnaire, mais des écrits de Warren Farrell, l'idéologue en chef du mouvement masculiniste aux Etats-Unis. Comme le révèle son interview dans le *Guardian*, Damore, qui se définit comme un centriste à tendance libertarienne, a bien lu *Le mythe de la domination masculine*, le livre de Farrell sorti en 1993 où les cadres de pensées féministes sont renversés, et la société présentée comme hostile aux hommes, aveugle à leurs souffrances, et prompte à mettre les femmes sur un piédestal.

Dans la lignée de Farrell, tout un ensemble de groupes d'hommes antiféministes se sont constitués en ligne dès le tournant des années 1990. On parle aujourd'hui de « manosphère » pour désigner cet ensemble disparate, et on désignera ici ses membres sous le terme de « masculinistes », comme il est d'usage en français. Bien que les communautés de la manosphère puissent avoir des divergences idéologiques substantielles, elles sont unies par leur opposition au féminisme, et par leur volonté affirmée de défendre les intérêts des hommes dans un monde dépeint comme de plus en plus hostile à ces derniers. Parmi ces groupes, on retrouve la communauté *Red Pill*, où des hommes hétérosexuels partagent des conseils de vie et de séduction basée sur une vision antagoniste des sexes inspirée de la théorie darwinienne. Sur Reddit, le réseau social préféré de la communauté *Red Pill*, l'affaire Damore a été abondamment relayée, y devenant même le sujet le plus discuté de tous les temps. Les centaines d'hommes qui commentaient l'événement étaient unanimes : d'après eux, l'ingénieur de Google fut licencié pour avoir simplement osé formuler des vérités biologiques qui sont monnaie courante dans la manosphère.

En effet, les groupes de la manosphère sont unis par leur enthousiasme pour les théories biologiques sur les différences sexuées. Les militants pour les droits des hommes soutiennent que les normes culturelles qui nuisent aux hommes sont ancrées dans une différence biologique fondamentale où la vie des femelles est précieuse pour l'espèce, tandis que celle des mâles est dispensable. Les coaches en séduction de la communauté *Pickup-Artist* écrivent des manuels entiers pour enseigner aux hommes hétérosexuels à exploiter les différences psychologiques entre hommes et femmes pour atteindre leurs objectifs romantiques et sexuels. Les incels (pour « célibataire involontaire ») expliquent leur solitude et leur célibat par leur génome défaillant qui les condamne à une vie de misère affective provoquée par la sélection sexuelle effectuée par des femelles exigeantes, comme l'avançait déjà Darwin. Dans tous ces cas, les idéologues comme les membres ordinaires de ces groupes disent ne se baser que sur des résultats issus de la recherche scientifique, en premier lieu en sciences évolutionnaires. Dans ces espaces en ligne, le féminisme, le socio-constructionnisme, et « l'ardoise blanche » sont tournées en ridicule et perçus comme des dogmes idéologiques de gauche n'ayant aucun rapport avec la réalité empirique.

Au cœur de ce débat se situe l'éternel clivage nature/culture : les différences psychologiques et comportementales entre les groupes humains, ou entre les femmes et les hommes peuvent-elles être attribuées à des facteurs environnementaux, tels que la nutrition ou l'éducation, ou à des différences génétiquement héritables ? Tous les scientifiques étudiant ces questions aujourd'hui sont d'accord sur le fait qu'un tel cadrage dichotomique de la question est beaucoup trop simpliste, comme l'exprime la biologiste évolutionnaire Suzanne Sadedin dans sa critique du texte de Damore :

« Cette dichotomie nature vs culture est complètement obsolète, et personne dans le champ ne la prend au sérieux. Plutôt, la recherche contemporaine se base sur l'idée beaucoup plus plausible biologiquement selon laquelle les traits neurologiques se développent dans le temps sous l'influence simultanée de facteurs épigénétiques, génétiques, et environnementaux. Tout ce qui concerne les humains mélange à la fois la nature et la culture. »

En effet, il est quasiment impossible de démêler empiriquement ce qui relève de la nature et de la culture, ou du sexe et du genre. Quand les hommes et les femmes divergent sur un trait donné comme la compétitivité, cela peut être causé par un ensemble de facteurs, dont certains sont considérés comme « biologiques » (comme les niveaux de testostérone ou la libido) et certains comme plutôt « culturels » (comme la socialisation genrée ou les normes institutionnelles). En fait, cette dualité nature/culture, quoi qu'intuitive, est beaucoup trop simpliste pour expliquer la myriade d'interactions entre les deux : par exemple, les gènes peuvent s'activer ou non selon l'environnement, et les niveaux d'hormones réagissent aussi constamment aux stimuli environnementaux. Dans cette thèse, nous appellerons donc cette vision le modèle « interactionniste », tel qu'illustré par les propos de Sadedin.

Cependant, ce qui est une question fondamentalement empirique est aussi une question politique. En réaction au racisme scientifique, à l'eugénisme, et aux horreurs du nazisme, la plupart des analyses héréditariennes et biologiques du comportement humain furent durablement discrédités après la seconde Guerre Mondiale. Pourtant, la science a tracé son chemin. Aujourd'hui, de nombreuses disciplines étudient les comportements humains et les sociétés par un prisme darwinien, propulsés par les découvertes en génétique, en statistiques, en théorie évolutionnaire, en endocrinologie, ou encore en sciences cognitives. Dans les sciences évolutionnaires, la théorie de l'évolution par sélection naturelle de Charles Darwin demeure le pilier théorique par lequel comprendre le vivant, des plantes aux bactéries en passant par les humains. Depuis les années 1960, dans les débats politiques autour des différences genrées et sexuées, ces disciplines ont été très controversées, car elles lient explicitement le comportement humain à la génétique, par le biais de la théorie évolutionnaire. Comme le montrent les réactions polarisées au mémo de James Damore, ces querelles idéologiques vont encore bon train, et les deux camps choisissent des positions exagérées, qu'il s'agisse de « l'ardoise blanche » des progressistes et féministes ou du déterminisme biologique extrême que l'on trouve dans la manosphère.

Dans cette thèse, c'est le côté de la manosphère que nous étudions. En effet, on observe un regain d'attention envers ces communautés d'hommes parfois radicalisés et misogynes de la part des médias, de la recherche, et des pouvoirs publics, notamment à l'occasion de quelques attentats terroristes perpétrés par des masculinistes. Cependant, on connaît encore assez mal la vision de la nature humaine qui sous-tend l'idéologie de ces groupes. Et pourtant, il est impossible de ne pas être frappé par la popularité des sciences évolutionnaires dans ces espaces en ligne. La manosphère abrite des férus de darwinisme, qui réduisent souvent les structures sociales et les comportements individuels à des stratégies reproductives et à des gènes en compétition. Si cela peut avoir l'air étrange pour un profane, c'est tout à fait habituel pour les chercheurs en sciences évolutionnaires. Dans une tribune du *Boston Globe* écrite en 2024, le psychologue évolutionnaire étatsunien Daniel Conroy-Beam écrivait : « Plonger dans la manosphère fut pour moi comme découvrir une vision déformée de ma science. La vision de la psychologie évolutionnaire que l'on trouve dans la manosphère est tronquée, filtrée, sélective, et exagérée. »

En quoi et comment la psychologie évolutionnaire est-elle déformée dans le discours et l'idéologie de la manosphère ? Comment les principes darwiniens sont-ils appropriés au service

d'un programme politique antiféministe ? Ce sont les questions qui ont guidé nos recherches. Elles s'inscrivent dans les problématiques plus larges soulevées par l'affaire Damore : la vision des différences sexuées promue par les sciences évolutionnaires est-elle intrinsèquement sexiste, et, si non, pourquoi est-elle si facilement appropriée de manière sexiste ? Il est clair que la manosphère peut se révéler extrêmement misogyne. Souvent, cette misogynie est niée par les masculinistes qui disent simplement rappeler que « les hommes et les femmes sont différents. » En effet, Suzanne Sadedin, la biologiste évolutionnaire critique du mémo de James Damore, reconnaissait que « certains passages semblaient fort raisonnables », et que « pour un biologiste évolutionnaire, l'idée que les différences sexuées soient purement construites socialement est tout à fait improbable. » Cependant, elle qualifie tout de même le texte de Damore « d'ordure méprisable » pour son sexisme et ses « pointes de racisme », plus proche pour elle d'une « idéologie d'extrême-droite déguisée » que de l'état de la recherche scientifique.

La question est donc plus complexe qu'une simple acceptation ou rejet de l'idée de différences biologiques entre les sexes. Les sciences naturelles continuent à accumuler des preuves de ces différences. Par exemple, plus l'on en découvre sur les impacts comportementaux des hormones, et plus l'on découvre par conséquent de différences comportementales fondamentales entre les sexes, les mâles et les femelles ayant des configurations et des niveaux hormonaux différents. La théorie évolutionnaire est le grand cadre théorique qui permet de guider les recherches et d'expliquer ces différences, par le simple principe que mâles et femelles ont évolué des traits physiologiques et comportementaux pour faire face à leurs défis de survie et de reproduction respectifs. Ce savoir empirique est descriptif, et il ne prescrit rien, ni ne valide une idéologie plutôt qu'une autre. Et pourtant, comme le déplore Sadedin dans un autre article : « quand les preuves sont présentées au public, elles deviennent souvent de la chair à canon idéologique. Parfois l'interprétation donnée est féministe, parfois elle est misogyne, mais les données ne sont fondamentalement ni l'un ni l'autre. »

Dans la manosphère, il existe un fort enthousiasme pour les recherches scientifiques sur les différences biologiques entre les sexes. Idéologues et influenceurs antiféministes propagent une vision darwinienne de ces différences, soutenue par un mélange de recherche scientifique de pointe et de spéculations évolutionnaires, le tout agrémenté d'exagérations, d'omissions, et de sexisme flagrant. En tant que travail de sociologie des sciences, cette thèse se propose de démêler ce phénomène complexe. Pour ce faire, elle prend en compte à la fois le contexte idéologique et politique propre à la manosphère, tout en effectuant un va-et-vient entre les discours de la manosphère et la littérature en science évolutionnaire qu'ils s'approprient. Ce faisant, elle vient combler une lacune dans l'état de la recherche sur la manosphère.

Revue de littérature et positionnement de la recherche

La recherche en sciences sociales a bien identifié l'importance des sciences évolutionnaires dans l'idéologie de la manosphère. Par exemple, dans l'un des premiers articles de recherche sur le sujet, la chercheuse en études de genre Debbie Ging reconnaît que la « rhétorique politique de la manosphère [...] est presque entièrement dominée par la psychologie évolutionnaire, qui se repose fortement sur le déterminisme génétique pour expliquer les comportements des hommes et des femmes en lien avec la sélection sexuelle. » Quelques années plus tard, dans un court article, Ging et Murphy ont même fait de la psychologie évolutionnaire un des éléments constitutifs de la manosphère, en écrivant que ses groupes étaient « unis par leur antipathie envers le féminisme, leur

recours à la psychologie évolutionnaire, et leur conviction que l'Occident est en danger. » Cependant, très peu d'études s'intéressent en profondeur à ce sujet.

La plus ancienne nous vient de la chercheuse en sciences de l'information et de la communication Amanda Denes. Cette dernière critique le guide de séduction le plus connu de toute la manosphère, *The Mystery Method*. Dans son analyse, elle montre à juste titre que le « texte opère dans une perspective évolutionnaire, essentialisant l'expérience sexuelle féminine. » Sa question de recherche est la plus proche de la nôtre : « Comment la science est-elle utilisée (à tort) pour comprendre la sexualité des femmes ? », se demande-t-elle. Son étude déconstruit judicieusement l'approche problématique du consentement présente dans le guide de séduction, où la biologie est invoquée pour dépeindre la sexualité comme étant fixe et monolithique, et par conséquent facile à contrôler et à manipuler pour ses lecteurs masculins. C'est aussi ce qu'a révélé l'enquête de terrain menée par la sociologue irlandaise Rachel O' Neill au sein de la branche londonienne de la communauté Pickup-Artist. Au fil de ses observations et de ses entretiens, elle a montré comment ces hommes prétendent posséder des vérités biologiques au sujet des femmes et de la sexualité, le tout soutenu par la théorie évolutionnaire. Cette prétendue expertise, avance O'Neill, fait office de véritable « idéologie vécue » qui conditionne le rapport de ces hommes à eux-mêmes et aux autres, et leur procure une justification morale pour la poursuite de leurs objectifs sexuels. Enfin, dans une étude du discours de la communauté Red Pill, le sociologue Shawn Van Valkenburgh reconnaît aussi l'importance de la psychologie évolutionnaire. Il ne croît pas cependant que la manosphère se base sur une « interprétation superficielle de la psychologie évolutionnaire », mais accuse plutôt la discipline tout entière d'être intrinsèquement sexiste.

Ces recherches en sciences sociales ont un objectif similaire au mien. Elles critiquent le discours de la manosphère sur la sexualité et les différences sexuées, et identifient « les appropriations populaires et les abus de la psychologie évolutionnaire dans la manosphère ». Cependant, la séparation est souvent peu claire entre les critiques des appropriations de la science par la manosphère, et la critique des sciences évolutionnaires elles-mêmes. Ainsi, Amanda Denes explique à la fin de de on article que le guide de séduction, « comme les théoriciens évolutionnaires, retire leur agentivité aux femelles et positionne la sexualité féminine comme une expérience essentialisée qu'une femme ne peut pas contrôler. »¹⁷⁴⁷ Tout au long de son article, elle soumet la psychologie évolutionnaire à des critiques qui ont été maintes fois retoquées. Les recherches en sciences sociales présentent malheureusement souvent la psychologie évolutionnaire à travers quelques sources critiques, souvent assez anciennes, sans montrer une connaissance intime du champ disciplinaire actuel. Cela ne fait pas justice aux avancées épistémologiques et méthodologiques que connaît ce champ, en partie grâce aux efforts de scientifiques féministes au sein de la discipline. Plutôt que de disqualifier des champs disciplinaires entiers, la présente recherche part du principe qu'il faut partir de l'état de la connaissance empirique dans les sciences évolutionnaires afin de produire une critique détaillée et précise des appropriations qui en sont faites par la manosphère. Par conséquent, nous examinerons maintenant les rares occurrences où les scientifiques qui produisent et connaissent cette connaissance empirique confrontent les appropriations antiféministes de leur champ.

Pendant presque dix ans, le seul article de recherche sur l'usage de la psychologie évolutionnaire dans la manosphère était très bienveillant. Dans un numéro de la revue *Evolutionary*

¹⁷⁴⁷ C'est moi qui souligne.

Psychology, les psychologues Nathan Oesch et Igor Miklousic ont passé en revue deux guides de séduction populaires chez les *Pickup-Artists*. Leur objectif était de comparer le contenu des guides à l'état de la recherche empirique, et leur verdict était sans appel : « il semble clair qu'il y a de nombreux résultats de recherche en psychologie qui soutiennent les affirmations de la Communauté de la Séduction », écrivaient-ils en conclusion. De plus, ils défendaient même l'existence de la communauté, en expliquant qu'elle était « fondée sur des recherches empiriques solides ainsi que sur une expérience certaine de la séduction et des relations », allant jusqu'à avancer que cela pourrait « améliorer les relations entre les hommes et les femmes. » Il n'est guère surprenant que des chercheurs en sciences sociales aient vu cela comme un soutien du champ envers la manosphère, au vu de cet article très complaisant publié dans une revue de psychologie évolutionnaire.

Pourtant, la popularité grandissante de la manosphère et son appropriation du darwinisme ne passe plus aujourd'hui inaperçue chez les chercheurs en sciences évolutionnaires. Par exemple, dans son étude de 2023 sur les incels, la chercheuse Kathryn Baselice explique que le problème n'est pas tant que les incels comprennent mal la littérature scientifique, mais plutôt qu'ils « appliquent ses principes de manière superficielle et inflexible », et « refusent d'envisager des explications alternatives pour la complexité des comportements humains. » Récemment, des chercheurs et des producteurs de contenu en ligne se sont attaqués à ces appropriations. Ainsi, Alexander @datepsych, étudiant en neurosciences comportementales et vulgarisateur sur les réseaux sociaux, a commencé à critiquer les fondements prétendument scientifiques des idéologies de la manosphère. Similairement, le podcaster Macken Murphy, doctorant en sciences évolutionnaires à l'université de Melbourne, a débattu en direct sur YouTube avec des influenceurs de la manosphère, et partage régulièrement du contenu sur Instagram, YouTube et TikTok visant à discréditer les interprétations simplistes ou misogynes des résultats de recherche scientifique. Ces exemples montrent qu'une jeune génération de chercheurs en sciences évolutionnaires, plus active sur les réseaux sociaux et attentive à ce qu'il s'y passe, s'inquiète des interprétations de la discipline.

Ainsi, les chercheurs en sciences sociales comme en sciences évolutionnaires sont conscients du besoin de déconstruire et de critiquer les appropriations de la science par la manosphère. Pourtant, comme l'a montré cette brève revue de littérature, il existe peu d'études à ce sujet. Bien que les chercheurs en sciences évolutionnaires soient idéalement placés pour critiquer les appropriations de disciplines dont ils connaissent parfaitement l'état de l'art, leurs trajectoires de carrière les encouragent plutôt à publier dans des revues spécialisées de leur domaine. A l'inverse, les études en sciences sociales ont l'avantage de mettre l'accent sur le contexte idéologique et politique de la question, et d'avoir une expertise plus grande dans l'étude des mouvements sociaux, mais pèchent parfois par méconnaissance de la littérature évolutionnaire. La présente thèse a pour ambition de combiner les forces de ces deux approches. Comme le montrent les travaux de la chercheuse finlandaise Ullica Segerstråle sur les controverses historiques liées aux sciences évolutionnaires du comportement humain, une sociologue ou historienne des sciences peut combiner sa connaissance intime des méthodes et de l'épistémologie d'un champ scientifique avec son attention aux phénomènes historiques et sociaux. C'est le but de ce travail de recherche, comme l'illustrent bien ses deux directrices de recherche : l'une étant historienne spécialiste des questions de genre aux Etats-Unis, et l'autre chercheuse en sciences évolutionnaires spécialiste de la sexualité féminine.

Problématiques de recherche

On peut découper les questionnements de cette thèse en trois volets. Tout d'abord, se pose la question de la culture scientifique des masculinistes. A quel point connaissent-ils les disciplines scientifiques dont ils aiment à invoquer les théories et les concepts ? Il s'agit d'une question qui se pose d'emblée lorsque l'on veut analyser la réception et la circulation des savoirs scientifiques au sein d'un groupe. Avant d'identifier les potentiels biais et mécompréhensions, il faut parvenir à évaluer le niveau de connaissances scientifiques de ces masculinistes. Afin de pouvoir en tirer des conclusions, une telle évaluation requiert une comparaison avec le niveau général du public, en l'occurrence étatsunien.

Se pose ensuite la seconde et principale question de ce travail, celle de l'instrumentalisation politique des savoirs scientifiques. Cette question en renferme de nombreuses autres, et elle est celle qui a demandé l'analyse la plus fine et poussée : quels sont les concepts et théories favoris des masculinistes ? A quelles fins sont-ils invoqués ? Comment cela s'insère-t-il dans le paysage plus vaste des récits, des valeurs, et des objectifs de ces groupes ? En quoi ces appropriations diffèrent-elles de la littérature scientifique, et quels sont les biais et mécompréhensions sous-jacents ? Bien que les masculinistes mobilisent principalement des savoirs scientifiques tournant autour de la sexualité et des différences sexuées, nous examinerons également la façon dont les idées darwiniennes peuvent se répercuter dans d'autres domaines, comme les identités personnelles, les récits de vie, ou encore les croyances sur le passé et le présent.

Le troisième volet de la recherche se concentre sur la circulation des savoirs scientifiques sur Internet. Alors que les idéologies et les groupuscules mutent et se combinent en ligne à une vitesse sans précédents, il est primordial d'essayer de comprendre la façon dont des savoirs collectifs émergent, sont maintenus, et se transforment. Pour cela, nous retraçons les origines de la fascination de la manosphère pour le darwinisme, et nous essayons de comprendre quelles sont les sources de savoir scientifiques prisées par les masculinistes, et par quels canaux ces savoirs sont transmis.

Résumé des chapitres

Afin de répondre à ces problématiques de recherche, la thèse est divisée en sept chapitres. Les deux premiers posent les bases historiques et conceptuelles nécessaires pour comprendre et discuter à la fois de la manosphère contemporaine, et des approches évolutionnaires du comportement humain. Le troisième chapitre détaille les méthodes et les données utilisées, et les quatre derniers détaillent les résultats de l'analyse.

Le premier chapitre dresse une généalogie idéologique de la manosphère, des années 1970 aux Etats-Unis à nos jours, avant d'effectuer un tour d'horizon détaillé des communautés masculinistes contemporaines. Il retrace les origines du mouvement de libération des hommes, un mouvement allié du féminisme libéral dans les années 1970, dont le chef de file n'était autre que Warren Farrell. Entraînés par la vague progressiste et militante de l'époque, ces hommes issus des classes moyennes et supérieures éduquées voulaient redéfinir la masculinité et s'émanciper d'un rôle de genre pauvre émotionnellement et basé sur la compétition, la force, l'homophobie, et l'écrasement des autres. Ce bref mouvement s'est rapidement fissuré, n'arrivant pas à trouver d'accord avec le féminisme autour des questions de garde des enfants en cas de divorce ou d'abolition du service militaire propre aux hommes. Si certains militants, dès lors nommés hommes proféministes, sont restés alliés aux mouvements féministes, un grand nombre ont également continué à militer pour les droits et les intérêts des hommes, des garçons, et des pères divorcés. Ce mouvement pour les droits des hommes né à la fin des années 1970 est le creuset intellectuel de la manosphère contemporaine, au sein de laquelle il existe toujours. A force d'insister sur les problèmes et les souffrances vécus par les hommes dans la société contemporaine, ces mouvements ont fini par renverser les grilles de lecture féministes, et à se structurer autour de l'idée que la société occidentale était hostile aux hommes, en partie à cause du féminisme, qu'il convenait alors de combattre. Aujourd'hui sur Internet, ce postulat est largement partagé par un ensemble nébuleux de communautés collectivement désignées sous le nom de « manosphère. » Pour ce travail, nous avons établi une typologie de la manosphère en cinq communautés différentes, que l'on retrouve dans des travaux de recherche récents : les militants pour les droits des hommes (1), branche la plus ancienne; les Pickup-Artists (2), c'est-à-dire des coaches en séduction pour hommes hétérosexuels et leurs ouailles ; The Red Pill (3), une communauté née dans les années 2010 qui intègre ces techniques de séduction à une vision du monde individualiste, darwinienne, et résolument antiféministe ; MGTOW -Men Going Their Own Way (4), une communauté séparatiste d'hommes désireux de vivre leur vie loin des femmes ; et enfin les incels (5), ces hommes malheureux en amour qui blâment la génétique, la société, et les femmes pour leur solitude. Audelà de leurs divergences certaines, ces groupes sont unis par une opposition à un féminisme perçu comme monolithique et hégémonique dans la société, par leur croyance en l'existence d'une crise de la masculinité en Occident, et par le partage d'un jargon commun.

Dans le deuxième chapitre, « Sciences évolutionnaires et politique du genre aux Etats-Unis », les controverses historiques et les instrumentalisations politiques du darwinisme aux Etats-Unis sont passées en revues, à commencer par le 19^{ème} siècle. Comme le montrent les travaux de l'historienne Kimberly Hamlin, telle était l'influence de la théorie évolutionnaire qu'elle a dès ses débuts dans les années 1850 fait l'objet de lectures genrées et normatives, par les féministes comme par leurs détracteurs, un phénomène dont notre recherche examine une déclinaison plus récente. Depuis les années 1970, les sciences évolutionnaires du comportement ont été au cœur de controverses portant sur les questions de sexe et de genre, souvent en opposition avec le féminisme. Afin de mieux comprendre ces disciplines, leur histoire, leur méthode, et leur épistémologie sont présentées. Au fondement des sciences évolutionnaires du comportement se trouve la pensée adaptationniste. C'est-à-dire, l'idée que l'on peut comprendre les traits et caractéristiques actuels d'une espèce comme des adaptations, c'est-à-dire comme le résultat d'un long processus de sélection naturelle ou sexuelle. Il s'agit aujourd'hui d'un champ varié, en plein essor, qui évolue de l'intérieur sous la houlette de chercheuses et de chercheurs engagés, réflexifs, et innovants.

Le troisième chapitre détaille les méthodes utilisées et les données récoltées pour les besoins de cette étude monographique. En premier lieu, nos arguments sont les résultats de l'analyse qualitative d'un corpus de discours masculinistes, principalement en ligne, de ces trente dernières années (1993-2023). Ce corpus de sources primaires inclut du contenu issu des réseaux sociaux comme Reddit et Twitter, de blogs, de forums, de sites internet, des vidéos YouTube, ainsi que des livres papier ou numériques. Le contenu est réparti également entre les cinq grandes communautés, et se divise en trois sections : les textes canoniques de ces communautés (70%), un échantillon aléatoire récolté sur des plateformes où les masculinistes ordinaires génèrent le contenu (15%), et du contenu spécifiquement lié à nos questions de recherche sur les sciences évolutionnaires (15%). L'ensemble fait 9000 pages, et la constitution du corpus est justifiée et sourcée de manière transparente. L'analyse de discours permet d'identifier des biais, des récits présents au sein de communautés, mais peine à en évaluer la fréquence, la popularité. C'est pourquoi une enquête

quantitative par sondage est venue complémenter l'analyse de discours. Récolter des données auprès de ces groupes hostiles n'a pas été tâche aisée (148 réponses récoltées), d'autant plus que le questionnaire est relativement long. Ce questionnaire est avant tout un quiz de science, dont le but est d'évaluer la culture scientifique des masculinistes. Les questions à choix multiples ont été sélectionnées dans des questionnaires de niveau licence conçus par des experts des disciplines en question. Le questionnaire contient des questions de culture scientifique générale, de génétique, d'endocrinologie, de biologie évolutionnaire, ainsi que de psychologie évolutionnaire. Les questions ont également été choisies pour mesurer la popularité de certaines interprétations erronées ou exagérées de ces sciences. Il a aussi permis de demander aux masculinistes quels étaient leurs sources de savoir scientifiques préférées. Afin de pouvoir monter en généralité sur les résultats obtenus, un groupe de comparaison issu de la population étatsunienne a été recruté sur la plateforme Prolific (151 réponses), et a répondu exactement au même questionnaire. Enfin, quelques entretiens qualitatifs ont été menées, notamment avec Warren Farrell, le militant masculiniste le plus influent au monde, ainsi qu'avec des psychologues évolutionnaires ayant interagi par le passé avec la manosphère. Armé de ces sources de données originales et variées, nous pouvons passer aux résultats de recherche.

Dans le quatrième chapitre, nous démontrons la place importante de la science au sein de ces communautés masculinistes. D'un point de vue discursif, tout d'abord, leurs membres aiment se réclamer de la science, et de la rationalité, en opposition au féminisme et aux femmes vus comme irrationnels voire antiscientifiques. La relation avec le milieu universitaire qui produit cette recherche scientifique est assez ambivalente, car les masculinistes savent à la fois s'en réclamer pour légitimer leurs positions, mais également le rejeter d'un bloc lorsque cela est utile. Au-delà du discours, les résultats du sondage indiquent assez clairement que les masculinistes disposent d'une culture scientifique bien au-dessus de la moyenne. Sur notre QCM de sciences noté sur vingt, un masculiniste avait, toute chose égale par ailleurs, plus de quatre points de plus qu'un étatsunien recruté sur Prolific. De plus, les masculinistes témoignent d'un niveau d'éducation plus élevés que la moyenne, en particulier en ce qui concerne l'éducation scientifique dans le supérieur. Enfin, et cela n'est pas réellement une surprise au vu de leur enthousiasme pour le darwinisme, il n'y a quasiment aucun créationniste dans nos réponses, ce qui est encore loin d'être le cas au sein de la population étatsunienne. Et pourtant, malgré cela, nos analyses révèlent que ces férus de biologie évolutionnaire s'approprient les recherches d'une manière qui leur est propre : ils voient les instincts comme des forces irrésistibles, et appliquent cela de manière disproportionnée aux femmes. Le comportement des femmes est ainsi « biologisé » mais pas celui des hommes, et les femmes sont présentés comme comportementalement uniformes, guidées par des impératifs biologiques similaires, ce qui peut conduire à leur déshumanisation et à des actes de violence misogynes. Outre ce déterminisme biologique exagéré, les masculinistes se distinguent aussi par la production d'hypothèses évolutionnaires qui leurs sont propres. Ayant intégré les fondamentaux du raisonnement adaptationniste, ils l'emploient pour donner du sens au monde autour d'eux, et en particulier aux différences femmes/hommes. Il s'agit d'un phénomène unique, où des communautés de profanes produisent eux-mêmes des hypothèses, sans jamais les accompagner de tests ou d'expériences empiriques, et en signalant rarement qu'il s'agit là de leurs propres spéculations. Au vu de toutes ces différences entre les discours de la manosphère et l'état des recherches en sciences évolutionnaires, nous avons désigné le phénomène étudié comme étant une véritable « science masculiniste » bien distincte des sciences évolutionnaires (quoi que ce terme ne signifie pas qu'elle soit pour autant régie par les règles de la méthode scientifique).

Dans le chapitre cinq, « Les avatars de la science masculiniste », nous passons en revue la façon dont chaque communauté de la manosphère s'approprie la science de manière différente en fonction de son identité et de ses objectifs. Au-delà de la diversité des cas étudiés, il apparaît que la science masculiniste tourne toujours autour de la question des différences sexuées, avec une suite de biais similaires, passés en revue dans le chapitre suivant.

Le sixième chapitre s'intitule « La science masculiniste : comment la science, la pseudoscience, et l'idéologie masculiniste se combinent pour une créer une vision darwinienne et sexiste du monde. » Il démontre comment les résultats de recherche sur les différences sexuées sont bien souvent exagérés, un biais qui est loin de n'être propre qu'à la manosphère. L'état de la recherche en psychologie évolutionnaire sur les différences comportementales femmes/hommes est ensuite comparé à la science masculiniste, sur des questions d'infidélité sexuelle, d'empathie, de faculté à ressentir l'amour, d'hormones, et d'intelligence. Quatre biais récurrents sont identifiés : la présence d'affirmations empiriquement fausses (1) ; la présence de jugements de valeurs négatifs sur les comportements féminins (2) ; l'omission des comportements masculins, de manière à présenter une vision plus négative de la « nature féminine » (3) ; et l'emploi de sources misogynes non-scientifiques (4). La suite du chapitre révèle en effet la présence dans la science masculiniste de théories pseudoscientifiques, obsolètes, et d'une véritable philosophie de l'histoire antiféministe et darwinienne, qui n'a plus grand lien avec l'état de la recherche.

Enfin, le septième et dernier chapitre étudie la circulation et l'acquisition des savoirs scientifiques dans la manosphère. Son objectif est de comprendre la façon dont la science masculiniste a émergé, et a pu se construire et se propager au fil du temps. C'est à priori dès la fin des années 1990, dans la communauté Pickup-Artist, grâce notamment aux succès de livres de vulgarisation grand public, que l'évolution darwinienne a fait son entrée dans la manosphère. Depuis, avec l'avènement d'Internet, l'accès aux savoirs n'a jamais été aussi aisé. En témoigne la part importante des masculinistes qui disent lire directement les résultats de recherche dans les revues scientifiques, accessibles en quelques clics. On observe d'ailleurs sur les sites et plateformes masculinistes la présence d'espace dédiés spécifiquement aux partages d'articles scientifiques. Nous avons supputé que ce flux d'information était en grande partie due à une minorité d'utilisateurs extrêmement actifs, ou « super-propagateurs ». De plus, les résultats du sondage indiquent clairement que les masculinistes consomment et partagent des savoirs scientifiques de manière plus régulière que les membres de l'échantillon de comparaison issu de la population étatsunienne. Enfin, le rôle des chercheurs en sciences évolutionnaires dans ce processus est également analysé. Ces analyses révèlent de profonds clivages politiques et idéologiques au sein de la discipline, tant sur les relations avec le féminisme et le masculinisme que sur la neutralité des savoirs scientifiques et la liberté académique. Bien que cela ne soit pas le cœur de notre sujet, cela ouvre des pistes d'enquête pour raffiner la compréhension de ce phénomène par la suite.

Résumé

Par nos analyses, nous avons révélé que les masculinistes produisent et maintiennent collectivement un corpus d'analyses darwiniennes sur la société et les questions de sexe/genre qui est assez distinct de l'état de la recherche en sciences évolutionnaires. Ce fossé ne peut pas s'expliquer uniquement par une mécompréhension des savoirs scientifiques par les profanes, car les masculinistes disposent d'une culture scientifique et d'une compréhension de la théorie évolutionnaire largement au-dessus de la moyenne. Il faut alors plutôt comprendre ce fossé comme le résultat d'une instrumentalisation idéologique de la science, guidée par des objectifs politiques

et des valeurs préétablies plutôt que par la recherche de la vérité. En effet, quand les résultats scientifiques concordent avec les croyances et idéologies de la manosphère, ils sont présentés comme des preuves irréfutables, tandis que ceux qui ne concordent pas brillent par leur absence. Au-delà de ces appropriations sélectives, les masculinistes emploient également leur imagination darwinienne pour générer leurs propres récits évolutionnaires à propos du passé, du présent, et du futur. Enfin, quand la recherche empirique ne parvient pas à soutenir leurs affirmations, ils peuvent parfois se tourner vers des sources pseudoscientifiques ou non scientifiques pour étayer ces dernières. Derrière tout cela, on retrouve un ensemble d'exagérations, d'interprétations partielles et sélectives, et de jugements de valeurs voire d'émotions misogynes.

Contributions à la littérature

Cette thèse contribue de trois manières à la littérature en recherches sur la manosphère.

Tout d'abord, sur le plan méthodologique. En effet, il n'existe encore pas de consensus sur les méthodes d'analyse de tels groupes en ligne. En particulier sur les questions de protection des données, de cybersécurité, et d'éthique du consentement éclairé, la recherche sur Internet remet en question les codes éthiques hérités de la recherche en sciences biomédicales. En rédigeant un protocole éthique où chaque choix est justifié (Annexe 3), afin d'étudier les communautés de la manosphère d'une manière qui combine protection du chercheur, protection des sujets de recherche, faisabilité, et respect des normes juridiques en vigueur, ce travail peut servir d'inspiration et permettre à d'autres chercheurs travaillant sur des sujets similaires de justifier leurs décisions méthodologiques. De plus, le sondage réalisé est le seul à comprendre les cinq communautés de la manosphère. En détaillant tout le processus de distribution du sondage, y compris ses difficultés, ainsi que la liste des sites et plateformes où s'est effectuée cette distribution (Annexes 15-17), l'espoir est de permettre à d'autres collègues de conduire ce type d'étude ambitieuse sur une population relativement hostile et difficile d'accès. Enfin, le corpus de discours qualitatif a également été constitué sur des principes transparents et détaillés exhaustivement dans les annexes (Annexe 6-9). Cela a pour but de permettre sa réutilisation par d'autres équipes de recherche, ce qui a déjà été le cas d'une équipe étatsunienne spécialisée en intelligence artificielle (Annexe 27).

Ensuite, les contenus du premier chapitre dédié à la manosphère peuvent servir de référence. Cette généalogie idéologique de la manosphère, s'appuyant sur des sources d'époque, ainsi que sur une interview de Warren Farrell, est à ma connaissance inédite. De même, la revue de littérature présente dans ce chapitre a aussi été pensée pour servir de référence à tous les collègues intéressés par le sujet, et a d'ailleurs déjà été publiée indépendamment. De plus, je propose ma propre définition de la manosphère, ainsi que ma typologie et mon analyse de ses différents groupes et idéologies, dans l'espoir que ces dernières soient reprises, raffinées, et critiquées par d'autres collègues. Enfin, l'ensemble des analyses contenues dans les chapitres IV à VII devrait permettre à chacun de mieux comprendre les racines scientifiques et idéologiques de la science masculiniste.

La présente thèse contribue aussi à l'état de la recherche sur l'histoire politique du Darwinisme. J'ai été inspiré par les travaux de l'historienne Kimberly Hamlin sur l'appropriation politique des théories évolutionnaires par les militantes féministes étatsunienne du 19-20^{ème} siècle. Cette thèse montre qu'un siècle plus tard, la science masculiniste peut se comprendre comme un phénomène similaire, mais inversé, où les mêmes théories darwiniennes sur la sélection sexuelle sont instrumentalisées par des groupes aux objectifs antiféministes.

Concernant les études sur la culture scientifique des non-experts ou « profanes », mon travail apporte un éclairage sur la compréhension des sciences évolutionnaires par le public. Bien qu'il s'agisse d'un sujet très populaire aux Etats-Unis, le dernier bastion de créationnisme biblique en Occident, cette étude par sondage est à ma connaissance la première à évaluer la connaissance de profanes dans les sciences évolutionnaires du comportement, mesurant la popularité de certaines erreurs dans le public. De plus, elle a permis de révéler les sources de contenu scientifique préférées du public, et de les lier à certaines erreurs de compréhension des sciences.

Enfin, ce travail n'a pas manqué d'intéresser la communauté des sciences évolutionnaires du comportement. Il a été présenté à quatre congrès internationaux dans le domaine, dans plusieurs podcasts de sciences évolutionnaires, en partie publié dans la revue *Evolutionary Human Sciences*, et mentionné dans la presse par plusieurs psychologues évolutionnaires. Il a permis de sensibiliser les scientifiques à l'existence de la science masculiniste, et de les informer à ce sujet, car ils n'ont souvent par le temps ni les incitations de carrière propices à s'y dédier. De plus, la conclusion de cette thèse explore les potentiels moyens d'actions pour les chercheurs désireux de combattre les appropriations politiques de leur discipline.

Un appel pour les scientifiques préoccupés

Depuis ses grands débuts en 1859, la théorie de Darwin a été appropriée pour toutes sortes de raisons politiques. De ce fait, j'avance qu'elle n'appartient pas qu'à la communauté scientifique qui l'applique et la perfectionne au quotidien. Comme le montrent les exemples de la science masculiniste ou des féministes darwiniennes du 19^{ème} siècle, des profanes s'approprient cette théorie simple et élégante pour expliquer le monde qui les entoure, consolider leurs arguments, et réaliser leurs objectifs politiques. Tel est le pouvoir explicatif de cette théorie qu'elle ne semble pas pouvoir être contenue entre les murs des laboratoires. Et c'est exactement la raison pour laquelle les chercheurs en sciences évolutionnaires devraient s'exprimer sur ces questions, car ils sont les seuls à pouvoir démêler la science de l'idéologie. Cela ne réduira peut-être pas la popularité des sciences évolutionnaires chez les masculinistes (il s'agit après tout d'un champ riche et fascinant). Cependant, cela permettra au moins que la recherche rigoureusement produite au sein des laboratoires ne soit pas assimilée au darwinisme rudimentaire et antagoniste de la manosphère.