SCROLLING IS NOT EXTENDED MIND-WANDERING:

HOW TIKTOK'S *FOR YOU*, ANDREW TATE, AND THE ATTENTION ECONOMY
ARE JEOPARDIZING USER AUTONOMY ONLINE

by

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Dalhousie University is located in Mi'kma'ki, the ancestral and unceded territory of the
Mi'kmaq.
We are all Treaty people.

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Abstract

In the following thesis, I argue that passively scrolling through TikTok significantly interferes with an agent's capacity to claim autonomous endorsement of repudiatory socio-political values consumed on their "*For You* Page." I reject the claim that task-unrelated smartphone use is a form of 'extended mind-wandering' to motivate my argument. I then argue that scrolling on TikTok is a source of value-inculcation, particularly with respect to antifeminist values. I argue that in order to autonomously endorse or repudiate values of this tenor, an agent must reflect on their alignment with such values in an extensive and collaborative way rather than in a brief way. I then move to show how TikTok's *For You* page does not provide a space wherein such reflection can take place, and conclude by displaying how these findings jeopardize user autonomy online.

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Chapter 1: Introduction

Social media can be used in many ways. Using social media can be either active or passive, where the former involves commenting, sharing, posting, networking, and following, for example, and the latter comprises task-unrelated social media usage that can be interpreted as merely *observing*. Most of the literature to date that concerns the harms of social media usage—including cyberbullying,[1] addiction,[2] misinformation,[3] radicalization,[4] mental health and self-esteem issues,[5] and privacy[6]—has been mostly directed at the consequences of excessive *active* social media usage. In the following project, I instead focus on *passive* usage, and argue for the existence of one of its relatively under-discussed harms. Namely, in the following project, I explore how task-unrelatedly and apathetically *scrolling* through a social media feed interferes with a user's ability to autonomously endorse or repudiate value-laden messages they encounter on social media.

I narrow my analysis to passive media consumption as performed on TikTok's *For You* page—a curated infinite stream of recommended short video clips classified as a *Content Discovery Platform*.

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[1] Gary W. Giumetti and Robin M. Kowalski, "Cyberbullying via Social Media and Well-Being," *Current Opinion in Psychology* 45 (June 2022): 101314, https://doi.org/10.1016/j.copsyc.2023.101314.

[2] Yubo Hou et al., "Social Media Addiction: Its Impact, Mediation, and Intervention," *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 13, no. 1 (February 21, 2019), https://doi.org/10.5817/CP2019-1-4.

[3] Yochai Benkler, Rob Faris, and Hal Roberts, *Network Propaganda: Manipulation, Disinformation, and Radicalization in American Politics* (New York, NY: Oxford University Press, 2018).

[4] Ibid.

[5] Muqaddas Jan, Sanobia Anwwer Soomro, and Nawaz Ahmad, "Impact of Social Media on Self-Esteem," *European Scientific Journal, ESJ* 13, no. 23 (August 31, 2017): 329, https://doi.org/10.19044/esj.2017.v13n23p329.

[6] Kwame Simpe Ofori et al., "Factors Influencing the Continuance Use of Mobile Social Media: The Effect of Privacy Concerns," *Journal of Cyber Security and Mobility* 4, no. 2 (2016): 105–24, https://doi.org/10.13052/jcsm2245-1439.426.

In Chapter 2 of this project, I reject Jelle Bruineberg and Regina E. Fabry's (2022) claim that mindlessly scrolling through a social media feed is a form of *extended mind-wandering* under second-wave extended cognition theory.[7] I do so by arguing against these authors' invocation of a *family-resemblance* theory to defining mind-wandering, and instead mobilize Zachary Irving's (2016) definition of mind-wandering as 'unguided attention'[8] to make my case. I argue that by keeping in mind how the 'attention economy' impacts the automated recommendation of digital media on Content Discovery Platforms, scrolling on TikTok can be properly classified as an attentionally guided activity and—under Irving's definition—is thus not mind-wandering. This chapter motivates a more critical understanding of the harms of passive social media use that a mind-wandering approach risks overlooking.

In Chapter 3, I will argue that in order to become autonomous with respect to specific kinds of *values* or *convictions* (namely, ones of a hateful or repudiatory attitude towards marginalized individuals), an agent must reflect both *extensively* and *collaboratively* on her alignment with such values or convictions. I begin by establishing that TikTok's *For You* page has the ability to inculcate values into its users. I adopt a framework of relational epistemic autonomy to motivate this discussion and invoke Marilyn Friedman's (2003) conception of *self-reflective reaffirmation*[9] and John Christman's (2009) account of *alienation*[10] in their accounts of autonomy. According to

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[7] Jelle Bruineberg and Regina Fabry, "Extended Mind-Wandering," *Philosophy and the Mind Sciences* 3 (October 5, 2022), https://doi.org/10.33735/phimisci.2022.9190.

[8] Zachary C. Irving, "Mind-Wandering Is Unguided Attention: Accounting for the 'Purposeful' Wanderer," *Philosophical Studies* 173, no. 2 (February 2016): 547–71, https://doi.org/10.1007/s11098-015-0506-1.

[9] Marilyn Friedman, "A Conception of Autonomy," in *Autonomy, Gender, Politics*, by Marilyn Friedman, 1st ed. (Oxford University PressNew York, 2003), 3–29, https://doi.org/10.1093/0195138503.003.0001.

[10] John Christman, *The Politics of Persons: Individual Autonomy and Socio-Historical Selves* (Leiden: Cambridge University Press, 2009).

Friedman, a minimal, non-conscious, non-extensive amount of critical reflection upon an agent's alignment with a particular value can successfully render her autonomous with respect to the value in question. I disagree with this claim by posting three charges against the possibility of minimal, non-conscious, non-extensive reflection generating autonomy. The first is motivated by moral intuition, the second by the nature of reflective attention, and the third by a charge of infinite regress. I end this chapter by outlining a more detailed and effective process of reflection that can allow one to become autonomous with respect to the hateful repudiatory kinds of values I have in mind. I invoke antifeminism as an example.

In Chapter 3, I argue that various design features utilized on TikTok's *For You* page interfere with TikTok users' ability to claim autonomous endorsement or repudiation over the values laden in content they consume while scrolling. The characteristics of scrolling I discuss are: (i) its nature as extended rumination; (ii) its effects on loneliness and isolation; (iii) its personalized algorithmic curation of content. Each point is allocated its own subsection in this chapter, wherein I first establish its existence, and then move to show how it interferes with one's ability to autonomously endorse or repudiate the messages contained in harmful value-laden content encountered on TikTok.

Chapter 2: Scrolling is not Mind-Wandering

Abstract:

In this chapter, I reject Jelle Bruineberg and Regina E. Fabry's claim that mindlessly scrolling through a social media feed is extended mind-wandering under second-wave extended cognition theory. I do so by arguing against a *family resemblances* approach to defining mind-wandering, and instead invoke Zachary Irving's definition of mind-wandering as unguided attention. After some exposition on habitual smartphone use and second-wave extended mind, I argue that by keeping in mind the impact that the "attention economy" has on how Content Discovery Platforms automate the recommendation of digital content, scrolling is attentionally guided rather than unguided, and thus cannot count as mind-wandering.

2.1 Introduction

In the following chapter, I argue that Jelle Bruineberg and Regina E. Fabry's (2022) claim that habitual, task-unrelated smartphone use is a form of extended mind-wandering is false. This helps me undermine a line of thought according to which scrolling on TikTok, as a form of mind-wandering, is an activity that is harmless or even beneficial, and instead motivates a more critical interpretation of the activity.

In what follows, I first explain the kind of habitual smartphone use I am concerned with in this chapter and the rest of this thesis. Namely, an action I call, simply, *'scrolling.'* I then move to explore some of the literature on *extended mind* theory as coined by Andy Clark and David Chalmers (1998), where I focus primarily on *second-wave* extended cognition. Upon elucidating the extended mind thesis, I move to show how smartphones have become considerable candidates as cognitive extensions under second-wave extended mind theorizing.

Following this, I visit some of the existing literature on *mind-wandering*. Here, I describe and define the various features of mind-wandering that have been explored and stipulated by a handful of philosophers and psychologists working on the phenomenon. After articulating these features, I explain how Zachary Irving (2016) establishes the features' contingency and argues that intuitive cases of mind-wandering can violate each of them.

I list the benefits of mind-wandering and move to show how Bruineberg and Fabry integrate second-wave extended mind theorizing and the literature on mind-wandering to argue that habitual, task-unrelated smartphone use is extended mind-wandering through a *family-resemblances* approach to defining mind-wandering. I reject their view by mobilizing Irving's definition of mind-wandering as *unguided attention*. I

do so on two grounds after defining attentional unguidedness. My first charge argues that a family-resemblance approach to classifying mental experiences as mind-wandering grants some unintuitive candidates access into the mind-wandering family. My second charge is split into two sub-arguments, each of which supports the claim that attentional guidedness and mind-wandering are conceptually incompatible.

After posting these objections, I show how TikTok is structured in such a way that explicitly guides user attention toward its platform. I do so by explaining and exploring the functions of what has been coined the 'attention economy.' I use this analysis to argue that scrolling is an attentionally guided activity and—paired with my commitment to Irving's definition of mind-wandering as unguided attention—I reject Bruineberg and Fabry's claim that scrolling is extended mind-wandering.

2.2 What is "Scrolling"?

Over the course of this chapter, I will be primarily focused on what I call, simply, 'scrolling.' Here, I use the term *scrolling* to refer to a kind of passive use of social media: the act of continuously and mechanically swiping through digital content without clear purpose, intention, or active engagement. Scrolling typically involves mindlessly and habitually flicking through social media feeds without feeling as though one is processing or effectively absorbing the information being presented. Scrolling often results in a lack of focus, decreased productivity, and a sense of time passing by unnoticed. Scrolling is being increasingly referred to as a *mindless* activity on social media and in online blogs that preach well-being. Such is the case, for example, in

Rebecca Fishbein's (2019) blog entry published in *Forge* titled "How to Kick a Mindless Scrolling Habit."[11]

Specifically formatted types of social media interfaces promote this activity, and have been slowly becoming more ubiquitous on social networking sites. Here, I am discussing the personalized, recommendation-based, short-video format of social media feeds, such as Instagram's *Reels* or TikTok's *For You* page. These kinds of interfaces are typically referred to as *Content Discovery Platforms*.[12] For those who are unfamiliar, a specific description of how these interfaces are formatted will follow soon.

A glimpse of these kinds of interfaces was first seen on the short-lived social media platform *Vine*, which operated under Twitter from 2013 to 2017.[13] This platform exclusively shared videos that were no longer than six seconds in length and was typically populated with short comedy skits. ByteDance, a China-based internet technology company headquartered in Beijing, implemented a similar architecture into their *A.me* application in 2016, which was succeeded by the now-famous *TikTok* in 2017.[14] This kind of social media formatting has proven extremely profitable as machine learning recommender systems become more advanced, and Meta has since implemented similar formatting methods on their networks *Facebook* and *Instagram*, titling such feeds *Shorts* and *Reels*, respectively. YouTube and Reddit have also integrated this format into their interfaces.

[11] Rebecca Fishbein, "How to Kick a Mindless Scrolling Habit," *Forge* (blog), August 12, 2019, https://forge.medium.com/how-to-kick-a-mindless-scrolling-habit-55b330137887

[12] "Content Discovery Platform," *Wikipedia*, January 22 2023, https://en.wikipedia.org/wiki/Content_discovery_platform.

[13] Wilson Wong, "A look back at Vine — the six-second video app that made us scream, laugh and cry," *NBC News*, January 17, 2022, https://www.nbcnews.com/pop-culture/pop-culture-news/look-back-vine-six-second-video-app-made-us-scream-laugh-cry-rcna10910

[14] Chloe West, "The TikTok Logo: History and Why It Works," *Brand* (blog), *Shopify*, May 20 2023, https://www.shopify.com/ca/blog/tiktok-logo.

This chapter, as well as the rest of this thesis will be focused almost exclusively on TikTok's *For You* page—one of the most widely-used venues for scrolling that exist today. My arguments, if slightly modified, can likely be applied to all kinds of Content Discovery Platforms that exist under different social networking sites. Doing so for each is well beyond the scope of this paper.

The experience of scrolling through one's *For You* page can be described as follows. Upon opening the TikTok application, a user will be immediately directed to their *For You* page, which displays a continuous stream of a curated selection of short videos (also referred to as '*tiktoks*') that the interface's artificially intelligent recommendation algorithm deems are popular or relevant to the user's interests. The first video will automatically start playing. Each piece of content is displayed in full-screen, vertical format and usually ranges from 15 to 60 seconds in length. In order to see the next tiktok, the user needs to swipe upwards on their screen to load the next piece of content, which immediately starts playing without any buffer. A user can scroll for hours and hours without any interruption if they like given TikTok's 'infinite scroll' feature, a design patten created by engineer Aza Raskin in 2006 that eliminates the need for page clicks and instead allows content to load on one endless feed.[15] TikTok features a wide variety of content, and its videos are generally highly stimulating, often featuring bright colors, loud noises and sounds, fast cuts, and lots of movement. The next video may not relate to the previous, and the content can jump from theme to theme in a seemingly arbitrary way. Videos can range from a sports highlight to a cat video, to a cooking tutorial, to a dance challenge, to a comedy skit all in the span of a few minutes, for

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[15] Erin Rupp, "The Infinite Scroll: Why It's So Addictive and How to Break Free," *Freedom* (blog), February 28, 2022, https://freedom.to/blog/infinite-scroll/

example. It all depends on which pieces of content the machine learning technique behind the recommendation of videos predicts are most likely to keep the user engaged with the application.

This kind of social media interface is gaining popularity, with TikTok experiencing a staggering 197.8 million daily hours of user interaction, the equivalent of about 289 human lifetimes a day.[16] TikTok has over 1 billion global users, with over 150 million in the United States. It is—as one may expect—extremely popular among younger populations, with 24% of its demographic being women between the ages of 18 to 24, with male users in this making up another 18% of this age bracket.[17]
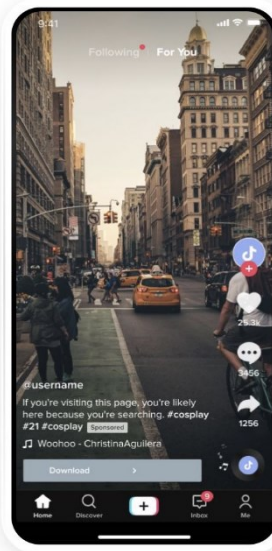
Figure 1.a: A screenshot of a video formatted under TikTok's *For You* page[18]

In their 2022 report *Teens, Social Media, and Technology 2022*, Emily Vogels, Risa Gelles-Watnick, and Navid Massarat report that out of the 1316 U.S. teens (aged

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[16] Christopher Carbone, "TikTok users spend 197.8 MILLION hours a day scrolling through the app—TEN TIMES the time that Instagram users spend on Reels, new Meta documents reveal" *Daily Mail* online, September 12, 2022. https://www.dailymail.co.uk/sciencetech/article-11204357/Instagram-struggles-Reels-popularity-pales-comparison-TikTok-internal-Meta-docs-reveal.htm.

[17] Stacey McLachlan, "50+ Important TikTok Stats Marketers Need to Know in 2023," *Strategy* (blog), *Hootsuite*, April 13, 2023, https://blog.hootsuite.com/tiktok-stats.

[18] "Advertising on TikTok," *Help Center*, *Lightspeed*, https://support.ecwid.com/hc/en-us/articles/4407402372754-Advertising-on-TikTok

between 13 and 17) the researchers surveyed, "some" 67% of North American teens

aged between 13-17 report having used TikTok, with 16% of all teens claiming to use it

"almost constantly."[19] Their studies showed that U.S. teen girls (73%) are more likely

than teen boys (60%) to use TikTok, with teens of lower income families (< $30,000

household) reporting 7% more TikTok usage than those of higher income (> $75,000

household) families.[20]

Additionally, this research found that Black and Hispanic teens are over *twice* as

likely as White teens to admit to being "constantly" on TikTok.[21] While I will address

the autonomy-diminishing features of social media use in Chapter 3, it is important to

keep in mind that given these statistics, these effects may consequently

disproportionately affect teens of color, of lower income households, and young girls.

The technicalities involved in how the algorithms that fuel Content Discovery

Platforms collect data and in turn recommend content are extremely intricate and will be

addressed lightly over the course of my project. For the purposes of this chapter, it will

suffice to focus on the nucleus that—with the end goal of increasing and maintaining

user engagement—content from unfollowed accounts is recommended and presented in a

force-fed manner that is artificially curated, is tailored to one's online profile, and is

presented with the intention of maintaining the user's attention.

Officials have been urging the regulation of these platforms given their alleged

negative effects on well-being and privacy.[22] Some potential positive effects of scrolling

[19] Emily A. Vogels, Risa Gelles-Watnick, Navid Massarat, "Teens, Social Media, and Technology 2022," *Pew Research Center: Internet, Science & Tech.* (August 10, 2022), 3, 20.500.12592/300dsq
[20] Ibid., 11.
[21] Ibid.
[22] Kristen E. Busch, "TikTok: Recent Data Privacy and National Security Concerns," *Congressional Research Service* (March 29, 2023), https://crsreports.congress.gov/product/pdf/IN/IN12131

through these platforms that are referred to, however, are that users can benefit from both *discovery* and various forms of *entertainment* (including humor, taking a break, passing time, or 'turning your brain off') through these interfaces. TikTok's CEO Shou Zi Chew has claimed this himself, stating that *For You* provides users with a fun way to pass time, to become creative, and to discover new content that they may not have otherwise found in his opening statements during his hearing in front of US Congress in March of 2023.[23]

One potential avenue to justify Chew's claims is to argue that scrolling is an activity that is characterized as *mind-wandering*: a common, semi-detached, task-unrelated mode of cognition that jumps from thought to thought in a seemingly unconnected, random way that is commonly equated with daydreaming. In recent psychological research, engaging in mind-wandering has been found to benefit individuals by inducing discovery, increasing creativity, and relieving them from boredom.[24] If mind-wandering is beneficial in these ways, and if—as some philosophers have argued, as I will soon show—scrolling is a form of *extended mind-wandering*, one should expect scrolling to be beneficial in these same ways.

This chapter is meant to preclude individuals from citing literature on mind-wandering when attempting to justify Chew's claims that scrolling is an activity that is conducive to well-being.

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[23] C-SPAN, "TikTok CEO Shou Zi Chew testifies before Congress," YouTube, March 23, 2023, 27:06, 28:09, https://www.youtube.com/watch?v=_E-4jtTFsO4

[24] Benjamin W. Mooneyham and Jonathan W. Schooler, "The Costs and Benefits of Mind-Wandering: A Review.," *Canadian Journal of Experimental Psychology / Revue Canadienne de Psychologie Expérimentale* 67, no. 1 (March 2013): 11–18, https://doi.org/10.1037/a0031569.

2.3 First and Second Wave Extended Mind: Smartphones as Cognitive Extensions

In their 1998 paper *The Extended Mind*, Andy Clark and David Chalmers put forth a suggestion that cognitive processes and mental states are not limited to the boundaries of the human brain, and that we ought to consider the possibility that mental functioning can take place outside of the skull.[25] Their account was fueled not solely by the presence of "advanced computing resources [...] but rather the general tendency of human reasoners to lean heavily on environmental supports."[26] Clark and Chalmers argue that the performances and mechanisms of one's mind can take place in objects external to oneself, including tools, artifacts, and other people. In other words, objects and entities that exist outside of one's mind don't only facilitate or enhance our cognitive capacities; they can literally *be* mental.

As an example, Clark and Chalmers form the story of Otto, an Alzheimer's patient attending the Museum of Modern Art to view an exhibit.[27] Otto writes new information, including directions to MoMA, in a notebook, and consults it when he needs or has forgotten old information.[28] Under the Extended Mind Thesis, Otto's notebook "plays the role usually played by a biological memory"[29] that includes the address of MoMA. Here, "[t]he information in the notebook functions just like the information constituting an ordinary non-occurrent belief; it just happens that this information lies beyond the skin."[30] That is, Otto's notebook plays the exact role his

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[25] Andy Clark and David Chalmers, "The Extended Mind," *Analysis* 58, no. 1 (1998): 7–19.
[26] Ibid., 8.
[27] Ibid., 12-13.
[28] Ibid., 12.
[29] Ibid.
[30] Ibid., 13.

mind would play in navigating his way to MoMA and is therefore a cognitive extension.

Despite the appeal of Clark and Chalmers' argument, it may remain difficult to determine *which* objects can be considered external mental processors. Clark introduces and relies on the *Parity Principle* to help distinguish between mental and non-mental objects.[31] The Parity Principle is the cornerstone of what has been called *first-wave* extended cognition theory, and states that "[i]f, as we confront some task, a part of the world functions as a process which, *were it done in the head*, we would have no hesitation in recognizing as part of the cognitive process, then that part *is* part of the cognitive process."[32]

While the extended mind thesis was challenged at first, the Parity Principle makes smartphones strong candidates for extensions of our cognitive selves.[33] Our smartphones are such effective, readily available tools of computation that Sari R. R. Nijssen, Gabi Schaap, and Geert P. Verheijen (2018) claim that smartphones have 'taken over' a handful of our mental functions.[34] For one example among many, smartphones can be used as external hard drives for memory retention through their Notebook or Camera applications. The degree to which our smartphones have become ingrained in our daily lives paired with our tendency to employ them to perform the cognitive tasks

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[31] Andy Clark, "Intrinsic Content, Active Memory and the Extended Mind," *Analysis* 65, no. 1 (January 1, 2005): 1–11, https://doi.org/10.1093/analys/65.1.1.

[32] Ibid., 2.

[33] Nathaniel Barr et al., "The Brain in Your Pocket: Evidence That Smartphones Are Used to Supplant Thinking," *Computers in Human Behavior* 48 (July 2015): 473–80, https://doi.org/10.1016/j.chb.2015.02.029.

[34] Sari R. R. Nijssen, Gabi Schaap, and Geert P. Verheijen, "Has Your Smartphone Replaced Your Brain? Construction and Validation of the Extended Mind Questionnaire (XMQ)," ed. Stefano Federici, *PLOS ONE* 13, no. 8 (August 31, 2018): e0202188, https://doi.org/10.1371/journal.pone.0202188.

we would otherwise have to face on our own has led some to "[the consideration of] our smartphone as an extension of ourselves."[35]

Jelle Bruineberg and Regina E. Fabry (2022) are among the many contemporary extended mind theorists who entertain the idea of smartphones as cognitive extensions. While most of this literature is largely focused on how we use smartphones to perform *tasks*, Bruineberg and Fabry instead integrate habitual, *task-unrelated* smartphone use with the extended mind thesis in their article *Extended Mind-Wandering*.[36] Bruineberg and Fabry, however, do not abide by first-wave extended cognition. Instead, they turn to *second-wave* extended mind theory to motivate their project, where *coupling* and *complementarity* conditions replace the Parity Principle. Before explaining their argument, I will give a brief account of how second-wave extended cognition theorizing differs from first-wave extended mind.

Second-wave extended mind theory differs from first-wave by shifting away from the Parity Principle, and moving instead to a reliance on *complementarity*, characterized primarily through *coupling*.[37]

John Sutton (2010) argues that the complementarity principle states that "external states and processes need not mimic or replicate the formats, dynamics, or functions of inner [cognitive] states and processes"[38] in the ways required of the Parity Principle.

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[35] Nijssen, Schaap, and Verheijen, "Replaced Your Brain," 2.

[36] Bruineberg and Fabry, "Extended Mind-Wandering."

[37] As John Sutton (2010) articulates, "the parity principle is better seen as 'an informal test' or temporary indicator of cognitive extension" than as a defining condition for what does and does not count as cognitive extension. In short, the Parity Principle faces too many challenges and objections. Instead, Shaun Gallagher (2018) claims that "we should read the principle as stating a sufficient rather than a necessary condition" to determine what does and does not count as a mental object.

[38] John Sutton, "Exograms and Interdisciplinarity: History, the Extended Mind, and the Civilizing Process," in *The Extended Mind*, ed. Richard Menary (The MIT Press, 2010), 194, https://doi.org/10.7551/mitpress/9780262014038.003.0009.

Instead, "different components of the overall [internal or extended] system can play quite different roles and have different properties."[39] Second-wave extended cognition places emphasis on the ways that our cognitive processes are largely *integrated with* the external environment in a reciprocally causal way. It stresses that cognitive processes are not simply extended to the environment but are actively shaped and transformed in a bilateral way through interactions between minds, bodies and the external world.

Coupling is of paramount importance to *second-wave* extended mind theorizing. As James Carney (2020) articulates, coupling involves a relationship "where the brain-body-world interaction links the three parts into an autonomous, self-regulating system."[40] A reciprocally causal relationship between mind, body and object—where each of the three are interrelatedly changed by one another as extended thought unfolds—motivates an understanding of the combination of these separate, differently functioning parts as one whole cognitive system.

Bruineberg and Fabry then use second-wave extended cognition to tap into the consideration of habitual, diversionary, task-unrelated smartphone use—activities such as scrolling, for example—as an externally coupled activity. Here, their primary goal is to argue that "an external resource, i.e., a smartphone displaying a social media or news feed, can be a proper component of a dynamically unfolding mind-wandering episode, thereby *complementing* internal components."[41]

In order to argue for habitual smartphone use as *coupled* under extended cognition, Bruineberg and Fabry say that "[i]n the case of habitual, diversionary

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[39] Sutton, "Exograms and Interdisciplinarity," 194.

[40] James Carney, "Thinking Avant La Lettre: A Review of 4E Cognition," *Evolutionary Studies in Imaginative Culture* 4, no. 1 (December 1, 2020): 2, https://doi.org/10.26613/esic.4.1.172.

[41] Bruineberg and Fabry, "Extended Mind-Wandering," 13.

smartphone use, internal components influence and are influenced by the perceptual input provided by the user interface as a result of motor action."[42] Since the cases of habitual smartphone use the authors are concerned with "are characterized by sensorimotor coupling (i.e. swiping and scrolling),"[43] then scrolling qualifies as extended cognition. This reciprocal relationship with smartphones can be seen as a symbiotic interaction that counts as coupled under second-wave extended mind theory, and unifies oneself with one's smartphone into a whole cognitive system.

In what follows, I explore the literature on mind-wandering to introduce the concept in more detail. I then move to my argument, which articulates the mistakes in equating scrolling with mind-wandering.

2.4 Mind-Wandering

Mind-wandering is a relatively underexplored concept in psychological and philosophical literature but has been gaining momentum in research over the last decade or so. In the following section, I provide an exposition of some of the literature conducted on mind-wandering so that my readers can here understand what kind of cognitive activity Bruineberg and Fabry have in mind. Here, I describe the various features of mind-wandering that have been suggested by a range of authors working on defining the concept. I then move to explain how Zachary Irving (2016) demonstrates that each of these features are insufficient at defining the concept. This section will primarily be considered with describing mind-wandering, and how Bruineberg and Fabry use its features to form their argument.

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[42] Bruineberg and Fabry, "Extended Mind-Wandering," 14.
[43] Ibid.

Sometimes—perhaps even *most* of the time—our waking thoughts are not clearly geared toward the completion of some mental goal. We aren't always trying to solve an equation, navigate our way to a destination, or retrieve memories. That would mentally exhaust us. Often, we may simply disconnect from our environment and let our thoughts roam on their own. Here, we let our intellect be taken over by what Irving calls "the stream of consciousness—thoughts, images, and bits of inner speech that dance across"[44] our minds. The thoughts that populate this stream may range from memories to fantasies to daydreams to worries or plans. This mode of cognition is known as *mind-wandering*, and is typically held in contrast with engaged, task-oriented, purposeful attention—the kind used for performing a calculation or navigating one's way to a destination, for example.

Jonathan Smallwood and Jonathan Schooler (2014) explore this phenomenon in their work *The Science of Mind-Wandering: Empirically Navigating the Stream of Consciousness*, where they describe mind-wandering as "the psychological processes underpinning the mind's capacity to stray from external events and to generate thoughts with no referent in the environment."[45] They refer to this tendency as *perceptual decoupling*,[46] where an individual's attention is diverted from their immediate environment, and is instead focused on these passive thoughts—a condition they believe imperative for mind-wandering.

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[44] Zachary C. Irving and Aaron Glasser, "Mind-wandering: A Philosophical Guide," *Philosophy Compass* 15, no. 1 (January 2020): 1, https://doi.org/10.1111/phc3.12644.
[45] Jonathan Smallwood and Jonathan W. Schooler, "The Science of Mind Wandering: Empirically Navigating the Stream of Consciousness," *Annual Review of Psychology* 66, no. 1 (January 3, 2015): 488, https://doi.org/10.1146/annurev-psych-010814-015331.
[46] Ibid., 501.

Smallwood and Schooler iterate that episodes of mind-wandering are also often described as task-unrelated or stimulus independent.[47] Additionally, they claim that "on at least certain occasions, mind-wandering reflects a failure to maintain continuous awareness on the links between the contents of conscious thought and our current goals,"[48] where they found that individuals often fail to notice that their minds have wandered.[49] That is, mind-wandering often lacks *meta-awareness*.

Smallwood and Schooler, however, seem to miss at least one key aspect of episodes of mind-wandering, which Irving and Evan Thompson (2018) point out in their work *The Philosophy of Mind-Wandering*, where they argue Smallwood and Schooler fail to focus on the 'dynamics' of episodes of mind-wandering.[50] Here, Irving and Thompson argue that while Smallwood and Schooler successfully identify a lot of considerable mind-wandering features, they fail to truly explain how the experience unfolds over time.

Irving and Thompson urge their readers to consider the distinctive way in which one's mind wanders when they decouple from their external environment. That is, the thoughts that dance across one's mind are *disunified*. Here, the authors state that "the thoughts seem to drift freely from one topic to another."[51] The thoughts that occupy a wandering mind come and go without sharing any unifying overarching theme or topic; the previous feeling rather unrelated to the next.

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[47] Smallwood and Schooler, "The Science of Mind-Wandering," 489.
[48] Ibid., 498.
[49] Ibid., 499.
[50] Zachary C. Irving and Evan Thompson, "The Philosophy of Mind-Wandering," in *The Oxford Handbook of Spontaneous Thought: Mind-Wandering, Creativity, and Dreaming*, ed. Kieran C. R. Fox and Kalina Christoff, Oxford Library of Psychology (New York, NY: Oxford University Press, 2018), 88.
[51] Ibid.

Explaining the disunified dynamic of mind-wandering can be facilitated by way of example. When I make the drive from Halifax to Montréal to go back home for the summer at the end of every school year, my mind is wandering when my attention moves away from the road, and instead roams on its own. My thoughts may jump from how excited I am to see my girlfriend, to how much I would love to take a vacation to Cuba next month, to what I am going to eat when I get home, to what the weather is like in Winnipeg, and so on. I may feel like I am not in complete control over which seemingly random thoughts pass through my mind; I may feel so disconnected from them that I don't remember their content after they have passed.

Irving and Aaron Glasser (2019) summarize the traditional approaches to mind-wandering in their *Mind-wandering: A philosophical guide*. Here, the authors suggest that the philosophical and psychological work done to date has largely considered mind-wandering under the following features: it is a (i) task-unrelated, (ii) stimulus-independent, (iii) unintentional, (iv) unaware, (v) disunified mode of cognition that (vi) lacks veto-control.[52]

Irving, however, believes these approaches to mind-wandering are insufficient at fully characterizing the experience.[53] These features are too broad, and far too many intuitively acceptable instances of mind-wandering can violate at least one of them.

For example, one's mind can certainly wander toward their goals, so episodes of mind-wandering can "therefore be task-related"[54] or even perhaps *purposeful*. One's episode of mind-wandering can be triggered by perceptual stimuli in one's environment,

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[52] Irving and Glasser, "A Philosophical Guide."
[53] Ibid., 6.
[54] Ibid., 2.

which is "inconsistent with the view that mind-wandering must be decoupled from perceptual inputs."[55] Mind-wandering can therefore be *stimulus-dependent*. Additionally, Irving argues that an individual can certainly be *aware* that they are mind-wandering, thereby challenging claims that mind-wandering necessarily lacks meta-awareness and veto control.[56] Irving also suggests that one can *choose* to mind-wander, rejecting claims that mind-wandering is unintentional,[57] and goes on to note that—despite disunification being imperative to describe the dynamics of mind-wandering—referring to mind-wandering strictly as *disunified thought* overgeneralizes the experience.[58] An individual can certainly experience a thread of disunified thoughts without mind-wandering, such as they would when multitasking between unrelated mental tasks, for example.

All of these features on their own are insufficient at fully grasping the experience of mind-wandering, and the subsequent obfuscation of the concept has led many in the field to resort to a *family-resemblance* approach to defining mind-wandering—a point I will return to in the next section of this chapter.

Before continuing to elucidate how Bruineberg and Fabry reconcile activities like scrolling with mind-wandering, let us first acknowledge some of the recently cited benefits of mind-wandering.

It may not seem valuable to have one's attention drift away from one's tasks and flow along unchecked. For one, Aquinas believes that "mind-wandering is the 'daughter sin' of sloth"[59] and Katsuki Sekida takes it to be antithetical to the practice of mindful

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[55] Irving and Glasser, "A Philosophical Guide," 2.
[56] Thomas Metzinger, "M-Autonomy," *Journal of Consciousness Studies* 22, no. 11–12 (2015): 275.
[57] Ibid.
[58] Irving and Glasser, "A Philosophical Guide," 4.
[59] Irving, "Mind-Wandering Is Unguided Attention," 10.

meditation.[60] Benjamin Mooneyham and Jonathan W. Schooler's (2013) research on

mind-wandering, however, shows that the activity itself is beneficial for one's well-

being.[61] As some examples, it is said to facilitate creativity by allowing the mind to make

unexpected connections between seemingly unrelated concepts, thereby inducing

discovery;[62] it enhances problem-solving by allowing its thinker to approach problems

from different angles;[63] it improves mood by enabling people to think about meaningful

things they may have otherwise forgotten[64] which enhances self-understanding; and it

serves as a mental break that relieves its wanderer from boredom.[65] Recall, as Shou Zi

Chew testified before Congress, benefits such as discovery, creativity, and relief from

boredom are also cited as desirable upshots of scrolling.[66]

I will now move to discuss how Bruineberg and Fabry use a *family-resemblance*

approach to define scrolling as extended mind-wandering.

2.5 The Case For Scrolling as Extended Mind-Wandering: A Family-Resemblance View

The dynamic experience of scrolling on one's *For You* page that I had described

earlier in this chapter shares some striking similarities with that of mind-wandering. By

using a family-resemblance approach to qualifying experiences as mind-wandering,

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[60] Kazuki Sekida and A. V. Grimstone, *Zen Training: Methods and Philosophy* (Boston: Shambhala, 2005).
[61] Mooneyham and Schooler, "The Costs and Benefits of Mind-Wandering."
[62] Ibid., 15.
[63] Ibid., 14.
[64] Smallwood and Schooler, "The Science of Mind-Wandering," 498.
[65] Mooneyham and Schooler, "The Costs and Benefits of Mind-Wandering," 15.
[66] C-SPAN, "Chew Testifies Before Congress," 28:09.

Bruineberg and Fabry make the case that habitual, task-unrelated smartphone use is *extended mind-wandering*.[67]

Family resemblance theories cluster similar entities into definitional groups despite them not sharing a common definitional denominator. These theories are inspired by Wittgenstein's (1958) discussions of family resemblances in his *Philosophical Investigations*.[68] Individual objects in family-resemblance-based definitional groups have 'overlapping' and 'crisscrossing' similarities as opposed to clear-cut definitional sets of features, as Wittgenstein argued.[69] That is, instead of a strict set of necessary and sufficient conditions that admit membership into a definitional category, family resemblance theory urges the recognition that there are multiple characteristics that entities within a category may share, with different entities exhibiting different combinations of such features while still being members of such a group.

For a quick example—as Wittgenstein was famously concerned with in his *Investigations*—what can and cannot be defined as a *game* can be determined through a family resemblance approach. As Wittgenstein articulates, "if you look at [all things that are called games], you will not see something that is common to *all*, but similarities, relationships, and a whole series of them at that."[70] Some have scoring, some have winners, some have fun, some have rules… the list goes on; not all games, though, share the exact same features, and so a family-resemblance approach may be the best method at determining what is and what is not a game.

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[67] It should be noted that Bruineberg and Fabry are not explicitly discussing scrolling. However, I take scrolling to be the most considerable form of habitual and diversionary smartphone use that can qualify as extended mind-wandering.

[68] Ludwig Wittgenstein, *Philosophical Investigations* (Oxford: Basil Blackwell, 1968), 32e, 67.

[69] Ibid.

[70] Ibid., 31e, 66.

As applied to mind-wandering, a family resemblance approach denies that any of its previously cited conditions (task-unrelatedness, lack of intention, disunification, stimulus-independence, etc.) are either necessary or sufficient qualifiers for what does and does not count as mind-wandering. Irving—a critic of family-resemblance theory applied to mind-wandering—states that according to this approach "streams of thought with more of [mind-wandering's] features are better exemplars of mind-wandering than streams of thought with less [of these] features."[71]

The case for family resemblance definitions of mind-wandering is defended by Paul Seli and colleagues (2018) in their work *Mind-Wandering as a Natural Kind: Toward a Family-Resemblances View*. Here, they articulate that treating mind-wandering as a unitary construct "constrains conceptual and theoretical understanding of the phenomenon,"[72] and that "mind-wandering is a useful umbrella term, just as 'cognition' and 'creativity' are."[73] Under their view, these authors claim that neither logic nor empiricism can determine what does and does not count as mind-wandering.[74]

Assuming that we have accepted the second-wave extended mind thesis, and with scrolling as extended cognition established, cases of scrolling *can* respect any combination of the previously cited features of mind-wandering. Smartphone users can "find themselves scrolling through a social media feed … without a particular goal,"[75] so scrolling can be task-unrelated. Users can find "themselves checking their phone without having decided to do so," so scrolling can be unintentional. A user can "absentmindedly

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[71] Irving and Glasser, "A Philosophical Guide," 6.
[72] Paul Seli et al., "Mind-Wandering as a Natural Kind: A Family-Resemblances View," *Trends in Cognitive Sciences* 22, no. 6 (June 2018): 479, https://doi.org/10.1016/j.tics.2018.03.010.
[73] Ibid., 482.
[74] Ibid.
[75] Bruineberg and Fabry, "Extended Mind-Wandering," 3.

scroll through [their] social media feed without noticing it,"[76] so scrolling can lack meta-awareness. Further, the continuous stream of short tiktoks that can jump from topic to topic sharing no necessary similarity in content can be disunified in a similar way to the stream of thoughts that dance across one's mind when engaged in non-extended mind-wandering.

All of these conditions, according to Bruineberg and Fabry, however, are contingent; their presence or absence depends on the specific context revolving around individual instances of smartphone use. In short, some specific episodes of scrolling can certainly have more of these features while some can have less. Under their family-resemblance commitment, episodes of habitual smartphone use that respect *more* of these conditions are *more like* mind-wandering, while episodes that exhibit less of them are less like mind-wandering.

And so, by deploying a family-resemblance approach to defining mind-wandering complemented by an abidance to second-wave extended mind theory, Bruineberg and Fabry conclude that habitual smartphone use—scrolling included—is extended mind-wandering.

2.6 Against a Family-Resemblance View to Defining Mind-Wandering

The following argument will be divided into two subsections that are meant to undermine a family resemblances approach to mind-wandering. In the first, I articulate how a family-resemblance approach to classifying mental experiences as mind-wandering can generate some unintuitive results and can thereby result in the classification of some obvious cases of *not*-mind-wandering as mind-wandering. I use

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[76] Bruineberg and Fabry, "Extended Mind-Wandering," 16.

absorption as an example. Second, I argue that attentional guidance—a term invoked by Irving that will soon be defined extensively—and mind-wandering seem conceptually incompatible. I use this analysis to claim that there is insufficient reason to deny accepting unguidedness as a sufficient condition for mind-wandering.

2.6.1 Unintuitive Admittance into the Mind-Wandering Category

In this subsection, I agree with Kalina Christoff and colleagues (2018) that "a family-resemblance approach, which groups together different and sometimes conflicting definitions of mind-wandering, will not help overcome [the problem of fundamentally different experiences being lumped into the mind-wandering category.]"[77] Instead of clarifying the category, Christoff et al. argue that through "the family-resemblances approach, the boundaries of the mind-wandering concept become even more porous in principle than they already are in practice."[78] That is, too many mental episodes that are *not* mind-wandering will count as mind-wandering under family-resemblances.

Recall the previously explored features of mind-wandering that have been bounced around in the literature to date. Mind-wandering is *task-unrelated*, *stimulus-independent*, *unintentional*, and *unaware*, among others, while its dynamic is *disunified*. Moreover, Christoff et al. argue that according to the family-resemblance framework, "no features of thought are more defining than others;"[79] each condition has equal weight.

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[77] Kalina Christoff et al., "Mind-Wandering as a Scientific Concept: Cutting through the Definitional Haze," *Trends in Cognitive Sciences* 22, no. 11 (November 2018): 956, https://doi.org/10.1016/j.tics.2018.07.004.

[78] Ibid.

[79] Ibid., 958.

As a result, family resemblance theories generate unintuitive results; modes of cognition that harness more of these features are granted admittance into the mind-wandering family while intuitively not being mind-wandering. Rumination, daydreaming, reflection, distraction, contemplation, and absorption are among these. For illustrative purposes, let us consider absorption. Irving defines absorption as "engrossment in an intellectual idea."[80] It refers to a deep mental immersion in a specific thought and is characterized by a high level of attention and involvement in an idea that leads to a diminished awareness of one's surrounding environment and passage of time.[81] It can refer to an obsessive focus on an idea in one's mind, understandably associated with fantasizing.

Irving points out that absorption can "unfold without veto control and, possibly, without meta-awareness."[82] It can also be purposeless or task-unrelated, as the thought upon which one is absorbed may not be conducive to the completion of any specific goal; one may be absorbed over entertaining fantastical thoughts, for example. It can also be stimulus-independent, as experiences of absorption are "non-perceptual, in that they are really distracted in what takes place around them."[83]

Given these characteristics, we can recognize that absorption can be at least (i) task-unrelated, *and/or* (ii) unaware, *and/or* (iii) lacking veto-control, *and/or* (iv) stimulus-independent. Under a family-resemblances view, experiences of absorption that satisfy these conditions successfully qualify as episodes of mind-wandering.

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[80] Irving, "Mind-Wandering Is Unguided Attention," 547.
[81] Sonya Dal Cin, Michael P. Hall, and Daniel S. Lane, "Absorption," in *Encyclopedia of Personality and Individual Differences*, ed. Virgil Zeigler-Hill and Todd K. Shackelford (Cham: Springer International Publishing, 2016), 1–2, https://doi.org/10.1007/978-3-319-28099-8_1117-1.
[82] Irving, "Mind-Wandering is Unguided Attention," 559.
[83] Ibid.

Absorption, though, is fundamentally different from mind-wandering despite its potential in respecting these characteristics. As Irving articulates, "[i]ntellectual absorption doesn't involve mobility and dispersion; rather, it involves being 'wholly absorbed by some idea distinguished precisely by the impossibility or the great difficulty of a transfer from one idea to another."[84] That is, absorption necessarily lacks the *disunified* dynamic that is so integral to episodes mind-wandering. It does not involve letting unrelated thoughts pass through one's mind, but instead involves being obsessively fixated on one single thought.

In short, absorption is *not* mind-wandering, yet a family-resemblance approach to defining the term would certainly grant it admission to the category. Absorption can occur *during* mind-wandering, yet it on its own is not the experience itself. A family-resemblance view cannot accommodate this distinction.

Absorption is further distinguished from mind-wandering when considering that an individual will certainly be *drawn* to their absorbed thoughts, and such thoughts will *hold* their attention in ways that thoughts occurring during mind-wandering do not. That is, if an individual were to snap out of their absorptive episode, they would feel a gravitation to return to such thoughts given their fantastical nature.

This notion of attention being *drawn to* or *held on* thoughts is imperative in Irving's account of mind-wandering as *unguided attention*—a condition I will define and describe in detail in the next subsection, where I invoke Irving's use of attentional unguidedness to reinforce my disagreement in the adoption of a family-resemblance approach to defining mind-wandering.

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[84] Irving, "Mind-Wandering is Unguided Attention," 559.

2.6.2 Attentional Unguidedness is Sufficient for Mind-Wandering

While the previous subsection articulated a disagreeable consequence of adopting a family-resemblances view in classifying mental episodes as ones of mind-wandering, the following subsection argues that there is no sufficient reason to abandon attentional unguidedness as a sufficient condition for mind-wandering. I first explain in detail what Irving means by 'attentional unguidedness.' I then make my argument on two grounds. The first articulates that the current state of the literature has failed to conjure an example of mind-wandering that is attentionally *guided*. The second reinvokes Irving's work to make a stronger case that mind-wandering and attentional guidance are conceptually incompatible.

2.6.2.a Defining Attentional Unguidedness

Irving argues that by focusing on "how attention is monitored and regulated as it unfolds over time"[85] during mind-wandering, his case can be made that mind-wandering is *unguided attention*. Attentional guidance is described as the following:

> "An agent *A* is guided to focus her attention on some information *i* if and
> only if she has two dispositions:
>   1. *A* is reliably disposed to focus her attention on *i* and
>   2. If *A*'s attention isn't focused on *i*, she notices, feels discomfited by, and is
>   thereby disposed to correct this fact."[86]

That is, "someone's attention is guided if she would feel pulled back, were she distracted from her current focus."[87] Mind-wandering occupies the counterfactual of this proposition: someone's attention is unguided if she would *not* feel pulled back were she distracted from her current focus. Here, the 'current focus' is the individual thought that

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[85] Irving, "Mind-Wandering is Unguided Attention," 547.
[86] Ibid., 565.
[87] Ibid., 548.

is occupying one's mind at a given moment as it wanders; it occupies the 'information *i*' in the definition quoted above. According to Irving, since "someone whose mind is wandering would not feel distracted if her attention were to shift,"[88] her thoughts are characterized as *attentionally unguided*.

2.6.2.b The Absence of a Counterexample

As has been repeatedly stated, defining mind-wandering as a coherent, unified concept in psychology and philosophy has faced a great deal of difficulty given the contingency of its debated-upon features. A multitude of examples have been invoked by Smallwood & Schooler, Bruineberg & Fabry, Irving, Seli et al., and Christoff et al. in each of their works to demonstrate that the various combinations of features that an episode of mind-wandering can have. Noticeably, however, none of the examples they have introduced include a case where an episode of mind-wandering is attentionally guided.[89] I believe that the absence of these examples support the claim that moving beyond attentional unguidedness as a sufficient condition is an inappropriate and premature move in the definitional debates surrounding the concept of mind-wandering. These authors have a duty to demonstrate that mind-wandering can be guided before they adopt a family-resemblances view and discard attentional unguidedness as sufficient. They have yet to do so.

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[88] Irving, "Mind-Wandering is Unguided Attention," 567.
[89] For reference, Bruineberg and Fabry—both advocates of family-resemblance theory in mind-wandering—provide a table of 8 examples of what they take to be extended mind-wandering on Page 16 of their article. Here, the authors demonstrate that many cases of extended mind-wandering can omit some of its previously debated-upon features, but none provided are guided.

2.6.2.c Attentional Unguidedness is Sufficient

The previous argument is admittedly too weak to reject family-resemblance theory on its own. Beyond the absence of a counterexample in the literature, I argue that attentional guidedness is in fact conceptually incompatible with mind-wandering. To argue this, I describe Irving's invocation of attentional unguidedness in more detail than I did in Section 6.2.a.

Recall the disunified dynamic of mind-wandering. When the mind wanders, its train of consciousness is fragmented into individual unrelated thoughts that come and go. Since each thought that dances across a wandering mind uncomplainingly fades out of focus as it is replaced with a new one, "whenever the focus of [one's] wandering attention shifts from one topic to the next, [one] feels no discomfort drawing [one] back"[90] to the preceding thought. As a result, "[w]hen the mind wanders, the focus of attention drifts unguided from one topic to the next,"[91] and a mind-wanderer's "attention would simply wander onward"[92] until they snap out of it and redirect their attention to their immediate environment.

Attentional guidedness and the disunified dynamic of mind-wandering are conceptually incompatible.[93] If the thoughts populating a stream of consciousness were attentionally guided, they flatly would *not* be constitutive of mind-wandering. Rather, they would be constitutive of some other mental activity commonly mistaken for mind-wandering: absorption or rumination, for example. An episode of mind-wandering

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[90] Irving, "Mind-Wandering is Unguided Attention," 567.
[91] Ibid., 563.
[92] Ibid., 567.
[93] There are some instances of disunified thought that are attentionally guided—such as multitasking, for example. When I set my fantasy football lineup while I make my Sunday morning breakfast, my attention is pulled in different directions constantly. However, this is intuitively *not* mind-wandering. If a disunified train of thought is guided, it does not cross the intuition threshold to count as mind-wandering. And so, my argument remains stable despite the occurrence of disunified, guided thoughts.

whereby a wanderer feels drawn or held to an individual thought is conceptually incoherent; mind-wandering is too passive, apathetic, disengaged, and indifferent to guide its attention toward its constitutive thoughts.

As Irving claims, the 'unstable' disunified nature of thoughts during mind-wandering necessitate its conception as unguided: "it's unclear whether the instability of our wandering thoughts could be explained by a view that takes mind-wandering to be guided unconsciously. In contrast, views that take mind-wandering to be unguided *simpliciter* can explain this fact easily: mind-wandering is unstable because it is guided."[94] That is, a disunified train of thoughts cease to constitute an episode of mind-wandering once they are guided.

If your attention is unguided, then you are mind-wandering—plain and simple. The presence or absence of these other debated-upon features bear no effect on making a mental experience *more* or *less* like mind-wandering; attentional unguidedness is all that is needed.

Having supported Irving's claim that mind-wandering can be properly defined as *unguided attention*, I will now move to show that scrolling, an activity utilized by traders in the *attention economy*, is attentionally guided and that it therefore cannot be extended mind-wandering.

2.7 Scrolling is Attentionally Guided

Given my rejection of a family-resemblance approach to mind-wandering, I will now move to take Bruineberg and Fabry up on their suggestion that "[f]uture research should explore [the] cross-connections between the literature on the attention economy

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[94] Irving, "Mind-Wandering is Unguided Attention," 568.

and extended mind-wandering in more detail"[95] to argue that scrolling is in fact an attentionally guided mental activity, and is therefore not mind-wandering. By making reference to the architecture of Content Discovery Platforms and the way that they recommend content under the attention economy, I touch on works conducted on social media addiction, recommender systems, and reward functions in human psychology to conclude that scrolling is *guided attention*, and therefore cannot be considered as mind-wandering.

I will first briefly introduce what the attention economy is. The attention economy is a marketplace that is dominated by advertising,[96] in which the commodity being traded is not a product or a service, but human *attention*.[97] To companies that trade in this economy—typically those in Big Tech—human attention is the scarce, limited resource that their services are competing to capture and retain.[98] Traders in the attention economy stock up on human attention, and monetize this resource by selling it to advertisers, as—as James Williams (2018) claims—"the scalability and increasing profitability of digital advertising made [collecting attention] the default business model [...] for digital platforms and services."[99] And so, in this economy, the most valuable and influential traders are social media companies such as Google, Meta, Snap Inc., Twitter, and ByteDance. In order to compete with one another, these businesses have had to become more creative and strategic in their methods of capturing and retaining attention.

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[95] Bruineberg and Fabry, "Extended Mind-Wandering," 24.

[96] Vikram R. Bhargava and Manuel Velasquez, "Ethics of the Attention Economy: The Problem of Social Media Addiction," *Business Ethics Quarterly* 31, no. 3 (July 2021): 321, https://doi.org/10.1017/beq.2020.32.

[97] Shoshana Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*, First edition (New York: Public Affairs, 2019).

[98] James Williams, *Stand out of Our Light: Freedom and Resistance in the Attention Economy* (Cambridge, United Kingdom ; New York, NY: Cambridge University Press, 2018), 14.

[99] Ibid., 28.

In turn, this has led to the proliferation of Content Discovery Platforms on social media, and the development of design features that succeed in doing so.

With TikTok retaining almost 200 million and Instagram's *Reels* capturing 17.6 million hours of human attention per day,[100] Content Discovery Platforms have proven immensely effective at capturing and retaining human attention. In my view, advanced, highly-stimulating recommendation-based social media interfaces such as TikTok's *For You* page are the most valuable assets a business trading in the attention economy can have.

Recall, TikTok employs machine learning algorithms that automate the recommendation of content presented to its users in real-time on its *For You* page. These algorithms operate with the end goal of increasing user engagement to retain the user's attention for as long as possible. Vikram Bhargava and Manuel Velasquez (2021) articulate that these algorithms "adjust the content they feed each particular user such that each user will remain engaged with the platform for even longer periods of time."[101]

These algorithms measure a wide range of weights, including how much time a user is to spend looking at the video (down to the very millisecond);[102] if they are likely to watch the video a second time after having seen it the first; if they are likely to like, save, or comment on the post; if it is similar to any of the videos they have previously sent or received in direct message chats, including group chats; if it shares a theme with their search history; if they are likely to visit the content creator's profile, or tap on its corresponding hashtag after having viewed the video; if it corresponds to their shopping

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[100] Carbone, "TikTok users spend 197.8 MILLION hours a day scrolling."
[101] Bhargava and Velasquez, "Ethics of the Attention Economy," 333.
[102] This metric is prioritized above all others, as I will discuss later in this paper in Chapter 3, Section 4.1.

habits; the list goes on.[103] If a user does not engage with a particular piece of content in the way predicted, it is taken note of, and the algorithm will modify the extent to which it presents similar content in the future, correcting itself in real time.

This creates a feedback loop of engagement: "the more one uses the platform, the more data the platform's algorithm has about what keeps that particular user engaged."[104] Then, the more the adaptive algorithm feeds that particular user precisely the kind of content it predicts will retain their attention, the more time the user will spend on the app. The more attention social media companies stock up on, the more supply they have to sell to advertisers.

While this undoubtedly raises immense privacy concerns, these recommender systems are so effective at capturing and retaining user attention that they are said to be at the frontlines of social media addiction, with Bhargava and Velasquez arguing that "technologies such as adaptive algorithms allow social media companies to target and continuously maximize their addictive potential at the individual level in ways that [pre-existing technologies] cannot do."[105]

Whether one can be addicted to social media in the same way that one can be addicted to various substances, for example, is a controversial topic. The American Psychological Association has a classification for 'Internet Addiction,' where they cite "various subtypes [of internet addiction], including those involving excessive gaming,

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[103] Meta, "Privacy Policy: What is the Privacy Policy and what does it cover?" January 1, 2023. https://www.facebook.com/privacy/policy/
   Note: I here elected to refer to Meta's (parent company of Facebook and Instagram) privacy policy as opposed to TikTok's due to transparency concerns, but general consensus is that TikTok collects a similar amount of data (Fung, 2023).
[104] Bhargava and Velasquez, "Ethics of the Attention Economy," 334.
[105] Ibid., 341.

sexual preoccupations, and e-mail and text messaging,"[106] but does not explicitly classify

social media addiction in its dictionary or under this term. Brenda Wiederhold (2022)

points out that the DSM-5 does not include social media addiction as an official

diagnosis.[107] However, Bhargava and Velasquez outline that social media interfaces use

features such as intermittent variable rewards, they take advantage of desires for social

validation, and erode natural stopping cues[108] to argue for the existence and prevalence

of social media addiction—particularly among younger populations—despite not being

officially classified as such.

Additionally, using social media in general is a highly stimulating experience. To

support this claim, Conghui Su and colleagues (2021) studied fMRI brain imaging of

TikTok scrollers, where one group of participants was subject to watching personalized

videos (those that are algorithmically *recommended*), and another subject to watching

general videos (those that are not microtargeted through machine learning).[109] Here, the

researchers found that groups under both conditions experienced brain activation in over

a dozen brain areas. However, their study "revealed higher activation induced by TikTok

recommended videos"[110] in an additional 10 brain areas compared to those of

participants who scrolled through general videos. Some of these activated areas make up

the ventral tegmental area (VTA), which is associated with the dopamine-fueled reward

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[106] American Psychological Association, "Internet Addiction," *APA Dictionary*, https://dictionary.apa.org/internet-addiction

[107] Brenda K. Wiederhold, "Tech Addiction? Take a Break Addressing a Truly Global Phenomenon," *Cyberpsychology, Behavior, and Social Networking* 25, no. 10 (October 1, 2022): 623, https://doi.org/10.1089/cyber.2022.29258.editorial.

[108] Bhargava and Velasquez, "Ethics of the Attention Economy," 326.

[109] Conghui Su et al., "Viewing Personalized Video Clips Recommended by TikTok Activates Default Mode Network and Ventral Tegmental Area," *NeuroImage* 237 (August 2021): 118136, https://doi.org/10.1016/j.neuroimage.2021.118136.

[110] Ibid., 4.

function of the brain.[111] As Wiederhold articulates this, in turn, makes "our brains begin to identify logging onto [TikTok] as a rewarding activity that should be repeated."[112]

Recommendation algorithms, by continuously collecting data to ensure what specific video is most likely to keep a user looking at their smartphone screen for the longest amount of time—and to display that video at the right time—then allow social media platforms to succeed in "getting a person to contribute to making addictive the very thing to which that person has become addicted,"[113] as Bhargava and Velasquez argue. It is as if every cigarette smoked was able to change and reconfigure its chemical makeup after every inhalation—modifying nicotine concentration, flavor, filter makeup, etc. in real-time—with the goal of ensuring its smoker inhales again as soon as possible, incessantly wishing to light up again.

When it comes to TikTok in particular, Christian Montag, Haibo Yang, and Jon Elhai (2021) explore a seemingly simple question: *why do people use TikTok*?[114] Here, the authors claim that the immersive features of platform design (largely fueled by the recommendation of content) "likely drives users with certain characteristics into [...] problematic TikTok use (addictive-like behavior)."[115] Additionally, they argue that the reinforcement of this addictive-like usage is also very likely reached by the availability and ubiquity of personalized, endless content, where they suggest that "TikTok's '*For You*'-Page learns quickly via artificial intelligence what users like, which likely results in

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[111] Stephan Lammel et al., "Input-Specific Control of Reward and Aversion in the Ventral Tegmental Area," *Nature* 491, no. 7423 (November 2012): 212–17, https://doi.org/10.1038/nature11527.
[112] Wiederhold, "Tech Addiction?" 623.
[113] Bhargava and Velasquez, "Ethics of the Attention Economy," 335.
[114] Christian Montag, Haibo Yang, and Jon D. Elhai, "On the Psychology of TikTok Use: A First Glimpse From Empirical Findings," *Frontiers in Public Health* 9 (March 16, 2021): 641673, https://doi.org/10.3389/fpubh.2021.641673.
[115] Ibid., 2.

longer TikTok use than a user intended, which may cause smartphone TikTok-related addictive behavior."[116]

The list of design features that contribute to TikTok addiction is more extensive than this, but my point here is that under the overall thesis of the attention economy, recommender systems are engineered with the explicit and, frankly, obvious goal of guiding user attention. Leaving smartphone users performing attentionally unguided activities on social media is flatly antithetical to Big Tech's business model. If these interfaces did not guide user attention and were designed in such a way that left users *not* wanting to return to their scrolling were they distracted from it, these research findings would simply *not* exist. For as long as the attention economy exists, user attention will be guided. By guiding user attention, those trading under the attention economy are able to profit from selling attention to advertisers. Attentional unguidedness is simply antithetical to Big Tech's business model.

A simple example can illustrate why scrolling is a form of guided attention very clearly. If an iPhone user wants to limit their screen time, they can implement an iOS time-restriction feature that halts selected applications should they spend a pre-determined amount of time of their day using these selected applications. If they set this restriction on TikTok and are aimlessly scrolling through their *For You* page when their time limit is reached, their application blacks out and displays a little hourglass icon above the words 'Time Limit Reached.' On the bottom of the screen, they are prompted with four options: (i) give them one more minute of screen time, (ii) give them fifteen

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[116] Montag, Yang, and Elhai, "TikTok Use," 2.

more minutes of screen time, (iii) turn the restriction off for the day, or (iv) close the application.

If their attention was *unguided* during their scrolling, they would opt to close the application invariably. This tendency to ask for more scrolling time were one blacked out when their time limit is reached—interrupting and distracting them from their scrolling—is empirical proof that one *would* feel pulled back to their scrolling were they distracted from it. It is thus a clear violation of the necessary and sufficient condition of attentional *unguidedness* mind-wandering must exhibit.

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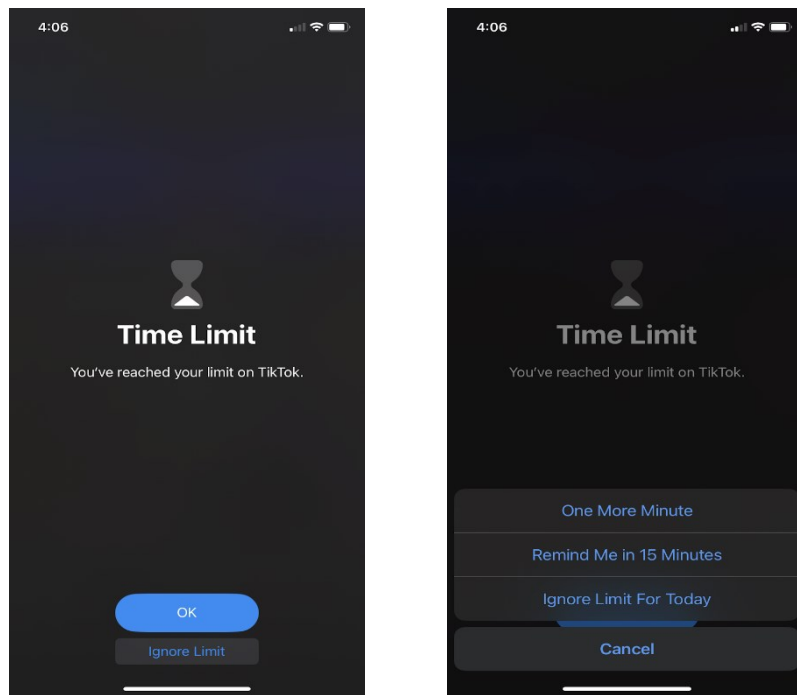
Figures 2.b, 2.c: Screenshots of iOS Screen Time Restriction on TikTok, and its corresponding bypass options.

I will end this argument by concluding that scrolling is an attentionally guided activity. Given my commitment to the claim that attentional unguidedness is sufficient for mind-wandering, scrolling is *not* extended mind-wandering. As a result, this allows

for a more critical interpretation of TikTok—one that does not paint it as a harmlessly beneficial mental activity that serves no obvious purpose other than deflecting one's mind from boredom. The remainder of this thesis seeks to scrutinize *For You* by exploring how TikTok interferes with user autonomy.

Later in this paper, in Chapter 4, I will make the case that scrolling is extended *rumination*, not extended mind-wandering. For now, it will suffice to conclude my argument here.

2.8 Conclusion

In this chapter, I argued that scrolling on TikTok is not extended mind-wandering. After outlining what scrolling on TikTok is, I explained how second-wave extended mind theory has allowed researchers to consider smartphones as cognitive extensions. I moved to explain the current state of mind-wandering research, where I focused primarily on Zachary Irving's conception of mind-wandering as unguided attention. Upon articulating these two expository foundations, I showed how Jelle Bruineberg and Regina E. Fabry used such research to make the case for habitual smartphone use being a form of extended mind-wandering, where they adopt a family-resemblances approach to defining mind-wandering. I rejected their approach on the grounds that (i) a family resemblance approach grants unintuitive candidates access to the mind-wandering family, (ii) there is not yet a reason to move past attentional unguidedness as a sufficient condition for mind-wandering, and (iii) scrolling is attentionally guided.

In what follows, I argue that instead of viewing scrolling as some mindless form of mind-wandering, there is sufficient reason to believe it is also a source of value-

inculcation that can alter a TikTok user's worldview, influence her political orientation, and reshape her moral compass. In the next chapter, I move to show how one is expected to claim autonomous ownership over convictions acquired from sources of socialization, such as TikTok.

Chapter 3: Why Self-Reflective Reaffirmation Needs to be Done Thoroughly

Abstract

In the following chapter, I argue that in order to effectively authenticate values and convictions that one has acquired from external sources of socialization as one's own, one has to reflect on one's alignment with such values extensively and thoroughly. I first establish that TikTok can be one of these external sources of value-inculcation. I invoke Marilyn Friedman's conception of *self-reflective reaffirmation* and John Christman's account of *alienation* in their accounts of autonomy. According to Friedman, a minimal amount of critical reflection can render an agent autonomous with respect to her convictions. I disagree with this claim by posting three charges against the possibility of minimal reflection generating autonomy. I detail and outline a more effective process, and end by anticipating and refuting an objection that claims an appeal to emotion can bypass the need for thorough reflection upon one's endorsements.

3.1 Introduction

The beginning of this chapter argues that the nature of some content on TikTok should allow for a consideration that TikTok users can acquire potentially harmful socio-political *values* from their *For You* page. By 'socio-political values' I mean principles or beliefs that guide individuals in determining what they take to be desirable, important, or worth pursuing. The values I am interested in are those that serve as a foundation for making moral and political judgments, shaping behaviors, attitudes, and priorities. These values influence one's positioning in conversations on topics such as social justice, environmental sustainability, human rights, equality, freedom, and anti-discrimination, as some examples. More specifically, my focus is on values that fuel repudiatory attitudes toward marginalized groups of individuals. To narrow this, I focus on feminism and antifeminism, as such content is becoming pervasive on TikTok.

Following this assertion, I explore how individuals are expected to claim autonomous ownership over values they have acquired from their environments and the ways in which they have been socialized. I here visit some literature on *relational autonomy* and point to Marilyn Friedman and John Christman's arguments for how an individual can become autonomous with respect to her convictions despite these convictions being acquired through external sources of socialization. I use the terms 'self-reflective reaffirmation' and 'value-authentication' interchangeably to refer to the process these authors outline.

I question whether existing frameworks for this process are effective enough at genuinely allowing one to cross the autonomy threshold required to genuinely claim ownership over one's convictions. Specifically, I explore whether a minimal amount of

self-reflection can render an agent autonomous with respect to harmful repudiatory convictions.

I will argue that a process of non-extensive, minimal, unconscious *self-reflective reaffirmation* as invoked by Marilyn Friedman (2003) in her work *A Conception of Autonomy*[117] is inadequate at rendering an epistemic agent genuinely autonomous with respect to her values, and instead propose a more rigorous method. Importantly, I argue that self-reflective reaffirmation needs to be conducted *thoroughly* and *extensively*; it cannot be done passively or idly with respect to harmful socio-political values acquired through socialization. That is, the proposition that minimal, quick, idle, or passive self-reflective reaffirmation renders an agent genuinely autonomous with respect to *all kinds* of convictions is false; different kinds of convictions require different degrees of reflection. Over the course of this section, I will invoke the example of a young man who has acquired antifeminist values on TikTok.

3.2 TikTok can Cause Value-Inculcation

In the following section, I argue that instead of interpreting TikTok as mindless, harmless entertainment, we ought to consider the possibility of scrolling as a source of value acquisition—not because it is necessarily *more* of a value-inculcator than a harmless entertainer, but because interpreting it in this way can motivate a more serious approach to understanding the epistemic harms it perpetuates. In order to do this, I expose some of the content that gets widely promoted on TikTok, where I argue that a great deal of its content is inherently *not* frivolously entertaining in nature, but is *value-*

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[117] Friedman, "A Conception of Autonomy."

laden.[118] I here invoke the recent rise of self-proclaimed misogynist influencer Andrew Tate, and the kind of online content his base has popularized. I argue that there is sufficient reason to believe that constant exposure to value-laden content on TikTok can have a causal influence on a user's worldview.

My definition of 'scrolling'—namely, the act of flipping through digital content on Content Discovery Platforms—has been popularized in discussions on online well-being blogs for quite some time. These kinds of entries often outline the harms of scrolling on mental health. Interestingly, they typically refer to the activity as "Mindless Scrolling," and are often given titles such as '*6 Ways to Overcome Your Mindless Scrolling Habit*,'[119] or '*Nothing Beneficial Comes From Mindless Scrolling.*'[120] Twitter accounts that preach mental health and well-being will also refer to the action as 'mindless scrolling' with verified users such as @PrasoonPratham tweeting—with considerable engagement—the following:
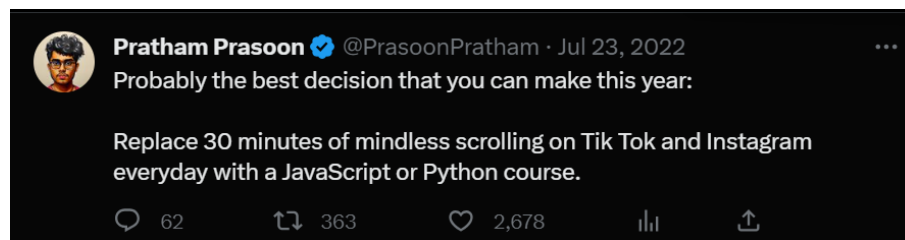
Figure 3.a: A Tweet referring to scrolling as 'mindless scrolling,' with considerable engagement[121]

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[118] Surely, entertaining content can still be value-laden. I mean here to say that one's For You page is not merely a collection of short cat videos and sports highlights. Rather, there is a great deal of heavily value-weighted content on TikTok. My concern is with content that is not obviously entertaining and harmless (i.e. a cat video), but rather that—at the same time, perhaps—communicates harmful socio-political rhetoric. I will return to this later.

[119] Lando Loic, "6 Ways to Overcome Your Mindless Scrolling Habit," *Make Use Of* (blog), May 15, 2022, https://www.makeuseof.com/ways-to-overcome-mindless-scrolling-habit/.

[120] Joe Fedewa, "Nothing Beneficial Comes From Mindless Scrolling," *How-To Geek* (blog), January 11, 2022. https://www.howtogeek.com/777940/nothing-beneficial-comes-from-mindless-scrolling.

[121] Pratham Prasoon (@PrasoonPratham), "Probably the best decision you can make this year: Replace 30 minutes of mindless scrolling on Tik Tok and Instagram everyday with a JavaScript or Python Course." Twitter, July 23, 2022, 8:27AM. https://twitter.com/PrasoonPratham/status/1550827433125085185

My point here is that despite my rejection of the extended mind-wandering thesis in Chapter 2, where I argued that scrolling is an attentionally guided activity and is thus not mind-wandering,[122] those in non-academic settings still tend to refer to scrolling as an utterly mindless activity—so much so that when you invoke the term 'mindless scrolling' in conversation, it seems as though everyone knows what you're talking about: the action of turning your brain off and flipping through a social media feed such as TikTok's *For You* page.

Just because scrolling is treated as 'mindless,' though, does not mean it has no effect on influencing a TikTok user's worldview. The curated stream of short videos that occupy a user's *For You* page is not always a frivolous feed that jumps from a cat video to a sports highlight to a cooking tutorial to a dance challenge; it would be naïve to assume TikTok is strictly populated by videos that are void of any *values*—my focus is on negatively charged socio-political values. Instead, a great deal of videos on *For You* simultaneously share conspiratorial rhetoric; denounce justice social movements; preach racism and violence; and glorify self-harm, eating disorders, suicide, and sexual assault.[123] These kinds of videos are not value-neutral, inconsequential, or apathetically entertainment-based; they instead communicate specific attitudes toward personal and socio-political debates. Take, for example, the recent rise of internet influencer Andrew Tate.

For those who are unfamiliar, Andrew Tate is the 36-year-old at the forefront of *men's rights* videos online who rose to fame on TikTok in the summer of 2022. His

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[122] Chapter 3, Section 5.3.
[123] C-SPAN, "Chew Testifies Before Congress," 18:23, 24:37, 1:28:15, 3:24:28.

videos have been watched over 12 billion times on TikTok alone.[124] If his coming to

fame in 2022 was missed, some may recognize him from news headlines in early 2023

after having been charged with rape and human trafficking.[125] His content is extremely

popular among young men on social media, but what does it look like?

The content in his videos varies. Sometimes, they consist of a Tate in a designer

suit living a seemingly expensive, lavish lifestyle. He is driving a nice car, or is in a

mansion or a private jet, for example. Typically, he is giving advice directed at young

men on how to achieve a life similar to the one he advertises. The advice tells his

listeners how to be competitive and aggressive, and how to regain their masculinity in a

world where it is allegedly being demoted. It tells men that they need to be assertive and

egoistic, that they need to pave their own path and eliminate relationships that are not

conducive to making themselves money. It screams messages like 'hard work makes

hard men.'[126]

Other content with similar rhetoric from other accounts consists of videos of

interviews or podcast settings, typically between a man and a woman. In these videos,

the man—Jordan Peterson, often among the figures featured—can be asking the woman

about feminism, asking questions such as "what rights do men have that women

don't?"[127] freezing the interviewee. Or the male podcaster featured will invoke some

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[124] Shanti Das, "Inside the violent, misogynistic world of TikTok's new star, Andrew Tate," *The Guardian* online, August 6, 2022, https://www.theguardian.com/technology/2022/aug/06/andrew-tate-violent-misogynistic-world-of-tiktok-new-star

[125] Lucy Williamson and George Wright, "Andrew Tate charged with rape and human trafficking," *BBC News* online, June 21, 2023, https://www.bbc.com/news/world-europe-65959097

[126] AJ Willingham, "Misogynistic influencers are trending right now. Defusing their message is a complex task," *CNN* online, September 8, 2022, https://www.cnn.com/2022/09/08/us/andrew-tate-manosphere-misogyny-solutions-cec/index.html

[127] Whatever Podcast Clips, "Feminists ONLY Care About Equality When It Benefits THEM?!," YouTube, April 2, 2023, 5:47, https://www.youtube.com/watch?v=tNenrJVN4Ak

obscure biological statistic that is meant to justify the dominance men are 'supposed' to exert over women. For example, the man will refer to statistics that show rates of depression among men to argue that men are not privileged over women, or that the patriarchy does not exist.[128] Usually, the man keeps a calm composure, and pushes these kinds of questions until the interviewee gets emotionally distressed, raises her voice, or leaves the set. Other content will consist of similar interviews with trans rights activists, with a man typically asking ludicrous questions regarding gender identity.[129]

 My point is that given the ubiquity of this kind of antifeminist, anti-woke, anti-LGBTQIA2S+ content online, TikTok is far from void of any socio-political influence on young minds. This kind of content is not all fun and games; it isn't all mindless, frivolous, meaningless entertainment that can cure boredom and induce discovery in the way that mind-wandering does. Empirical evidence supporting the claim that TikTok is in fact actively changing and manipulating young men's minds, political orientations and moral compasses toward antifeminist right-wing rhetoric is admittedly thin. However, there exist numerous anecdotes and testimonials from parents and teachers reciting how their sons and male students, respectively, have subscribed to the ideals communicated by Tate-like figures[130, 131] and conspiratorial videos[132] following excessive TikTok use.

[128] EducateInspireChangeTV, "Jordan Peterson Completely Destroys Feminist Narrative," YouTube Video, December 18, 2018, 3:23, https://www.youtube.com/watch?v=yZYQpge1W5s

[129] For reference, a YouTube channel titled "The Whatever Podcast" consists of prime examples of these clips.

[130] Martha Alexander, "How to talk to your children about Andrew Tate and online misogyny," *Evening Standard*, January 18, 2023, https://www.standard.co.uk/insider/talk-children-andrew-tate-misogyny-online-safety-b1053749.html

[131] Lola Okolosie, "Parents, talk to your sons about Andrew Tate—we teachers can't take him on alone," *The Guardian* online, February 14, 2023, https://www.theguardian.com/commentisfree/2023/feb/14/parents-sons-andrew-tate-teachers-toxic-influencers

[132] Sofia Barnett, "Why Teens Are Falling for TikTok Conspiracy Theories," *Wired* online, September 19, 2020, https://www.wired.com/story/teens-tiktok-conspiracy-theories/

Given (i) these anecdotes, (ii) the ubiquity of TikTok use, and (iii) the popularity of nonfrivolous content on the platform, it is far from unreasonable to believe that TikTok is exerting a considerable causal influence on young minds' subscriptions to these harmful socio-political ideals despite this proposition's lack of supporting empirical evidence.

It is important that individuals are held accountable for their subscription to harmful socio-political ideals; we would not want a young man who subscribes to antifeminist rhetoric to be absolved of any responsibility for his endorsement of such convictions, even if these values are acquired from external sources of socialization.[133] Yet if these values are inculcated from TikTok—a party greatly external to oneself— how can the individual in question be held responsible for having this value? Can he be said to *autonomously* subscribe to it? To address this question, I will first discuss autonomy and how it is invoked in a relational epistemic sense. I will then move to discuss Friedman's account of what it takes to autonomously subscribe to a belief.

3.3 What is Relational Epistemic Autonomy?

Autonomy is a difficult concept to articulate clearly; it does not seem to have one uniform definition that can encompass all the avenues of philosophical inquiry it occupies. Gerald Dworkin (1981) claims that different authors mobilize the term "autonomy" in very different ways in their work—including discourse on liberty, self-rule, free will, self-knowledge, dignity, integrity, individuality, and independence, among others—and that it is not at all clear whether any of them are discussing the same

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[133] Of course, I could adopt a compatibilist account of responsibility to reconcile this worry, but I wish to avoid these thorny discussions. I will take for granted that the easiest way to hold someone accountable for an action or belief is to say they acted or believed autonomously.

thing.[134] Here, Dworkin notes that the term is "related to actions, to beliefs, to reasons for acting, to rules, to the will of other persons, to thoughts and to principles."[135] Despite the obfuscation of the concept, Dworkin articulates that "the only featur[e] held in constant from one author to another [is] that autonomy is [...] a desirable quality to have."[136]

Defining autonomy is obviously difficult, and I do not wish to exert too much time and space in this paper in attempting to take on such a challenge. Instead, I believe we can move past this by resorting to 'folk' understanding of the concept. As Marilyn Friedman describes, this ordinary understanding claims that "[a]utonomy is, of course, self-determination."[137] In my view, concisely, autonomy encompasses the capacity for an individual to govern herself in a free, independent way; to (i) act, to (ii) make decisions, and to (iii) subscribe to values that are in accordance with her authentic self without being subject to external constraints, or coercion. To avoid incessantly trying to define or characterize autonomy, let us assume this definition for the sake of moving forward with my argument.

My focus will be on the epistemic nature of (iii): the capacity to freely subscribe to socio-political beliefs that are in accordance with one's authentic worldview. Catriona Mackenzie (2014) defines this branch of autonomy as *self-authorization*, which "involves regarding oneself as authorized [...] to determine one's values and identity-

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[134] Gerald Dworkin, "The Concept of Autonomy," *Grazer Philosophische Studien* 12 (1981): 203.
[135] Ibid., 204.
[136] Dworkin, "The Concept of Autonomy," 204.
[137] Friedman, "A Conception of Autonomy," 4-5

shaping practical commitments"[138] that ultimately serve as the foundation upon which one's worldview, political orientation, and moral compass are formed.

Relational autonomy is an equally tricky concept to articulate. Instead of putting forth an argument that charges against the Kantian tradition and advocates for a feminist relational approach, I will merely explain what relational autonomy *is*, and why it is useful for my purposes.

Mackenzie urges readers to understand that relational autonomy is "responsive to the facts of human vulnerability and dependency rather than assuming a conception of persons as self-sufficient, independent, rational contractors,"[139] where she reconciles the self-determining nature of autonomy with the fact that "persons are embodied and socially, historically, and culturally embedded and that their identities are constituted in relation to these factors in complex ways."[140] In short, under this feminist approach to autonomy, the self is not one individual, unitary concept, but is instead one node in a much wider system: society as a whole. The self is the product of its relationships with other people, with organizations, and with institutions.[141] As a result, values are inculcated from the self's relationships with others, its education, its family and upbringing, its peers and social circles, literature and art, religion, history and cultural heritage, the scientific community, and media and information sources. Thus, our

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[138] Catriona Mackenzie, "Three Dimensions of Autonomy," in *Autonomy, Oppression, and Gender*, ed. Andrea Veltman and Mark Piper (Oxford University Press, 2014), 18, https://doi.org/10.1093/acprof:oso/9780199969104.003.0002.

[139] Mackenzie, "Three Dimensions," 21.

[140] Ibid.

[141] While I do not necessarily disagree with the heavier philosophical commitment involved in some relational theories of autonomy that the self is *constituted by* its relationships with others and with institutions, the purposes of this chapter need not undertake such a thick stance. Instead, I am here making a weaker claim: an individual's societal relations exert a great deal of various causal effects on how she comes to identify herself, what she believes, how she acts, and how she decides.

decisions, actions, and subscriptions to such values are consequently influenced by these relationships. As some examples, my decision to attend school in Halifax was greatly influenced by my father urging me to attend the University of King's College; my decision to move back to Quebec after my degree was influenced by my girlfriend's, friends', and family's residencies in Montréal; my subscription to liberal, democratic values is constantly influenced by the books and articles I read, the news I consume, and the education I receive. Despite these decisions seeming like they have their source outside of myself, I am still able to claim ownership over them; they are still *mine* under a relational framework of autonomy. If the self is relational, then thus so too must be autonomy.

Understanding epistemic autonomy in this relational sense is rather useful for the purposes of this project. As I argued in Section 2.2, TikTok is among the sources of value-acquisition that exist. Social media as a whole needs to be included in these lists of institutions and relationships that have a causal influence on the self.

Return focus to the third example I had provided earlier: my subscription to liberal, democratic values is the result of my education, upbringing, and media consumption. Despite being able to say that I *can* claim genuine ownership over these values—and that I am thus epistemically *autonomous* with respect to them—it remains unclear *how* that is the case. As a result, the central problem underlying epistemic relational autonomy is the following: if our values are inculcated in us from sources external to the self, such as TikTok's *For You* page, are we then not just some weird amalgamation of all the ways we have been socialized? Have we effectively annihilated the self by establishing its relationality?

3.4 What is Self-Reflective Reaffirmation?

In the following section, I expound Friedman's elucidation of *self-reflective reaffirmation*. Friedman's definition of self-reflective reaffirmation is as follows: it is "the process in which, roughly, a whole self takes a stance toward particular wants and values she finds herself to have."[142] In order to understand all of the intricacies of reflective reaffirmation in an augmented definition, I rephrase and expand this definition into the following: Self-reflective reaffirmation is '*a thoughtful, deliberative, critically reflective process of value-authentication that involves questioning one's alignment with specific values or convictions with the end goal of enhancing one's ability to say one autonomously endorses or repudiates the values, beliefs, or preferences in question, thereby laundering them from external influence*.' This process is a cornerstone of epistemic relational autonomy, and is at the heart of what it means to autonomously hold a value as one's own.

I will explain how Friedman uses the concept in her approach to relational autonomy, how she claims it is meant to work, and what it is supposed to do. Following this, I introduce John Christman's (2009) integration of emotion into the discussion to elucidate his articulation of *nonalienation*[143] to the process of self-reflective reaffirmation, and how such a measure reinforces one's ability to reaffirm one's alignment with a value. Importantly, my account concerns values that motivate one's stance on socio-political normative questions that Tate-like figures mobilize on social media. For example: Should trans people deserve healthcare?; Should women occupy

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[142] Friedman, "A Conception of Autonomy," 21.
[143] Christman, "The Politics of Persons."

more positions of power?; Should abortion be a human right?; Should a woman be allowed to pursue sex work?

Recall the central question underpinning a relational approach to epistemic autonomy: If our values are entirely products of external influences, how can we genuinely claim to autonomously embrace and endorse them? Friedman articulates this question in her work as: "the familiar worry about whether someone can be autonomous if her guiding wants and values are the causal products of upbringing and other processes beyond her control, processes that are therefore not autonomous to her."[144]

In order to launder a conviction from external influence, Friedman here describes her approach to the process of self-reflective reaffirmation.[145] This process involves identifying the values one possesses, and then questioning whether one approves of them. Friedman's process is as follows.

First, one is to identify the kinds of "wants, desires, cares, concerns, values, commitments, and any other attitudes someone may take up with regard to what she experiences, attitudes that might influence her goals, purposes, aims, and intentions."[146] Of course, these can include one's attitudes toward the kinds of socio-political questions I am concerned with in this paper. For clarificatory reasons, Friedman reminds her readers that we are not here discussing desires such as "a liking for ice cream or a particular television program,"[147] but instead deeper concerns "that provide the basis for autonomous behavior."[148] These include the kinds of values and preferences that make

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[144] Friedman, "A Conception of Autonomy," 8.
[145] Ibid., 5
[146] Ibid., 6.
[147] Ibid.
[148] Ibid., 6-7

up one's *perspectival identity*[149] and the kinds of concerns that constitute someone's outlook of what *matters* to them.[150]

Upon identifying the values that make up *who one is*, a person is then expected to "somehow reflect on [them] and take up an evaluative stance with respect to them."[151] That is, they are expected to question their endorsement of such a value, and whether it is truly part of who they are as a person. By putting her values in question in this critical, reflective way, our value-holder "can endorse or identify with them in some way or be wholeheartedly committed to them, or she can reject or repudiate them or only be halfheartedly committed to them."[152] If, upon reflection, she endorses the value, then she makes it *more like* hers in some relevant way, which enables her to say she autonomously holds it. In turn, the values become a justifiably authentic part of her identity. Thus, "when she chooses or acts in accord with wants or desires that she has self-reflectively endorsed, [then] she is behaving autonomously."[153] The inverse is the case for values that she has *not* engaged in critical reflection upon; should she act in accordance with values she has not self-reflectively reaffirmed, she cannot be said to be autonomously subscribed to them. In the end, the values that undergo this reflective process are laundered from their external influence, and "those wants and concerns become more truly a (whole) person's 'own.'"[154]

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[149] Perspectival identity, as I understand it, involves asserting that an agent's personal identity is constituted by the collection of their wants, desires, preferences, values, beliefs, and commitments, and convictions. It moves beyond the mind-body debate on personal identity to reconcile oneself with one's social reality and is a cornerstone of feminist philosophy. A person's values make up who she *is*, and are thus integral to her personal identity.
[150] Friedman, "A Conception of Autonomy," 11.
[151] Ibid., 4
[152] Ibid., 4-5.
[153] Ibid., 5.
[154] Ibid.

Friedman claims that this process is a 'generic' account of autonomy that forms the basis for her approach to a relational framework of autonomy. Despite the attractiveness of this account, a worry remains that it may be difficult to determine whether or not one *genuinely* endorses or repudiates a conviction after having undergone self-reflective reaffirmation. I can certainly *say* I endorse or reject a certain value, but I could be lying to myself for the sake of social acceptance or outright arrogance. Or, I could simply be mistaken in this conclusion. More substantively—a point I will elucidate later, in Section 5.3 of this chapter—these 'higher order' endorsements or repudiations may *also* be externally influenced.

To remedy this worry, John Christman (2009) reinforces Friedman's process by integrating *emotion* into our laundering process. Christman urges that we reflect a little more extensively on our commitments than what Friedman allows for, whereby he expects individuals to critically reflect on and examine their *affective reactions* in response to the values in question. He introduces the concept of *alienation* to aid one in determining whether one's endorsement or rejection of a value is genuine, stipulating that "the proper test for the acceptability of the characteristic in question is one where the person does not feel deeply *alienated* from it upon critical reflection."[155]

Alienation here is characterized as the phenomenon by which an individual feels a disconnection or a distance from the value in question. It "involves feeling constrained by the trait and wanting to decidedly repudiate it,"[156] thereby allowing the individual to confidently rely on her emotions—her *affective reactions*—that are charged by the value in question. Since our feelings can be considered reliable indicators of our internal

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[155] Christman, "The Politics of Persons," 144
[156] Ibid.

attitudes towards objects or ideas in our environment, our affective reactions are trustworthy reflections and representations of our true, inner selves. Those feelings can thus confirm and substantiate an endorsement or repudiation of a belief in such a way that is made more confidently authentic, for they stem from the true internal states of the individual questioning them. This, as a bonus, helps move even further from the traditional individualistic, masculinist, anti-emotional Kantian approach to autonomy.

And so, if upon reflection, an agent feels disgust or regret in her possession of a certain value, she will thereby "feel a need to repudiate that desire or trait, to reject it and alter it as much as possible, and to resist its effects."[157] On the other hand, if she is "unable to rid herself of the characteristic in question, she is heteronomous in relation to it."[158] When I scroll, and am shown a short video of a man smoking a cigar in a Lamborghini telling me how to be a strong man in today's world, I *feel* a disgust toward such content. Upon evaluating my emotional reaction to this content, I conclude that it is incongruent with the higher-order values I care about as an individual, and I feel alienated from such content when it is presented to me; I am estranged from the message it contains. From there, my ability to solidify my repudiation of these messages promoting men's rights as officially genuine, authentic, and *autonomous* is increased.

3.5 Challenging Friedman's Account of Non-Extensive Reflection

Christman and Friedman are in tension with one another. Friedman believes that a quick, non-extensive reflection can allow one to claim at least a minimal amount of autonomy with respect to the values in question—a claim that will occupy the bulk of the

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[157] Christman, "The Politics of Persons," 144.
[158] Ibid.

remainder of this section—while Christman urges that *at least* putting in the effort to reflect on one's emotional relation to the values in question renders one genuinely autonomous in relation to them. While Friedman admits that "[t]he more extensively one reflects on one's wants and commitments, the greater one's autonomy is with respect to them,"[159] she maintains that the process need not take any effort in order to prove effective, claiming that "[r]eflective attention need not be conscious or extensive, and it need not be narrowly cognitive in nature."[160] That is, a person doesn't *need* to undergo deep reflection on their convictions in order to cross the autonomy threshold, but if they do, then all the better. Here, she claims that "[a] self who is at all minimally self-reflective [(i.e. that has performed a non-extensive self-reflective reaffirmation)] has crossed a threshold;"[161] a person who engages in even the most minimal self-reflection is the least amount autonomous with respect to the value(s) in question, but autonomous nonetheless. The more thoroughly one engages in their reflection, the more autonomous they are with respect to the same values. And so, while Christman's proposed procedure may make individuals *more* autonomous than an effortless one, it exceeds what counts as sufficient, where Friedman goes on to claim that "[Christman's] level of self-reflection [...] is sufficient for autonomy,"[162] but that "[o]n [her] account, however, it is more than what is necessary. Practically any self-reflective reaffirmation will do."[163]

I worry that the authors have not provided any detailed account of the actual dynamics of how this process is meant to unfold. Admittedly, it feels intuitive: take a value and ask whether you like it or not. Think about it. If you answer with a yes, it's

[159] Friedman, "A Conception of Autonomy," 7.
[160] Ibid.
[161] Ibid.
[162] Ibid.
[163] Ibid.

yours. If you conclude that it makes you feel good upon holding it in question, it's even more yours. If you answer with a no, it is not yours. If you conclude that it makes you feel badly upon holding it in question, it's even less yours.

However, this quick kind of approach still seems liable to error if we do not hold it to a high standard. While I sympathize with Christman's efforts at arguing that the process *needs* to be done more effortfully than what Friedman allows, I believe he still falls short; an appeal to emotion cannot do all the work of critical reflectoin (a point I will elaborate in Section 6, where I discuss propaganda).

Next, I provide three reasons why I disagree with Friedman that "[r]eflective attention need not be conscious or extensive, and it need not be narrowly cognitive in nature."[164] First, I will explain what Friedman means by this. Then I move to my objections. My first charge is fueled by moral intuition, which argues that when it comes to questioning values that are resentful, hateful, and discriminatory, we feel as though it is our reflector's *moral duty* to undergo a deeper process than what Friedman believes is sufficient. My second charge against this argument is based on the interrelated psychological nature of the terms 'conscious' and 'attention' and argues that unconscious attention is an incoherent concept. My third and final charge argues that non-extensive self-reflective reaffirmation is more likely to encounter accusations of infinite regress than thorough reflection. Importantly, I assert that despite my account coming off as value-laden and thus substantive, it remains content-neutral.

To begin, it is worth explaining what Friedman means by 'non-extensive' and 'narrowly cognitive' reflection. When Friedman claims that self-reflective reaffirmation

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[164] Friedman, "A Conception of Autonomy," 7.

"need not be narrowly cognitive in nature," she is implying that reflective attention can

go *beyond* strictly cognitive processes, stating that "reflective consideration may be

cognitive in a *narrow* sense or also affective or volitional and cognitive in a *broad*

sense"[165] (emphasis mine). This is to say that reflective attention is not restricted only to

cognition, but can include one's *will*, as well as one's *emotion* (as Christman argues, for

example). She thus suggests that self-reflective consideration *can* involve strictly

cognitive processes such as focused reasoning, but it need not; it can rely on broader

cognitive processes that encompass emotions and intentions.

My objections are directed at the claim that reflective attention need not be

conscious or *extensive*. In what follows, I provide my three arguments why non-

extensive self-reflective reaffirmation does not allow one to cross the autonomy

threshold.

3.5.1 The Challenge from Moral Intuition

This charge against Friedman's claim that reflective attention need not be

conscious or extensive states that non-extensive reflection cannot render one autonomous

with respect to *any* conviction. Instead, I argue that when it comes to questioning one's

alignment with deeply seated harmful, resentful socio-political values such as those

distributed by Andrew Tate, it feels intuitive that we would simply *want* or *demand* that

our evaluator perform a deeper amount of cognitive reflection than the minimal amount

Friedman believes sufficient.

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[165] Friedman, "A Conception of Autonomy," 14.

I illustrate this point by way of example. Let us imagine a scenario in which a young man—let's call him Ethan—has consumed a large deal of antifeminist content on TikTok, and this content has had a causal influence on his development of the conviction that transgender people do not deserve healthcare. Upon learning that Ethan holds this conviction, we urge that he reflect on his alleged alignment with this belief, and that he conducts some self-reflective reaffirmation to determine whether this conviction is truly one he endorses from within—whether this belief is aligned with who he is, or wants to be, as a person. Ethan goes on to look at the ceiling for a couple of seconds, doesn't really think about it that hard, and quickly and lazily reflects on this belief. He promptly answers by confirming that it does in fact align with his inner self, saying 'Yeah, sure, whatever, I stand by that.' Under Friedman's account, Ethan is now autonomous with respect to his belief.

Intuitively, we would be justified in feeling like Ethan has not done enough to satisfy our concern. This simply will not cut it; it falls short of our expectations. Not only would we feel as though Ethan hasn't conducted his inquiry *properly*, but that there is some sense in which he did something *wrong*; this kind of approach has moral implications. That is, our moral intuitions tell us that it is wrong for Ethan to say he subscribes to a hateful belief that resents members of a specific social group without doing *at least* one of the following: (i) identifying the source of socialization that imbued this belief in him, and questioning its reliability, trustworthiness, and virtuousness, (ii) decoding some of its underlying moral, social, and political implications, (iii) questioning whether his endorsement is motivated by internal biases, and what those biases are, or (iv) questioning whether a subscription to it aligns with who he is (or who he wants to be) as a person. Should Ethan neglect to undergo *any* of these reflective

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procedures, I argue that we would invariably be left feeling as though he has not done enough to claim that he authentically endorses the idea that transgender people do not deserve healthcare.

A quick, unconscious, non-extensive evaluation would simply leave Ethan's counterparts feeling dissatisfied, and would force us to urge Ethan to rethink his alignment with his conviction in a deeper, more thorough way. Immediately, our intuition tells us that Ethan's quick evaluation has merely skimmed the surface of the belief and would inevitably overlook the deeply ingrained biases and prejudices that fuel his subscription to the ideal in the first place; it tells us that this kind of evaluation will only allow Ethan to rely on surface-level assumptions, generalizations, and stereotypes that can end up perpetuating further harm against an already marginalized social group.

3.5.1.a Clarification: My Account is Value-Utilizing, not Value-Laden

These moral intuitions that accompany a distaste in Ethan's 'quick' reflection seemingly force me to commit to a value-laden conception of autonomy, which is typically held in contrast with Friedman and Christman's content-neutral conceptions. These content-neutral accounts argue that "[t]he substance of [an agent's] choices and commitments does not matter"[166] so long as she has reaffirmed them. A substantive account, on the other hand, pre-supposes a value that needs to *guide* one's autonomy. It is value-laden, wherein "someone must reflect on her [endorsements or repudiations] in certain ways [that] avoid conflicting in their *content* with [the guiding value]."[167] If the conviction inherently contrasts with this guiding value, an individual can *never* be

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[166] Friedman, "A Conception of Autonomy," 19.
[167] Ibid., 20.

autonomous with respect to it. In what follows, I briefly clarify that my account is not value-laden or substantive but is instead value-utilizing—a term coined by Diana Meyers (2014) in her work *The Feminist Debate over Values in Autonomy Theory*.[168]

The kind of value that I am here seemingly committed to advocating as guiding my account of self-reflective reaffirmation is, simply, *moral intuition* or *morality itself*. Under a substantive account guided by morality, no one could ever become autonomous with respect to *immoral* convictions. I do not wish to assert this, as I would be committed to saying if my account were value-laden. Nor do I wish to say that a considerable degree of 'normative competence' is required of Ethan in his reflection, as Susan Wolf (1990) argues in her strong substantive account of autonomy,[169] for that would set the bar too high and leave the possibility of autonomy only achievable to individuals with exceptional moral competency. That is, I do not want to commit—as Friedman articulates—that an agent must "self-reflect in the right way and, in addition, do so in accord with commitments limited by certain parameters."[170] Rather, I do not want these parameters to exist under my account, and I certainly do not want them to be limited by the bounds of morality. While our intuition tells us that Ethan ought to reflect on his conviction thoroughly, it also tells us that we need to hold him accountable for his endorsement.

To reconcile these conflicting intuitions, I clarify that my account is not value-laden, but is simply value-utilizing and thus remains content-neutral. Under Meyers' account, value-utilizing theories do not use guiding values to *restrict* or *limit* the content

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[168] Diana Tietjens Meyers, "The Feminist Debate over Values in Autonomy Theory," in *Autonomy, Oppression, and Gender*, ed. Andrea Veltman and Mark Piper (Oxford University Press, 2014), 114–40, https://doi.org/10.1093/acprof:oso/9780199969104.003.0006.
[169] Susan R. Wolf, *Freedom within Reason* (New York: Oxford University Press, 1990).
[170] Friedman, "A Conception of Autonomy," 20.

that an agent can become autonomous with respect to, but instead "invoke values to explicate the process of autonomous choice or the structure of autonomous motivation."[171] With moral intuitions motivating my account as opposed to *guiding* it, morality does not set parameters for what can count as autonomous, but rather merely elucidate some of the requirements of "the reflective procedure […] that renders [convictions] autonomous."[172]

By making this distinction, I avoid making the commitment that morality *guides* my conception of self-reflection. In saying instead that these intuitions are *utilized* in my account, an agent can become autonomous with respect to *immoral* convictions—such as Ethan's antifeminist ones. My account merely sets the requirement that an agent has a moral obligation to engage in thorough reflection and analysis into the conviction held in question should it bear harmful socio-political implications. Further, it does not require that the agent harness exceptional normative competence—as I will articulate in Section 3.5.4—but rather that they simply recognize that their conviction has moral implications. As a result, Ethan can become autonomous with respect to his antifeminist conviction, but his reflection is motivated by his moral obligation to question such a conviction thoroughly. Morality does not restrict certain convictions from being able to be autonomously held, it merely motivates a demand for thorough reflection.

3.5.2 The Challenge from the Nature of Reflective Attention

For a more analytic approach to the claim that reflective attention need not be conscious or extensive, and it need not be narrowly cognitive in nature, I wish to outline

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[171] Meyers, "The Feminist Debate," 114.
[172] Ibid., 120.

that the psychological and philosophical nature of reflective attention is incompatible with that of unconsciousness.

The idea of 'unconscious attention' has been argued for by a few researchers, such as Wayne Wu (2011)[173] and Christopher Mole (2013),[174] and typically populates discourse on *perceptual* attention. We, however, are not situated in such discussions. Instead, our discussion is centered around *reflective* attention, which involves the deliberate and focused mental effort involved in introspection and critical thought. In this case, it involves actively contemplating one's endorsement of specific values. Under thorough self-reflective reaffirmation, it involves asking meaningful questions over the origin of one's convictions, and taking an evaluative stance toward them. By nature, these activities *require* critical thought. That is, the very act of reflective attention in turn, necessarily involves conscious, cognitive deliberation.

To suggest that reflective attention can occur unconsciously would undermine the very essence of what critical reflection *is*. Given the nature of reflective attention I, for one, fail to see how it cannot be conscious in nature; I believe it incoherent to argue that one can critically reflect and attend to the topic of their focus in an unconscious way. That is, I do not believe that any form of reflective attention can be anything but conscious, extensive, and cognitive in nature; these are necessary conditions of critical reflection.

Let us revisit the case of Ethan, who has 'nonconsciously and noncogntively' attended to his conviction that trans people do not deserve healthcare, and returns from

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[173] Wayne Wu, "Attention as Selection for Action," in *Attention: Philosophical and Psychological Essays*, ed. Christopher Mole and Declan Smithies (Oxford University Press, 2011), 97–116.
[174] Christopher Mole, "Attention to Unseen Objects," *Journal of Consciousness Studies* 21, no. 11 (2014): 41-56.

his self-reflective reaffirmation by saying "Yes, I stand by my belief. I attended to my opinion in an unconscious way, and hereby claim that I authentically endorse the idea that transgender people do not deserve healthcare." This sentence does not even make any sense; one would walk away from Ethan thinking that he had not even *actually* undergone self-reflective reaffirmation. One simply cannot perform *any* kind of self-reflective reaffirmation in an unconscious or noncognitive way; reflection requires consciousness, and reflection requires cognition.

Even if I am wrong, and unconscious reflective attention isn't an *incoherent* concept, it at least isn't *good enough* for our purposes. We would, at the very least, be left feeling unsatisfied with this response and demand that Ethan repeat the process in a more extensive manner, as I had articulated in my challenge from moral intuition.

Admittedly, thorough self-reflective reaffirmation does not seem to have to undergo overly *intense* critical reflection. That is, it does not seem like one has to lock themselves in a dark room free from distraction and meditate on their convictions for a long time, engaged in a hyper-focused deliberation on their thoughts. That is not what I am suggesting. The process *can* be done quickly, but it *must* be done extensively and consciously. It *does* require mindful, effortful attention given the interrelated reality of attention and consciousness.

3.5.3 The Challenge from Infinite Regress

My disagreement with the statement that reflective attention need not be conscious or extensive, and it need not be narrowly cognitive in nature does not entirely rely on my claims about the conscious nature of reflective attention, nor the moral intuition that guides my account of autonomy. One of the main charges against what

Friedman calls this 'generic' account of autonomy that I have alluded to earlier is that it leads to an infinite regress. In what follows, upon articulating the infinite regress charge to self-reflective reaffirmation, I argue that the deeper and more extensive self-reflective reaffirmation is performed, the weaker the impact of this worry becomes.

The infinite regress charge is rather simple to elucidate, and is a serious objection to the validity of this process of value-authentication—likely the most popular objection. Recall the central challenge that self-reflective reaffirmation is trying to tackle: if one's subscriptions to their values, wants, preferences, and beliefs are the results of external influences and socialization, then how are they to authenticate these convictions as their own? So far, as we have explored, through self-reflective reaffirmation, one's evaluation of their alignment with the value in question launders them from this influence, and allows one to claim authentic endorsement of said value. However, it would be naïve to assume that this evaluation itself isn't *also* subject to the same question. As Friedman articulates: "Since a person's wants, desires, values, and commitments are the products of socialization, it seems that they are not really the agent's 'own,' and therefore [reflection] based on them would seem to undermine the possibility of a self genuinely determining itself."[175]

That is, how are we to know that the endorsement *itself* isn't also externally influenced? If it is, then it could detract from our conclusion that the value is autonomously held after reflection. Socialization feels inherently incompatible with autonomy at surface-level. We would then face a threat of infinite regress; every degree

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[175] Friedman, "A Conception of Autonomy," 13.

of endorsement is externally influenced, and therefore no conviction at the beginning of inquiry can be said to be autonomously held.

Friedman counters this argument by claiming that her account is "compatibilist in tenor,"[176] moving to a rather Humean metaphysic of free will that claims that "a person is autonomous with respect to what she does so long as her doings reflect and stem from what she reaffirms self-reflectively."[177] In response, I believe that this charge of infinite regress can be addressed without the need to dive into a thorny discussion on free will and determinism. Instead, I believe that the performance of thorough, conscious, extensive deliberation during self-reflection can elude this charge to a significant degree.

I can see this objection landing with force should self-reflective reaffirmation be done in a light, noncognitive way—the kind of way that Friedman believes it can be conducted in. If an agent undergoes this laundering process in a loose, isolated, noncognitive way, they have likely failed to give themselves the opportunity to analyze the value held in question from various perspectives or engage in any meaningful discussion and/or introspection that would allow for the identification of personal biases, principles, or experiences that underlie their alignment with the value at hand. Effectively, they will have failed to escape their own epistemic bubble.

A deeper, more extensive reflection, on the other hand, gives an agent the ability to identify potential biases, sources of social conditioning, or external pressures that might have influenced their alignment with a particular value. As I will show in Section 3.5.4, this necessarily involves engaging in meaningful discussion with others and assuming various perspectives to the value held in reflection. As this unfolds, agents are

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[176] Friedman, "A Conception of Autonomy," 13.
[177] Ibid.

better equipped to uncover and examine the internal sources of their beliefs alongside the external ones. Their understanding of the value in question is broadened through a more wide-ranging reflection, and allows for a more informed, less biased approach to its endorsement or repudiation. As a result, they are given the opportunity to approach their endorsement from a more relational standpoint as opposed to a solely individualistic one, and are thereby given more of a chance to assert their [mis]alignment with the value in question.

Let us return to the example of Ethan, the antifeminist young man who acquired anti-trans beliefs on TikTok, and claimed them as his own after a quick, nonconscious evaluation. Not only would we be unsatisfied with the depth with which Ethan performed his self-reflective reaffirmation, but I believe we would be left feeling more as if his reflective attention was *also* heavily externally influenced given the shallow nature of his investigation; a lazy reflection prevents him from stepping out of his own isolated perspective. We may say that Ethan is simply claiming autonomous alignment with his resentful conviction simply out of pride, and is only doing so due to—again—the extent to which he has been manipulated on TikTok. On the other hand, if Ethan underwent deep, extensive, conscious, cognitive reflection—whereby he considered alternative viewpoints with an open mind—and came back with the same conclusion, I believe we would be less likely to assume that his endorsement was as externally influenced as it was in the shallow case.

Admittedly, the infinite regress charge is still present during thorough reflection; I haven't refuted it completely. Of course, bias can infiltrate every step of the process— regardless of how extensively it is done—with some philosophers, such as Kathleen

Okruhlik (1994) arguing that it is doubtful bias can ever be done away with.[178] My point, though, is that if a person does not conduct self-reflective reaffirmation thoroughly, they preclude themselves from the opportunities to confront these potential deeply ingrained biases, and thus inherently prevent themselves from the possibility of genuine reflection. By identifying internal biases and prejudices, the more one's inner self is revealed in conjunction with the value at hand, and the less influence these external autonomy-diminishing factors carry. I believe this articulation does more to combat the infinite regress inherent in self-reflective reaffirmation than does a metaphysical account of compatibilist free will.

Recall Friedman's claim that "[t]he more extensively one reflects on one's wants and commitments, the greater one's autonomy is with respect to them,"[179] a claim that Christman attempted to build upon by urging reflection upon one's affectional reactions to the values in question. This idea mitigates the charge of infinite regress to a significant degree, and should further motivate our commitment to effortful self-reflective reaffirmation.

3.5.4 A Model for Extensive Self-Reflective Reaffirmation

I do subscribe to Friedman's claim that the more thoroughly one conducts their reflection on specific values, the more autonomous one is with respect to them. However, Friedman neglects to provide a detailed account of how this 'more extensive' self-reflective reaffirmation ought to unfold, and what its dynamics look like. Christman tries to do so, but only goes as far as the limits of emotion can set for an individual. I

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[178] Kathleen Okruhlik, "Gender and the Biological Sciences," *Canadian Journal of Philosophy Supplementary Volume* 20 (1994): 21–42, https://doi.org/10.1080/00455091.1994.10717393.
[179] Friedman, "A Conception of Autonomy," 7.

shall move to describe how I believe the process ought to look in a step-by-step format so as to elucidate the process with more detail. One potential way about going about this process that I believe supersedes the limits set by Friedman and Christman's accounts is the following:

1. **Recognition of Values:** The process begins with identifying the surface level values that one wishes to authenticate that may form not only an integral part of one's self, but may also be shared with other like-minded individuals.

2. **Contemplative Exploration:** Once the value has been identified, this next step involves engaging in an investigation into the origins of the value being questioned. This necessitates engaging in meaningful discussion with others—or at least listening to or reading others' testimonies—to gain a more wide-ranging understanding of the reliability, trustworthiness, and virtuousness of the identified source.

3. **Critical Reflection:** This step requires individuals to critically evaluate the value held in question from various perspectives. It further involves identifying the various underlying higher-order moral, social, and political implications that the value inflicts on other individuals and social groups. This necessitates both open-mindedness and empathy, and is facilitated by engaging in meaningful discussion and dialogue with others. Should an individual do this properly, they are able to identify underlying biases and prejudices that motivated their adoption of the value in the first place.

4. **Evaluation and Stance-Taking**: Based on the outcomes of these previous steps, individuals evaluate the alignment between the value in question and their personal higher-order values. They assess whether their values contribute

positively to their lives and those of others or if they hinder growth, perpetuate

harm, or restrict opportunities in either themselves or in others. This evaluation

helps individuals determine whether they should endorse or repudiate specific

values.

5. **Autonomy and Ownership**: By engaging in this self-reflective process,

   individuals claim autonomous ownership over their values. This means taking

   responsibility for their value system and actively choosing which values to

   embrace, modify, discard, or adopt.

6. **Integration and Growth:** After taking a stance on their values, individuals work

   towards integrating these values into their daily lives, relationships, and decision-

   making processes.

7. **Reassessment and Renewal:** As individuals grow and evolve, their values may

   undergo reassessment. Life experiences, exposure to new perspectives, and

   personal growth can lead to shifts in values or the addition of new ones. Thus, the

   process of self-reflective reaffirmation is not static but dynamic, allowing for

   continuous renewal and re-evaluation of one's value system.

Admittedly, the process need not be *this* extensive; a self-reflective reaffirmation

that falls short of meeting every single one of these steps can surely still cross the

autonomy threshold. I am not here saying that every one of these steps must be respected

and followed adequately in order for one to be rendered autonomous with respect to her

convictions. If that were the case, hardly anyone could be called epistemically

autonomous. However, I believe that an individual who does not engage in *any* one of

(or, combination of) these reflective processes has failed to cross that threshold.

Additionally, this process need not be deployed on *every* conviction a person has—that

would be unrealistic to ask of someone. Rather, it ought to only be deployed against the kinds of harmful normative socio-political ideals that I am concerned with. The less harmfully socio-politically charged a conviction is, the less of this process is required to render one autonomous with respect to it. This process, if done entirely, is as elusive to my charges as self-reflective reaffirmation can possibly be, and shows why it must be done thoroughly.

One may object that my process is too elitist, intellectual, or academic, and that I have hereby only allocated the possibility of autonomy to extremely competent, educated individuals who have the means of engaging in meaningful discussion with others. Admittedly, my process does suggest similar skills to Meyers' account of autonomy, which include: (i) introspection skills, (ii) communication skills, (iii) memory skills, (iv) imagination skills, (v) analytical skills, (vi) self-nurturing skills, and (vii) volitional skills.[180] While being in possession of these skills definitely *facilitates* an agent's ability to become autonomous with respect to her convictions, she remains *able* to become so as long as she is equipped with open-mindedness, a willingness to listen, empathy, and access to conversation with others. These less-demanding virtues are not confined to extremely competent individuals, and only require a minimal amount of willpower to achieve. Further, she need not exert the most demanding of problem-solving and critical thinking skills; she just needs to do the best she can. As a result, only individuals who cannot be open-minded, are unwilling to learn, are unempathetic, and cannot converse with others are the only people who are *unable* to achieve autonomy; the process is just *easier* for those who are extremely competent and educated.

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[180] Meyers, "The Feminist Debate," 121.

Of course, my process is quite demanding, but I stress again that it need only be so with respect to harmfully repudiative socio-political convictions. Convictions with different moral, social, and political implications may be able to undergo less demanding procedures in order to count as autonomous.

When applied to the consumption of antifeminist value-laden content on TikTok, it is clear that scrolling 'mindlessly,' as the activity is commonly interpreted, is incompatible with the demand for thorough reflection. Mindlessness and thorough reflection simply cannot exist side-by-side given their nature. Additionally, thorough reflection requires *time* to perform[181]—time that TikTok does not quite allocate given its rapid-firing dynamic in recommending content. These are but two features of scrolling that obstruct thorough reflection from taking place online; more will be identified and explored in Chapter 3.

In what follows, I anticipate an objection to my argument that simply appealing to emotions *can* in fact do all the work needed.

3.6 Emotion Alone Cannot do the Work of Deep Reflection

In the following brief subsection, I anticipate a Christman-fueled objection to my charge against Friedman's claim that reflective attention does not need to be conducted consciously, deeply, and cognitively. That is, I anticipate the argument that an appeal to emotion can bypass the need for deep critical reflection upon one's alignment with the values in question. I refute this objection by shifting focus to the architecture of some of the nonfrivolous content on TikTok—particularly antifeminst, Andrew Tate-esque

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[181] Not *a lot* of time, but time nonetheless. It is hard to see how my revised process can be performed in a short few seconds.

content—and how such videos are meticulously crafted so as to elicit a specific emotional response out of their viewers. I show how this, in turn, renders much content *propagandized*, and therefore makes one's emotional reactions unreliable indicators of an endorsement or repudiation of a specific value. This section is meant to argue that value-holders must therefore go even further than the extent that Christman has advocated for.

The anticipated objection to my argument is structured as follows: If we can rely on our emotions to communicate to us an accurate representation of our alignment or misalignment with the value we are holding in question, then there is no need to undergo the regimented process I outlined in Section 5.4. We can simply appeal to our affective reactions to the questioning of the value itself—concerns of infinite regress aside—and allow them to tell us whether we endorse or repudiate the value in question. As Jason Stanley (2015) writes on propaganda in his work *How Propaganda Works*, "emotions are rational and track reasons,"[182] and so they are reliable mirrors of our cognitive, judgmental reactions.

I can see this objection obstructing my argument should it be applied to values that have been inculcated from sources external to oneself that *do not intentionally inculcate values in common folk for the sake of their own personal gain*. That is, individuals, institutions, or organizations who imbue values into individuals as strategic ways of achieving personal political, financial, or ideological gain often succeed in doing so by ensuring their listeners experience a carefully predetermined emotional reaction upon consuming their messages. This plays a role in the basis of *propaganda*.

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[182] Jason Stanley, *How Propaganda Works* (Princeton, New Jersey : Oxford: Princeton University Press, 2015), 48.

Stanley outlines two kinds of propaganda, one of which he calls *supporting propaganda*: "A contribution to public discourse that is presented as an embodiment of certain ideals, yet is of a kind that tends to increase the realization of those very ideals by either emotional or nonrational means."[183] According to Stanley, propagandized messages are those that close off debate by circumventing the rational will.[184] Supporting propaganda is able to bypass the rational will by *hijacking* it through emotion; propagandized messages carefully 'overload' various affective capacities onto its recipient. Since emotions often track reasons, these carefully curated, predetermined emotional reactions "can lead to the discovery of reasons, reasons that in turn will support the [ideal in question] in a characteristically rational way."[185] That is, the emotions the message elicits make one *feel* as though they are tracking their rational will, yet their emotions have been 'moved' behind a separate goal—one that is *not* guided by rational law.

Stanley articulates that propaganda supports the realization of a specific goal "by indirectly seeking to overload various affective capacities, such as nostalgia, sentiment, or fear"[186] into its listeners. Such is the basis of Tate's antifeminist content, for example. Tate's goal, flatly, is to increase the amount of engagement and views his content receives on TikTok. That makes him money. While not inherently political in nature, his goal is achieved by sending messages to young men that stir up their emotions in such a way that keeps them watching. Recall, this kind of content typically asks young men to reflect on their bad habits, and then conjures up some story that somehow blames women

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[183] Stanley, "How Propaganda Works," 53
[184] Ibid., 48
[185] Ibid., 53
[186] Ibid., 53

and left-wing ideology for their development of these habits. Vaping, sitting around playing video games, scrolling social media (ironically), smoking weed, not working out, and having no ambition are often cited. For a moment, these messages make scrollers feel *sad*, *regretful*, *scared*, *angry*, *guilty*, *ashamed*, and *confused*, among others, for their cultivation of these lazy tendencies.

This has important implications on Christman's approach to alienation. By carefully curating the messages contained in the short videos that young men consume online, our scroller is first made to feel regretful, and then their feeling is quickly manipulated into anger when they are told to blame feminist theory for threatening their ability to escape their loser-dom. This combination of affective reactions—insecurity, regret, and anger—results in *motivation*. And so, most men's rights talk is actually veiled as motivational jargon. Jordan Peterson's (2018) *12 Rules For Life*[187] gets to stay on the shelves because it 'motivates' young men. In the same way, content online slips through the cracks of content moderation because it is said to be—as most defenders of this content claim—'teaching young men how to be strong, what's so wrong with that?'[188]

In this case, the motivation is admittedly seemingly harmless; it is primarily a desire to stop sitting around and playing video games—to stop smoking weed and wasting away one's youth, and to start making money. Unfortunately, it simultaneously teaches those whom it motivates to repudiate gender equality and adopt traditionally masculine gendered norms that translate into closed-mindedness, obstinacy, aggression,

[187] Jordan B. Peterson, Norman Doidge, and Ethan Van Sciver, *12 Rules for Life: An Antidote to Chaos* (Toronto: Random House Canada, 2018).
[188] Piers Morgan Uncensored, "Andrew Tate On The Problems of Modern Men And the Need For Masculinity," YouTube Video, 5:54, December 29, 2022, https://www.youtube.com/watch?v=QxbZ3l4qNWc

and insecurity.[189] However, there is a tendency to embrace motivation. It lights a fire under us and allows us to flourish in some scenarios, and to accomplish our goals in others. It gets us to stop sitting around smoking weed.

In order to feel motivated by a given message, one has to feel a personal tie to the values embedded within it. If the message doesn't motivate our scroller, he feels *alienated* from the values it contains. When applied to Christman's authentication approach, we run into the nucleus of our problem as it pertains to autonomy and the identification with men's rights. By carefully curating videos to gain popularity and at the same time to *motivate* young men to repudiate feminism, content creators such as Andrew Tate manipulate social media users into feeling a non-alienated affective reaction to these values.

If (i) "autonomy involves non-alienation from factors that function in our basic value orientations,"[190] and (ii) "to be alienated is to experience negative affect, to feel repudiation and resistance"[191] yet (iii) the values in question are carefully crafted, designed, and tailored to ensure that its listener, by default, is extremely likely to feel a motivational emotional reaction to their exposure to such values, then (∴) he will not feel alienated from the conviction, and it still remains difficult to confidently conclude that such a value is autonomously held.

And so, self-reflective reaffirmation on TikTok *has* to be done consciously, narrowly cognitively, and extensively, for a great deal of nonfrivolous content that is fueled by resentful socio-political underpinnings on TikTok is essentially *propaganda*.

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[189] Mark Piper, "Raising Daughters," in *Autonomy, Oppression, and Gender*, ed. Andrea Veltman and Mark Piper (Oxford University Press, 2014), 272, https://doi.org/10.1093/acprof:oso/9780199969104.003.0012.
[190] Christman, "The Politics of Persons," 215.
[191] Ibid., 144.

Because of its propagandized nature, our emotions are left as unreliable indicators of alignment or misalignment with the values in question, for they have been carefully hijacked to react in a specific way—one that does *not* track reason in the same way as genuine affective reactions do.

3.7 Conclusion

In this section, I first argued there is sufficient reason to believe that TikTok can inculcate values—including harmful socio-political ones—into its users, despite the ubiquity of its marketing as a platform to indulge in entertainment and humor.[192] Given its potential classification as an external value-inculcator, I explored some of the existing literature on autonomy to expose how some authors expect individuals to be able to claim autonomous endorsement or repudiation of values acquired from their environment and socialization: through a process called self-reflective reaffirmation. I moved to disagree with claims that this process can be done lazily, quickly, and non-extensively. I disagreed with this on the basis of the moral intuition accompanying the reflection of harmful values, the psychological nature of reflective attention, and a charge of infinite regress. I restructured the process and showed why an appeal to emotion cannot suffice at bypassing the need for it.

In the next chapter, I explore how some properties of scrolling interfere with being able to perform thorough self-reflective reaffirmation.

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[192] C-SPAN, "Chew Testifies Before Congress," 27:06

Chapter 4: Scrolling Interferes with Reflective Endorsement

Abstract:

In this chapter, I argue that various design features of scrolling either directly or indirectly interfere with TikTok users' ability to properly authenticate the values they encounter on their *For You* page. I narrow my analysis to three characteristics of scrolling: (i) its nature as extended rumination; (ii) its effects on loneliness and isolation; (iii) its personalized algorithmic curation of content. Each point is given its own section in this chapter, wherein I first establish its existence, and follow by showing how it interferes with one's ability to self-reflectively endorse or repudiate the values one acquires on TikTok.

4.1 Introduction

In Chapter 3, I argued that self-reflective reaffirmation needs to be done thoroughly with respect to harmful socio-political values a user encounters on TikTok. Part of my argument here was that scrolling—given its mindless gloss and its quick, rapid-fire dynamic—does not provide the space or time necessary for its users to perform thorough reflection.

The following chapter expands on how scrolling interferes with value authentication by arguing for reflective interference imposed by three additional features of scrolling. I point to scrolling's following characteristics: (i) scrolling's nature as extended rumination; (ii) scrolling's effects on isolation and loneliness along with its genesis of filter bubbles, echo chambers, and epistemic bubbles; and (iii) scrolling's personalized algorithmic curation of content.

Each of these features is given its own section in the following chapter. In each section, I first either argue for or establish the existence of the point in question. After having done so, I post the intricacies of these points against those of my proposed process of thorough self-reflective reaffirmation as elucidated in Section 3.5.4. I will point to how each of these considerations either interfere with or outright prevent the process from unfolding effectively enough to render an agent's endorsement or repudiation of value-laden content on TikTok genuinely autonomous.

This chapter is meant to solidify the claim that TikTok is not an interface wherein users are properly able to assess their alignment with value-laden content they consume,

and is meant to outline the extent to which TikTok jeopardizes its users' autonomy on its platform.

4.2 How Scrolling as Extended Rumination Interferes with Value-Authentication

In the following section, I argue that scrolling is extended rumination, and that its ruminative nature interferes with a user's ability to properly reflect on the value-laden content they consume on TikTok.

In the first subsection, I argue that instead of interpreting scrolling as extended mind-wandering, scrolling is more appropriately defined as extended *rumination*. I first define and describe rumination so that my readers here know what kind of mental activity I have in mind. I then move to establish that (i) scrolling and rumination exhibit similar consequences on well-being and, more strongly, (ii) the two activities are similar enough in their very structure for scrolling to be properly classified as extended rumination.

In the second subsection, I explore how some of rumination's negative effects on cognition and attention obstruct one's ability to perform self-reflection according to my proposed process. Here, I focus on several studies but am mostly engaged with Susan Nolen-Hoeksema, Blair E. Wisco, and Sonja Lyubomirsky's (2008) work *Rethinking Rumination*, a literature review wherein these authors explore rumination's effects on cognitive processing, attentional bias, and problem-solving.

4.3.1 Scrolling is Extended Rumination

To begin, I will define rumination, a term that—like mind-wandering— has faced a great deal of definitional debate. Jeannette M. Smith and Lauren C. Alloy (2008)

identify over a dozen different definitions of the term within existing literature.[193]

Marieke K. Van Vugt and Maarten van der Velde (2017) articulate that some theorists suggest that "rumination arises from an increased bias toward negatively valenced information,"[194] and that others claim that "rumination is an inability to disengage from information, in particular when this information is negative."[195] The most useful definition of rumination for our purposes, though, comes from Edward Watkins and Henrietta Roberts (2020), who describe rumination as "repetitive, prolonged, and recurrent negative thinking about one's self, feelings, personal concerns and upsetting experiences."[196] It involves dwelling on past events or current problems, and often includes self-criticism, self-blame, and regret.[197]

Rumination—for our purposes—can be defined as the following. Rumination is a cognitive state whereby one's attention is diverted from their immediate environment and is instead *guided* toward negative thoughts; it is obsessive and compulsive, and is a hallmark symptom of depression and anxiety.

Watkins and Roberts show in their work that some of the negative and maladaptive consequences of rumination are the following: It exacerbates psychopathology; it has negative effects on mood; it reduces willingness to engage in pleasant activities; it contributes to the onset of mental health disorders, including

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[193] Jeannette M. Smith and Lauren B. Alloy, "A Roadmap to Rumination: A Review of the Definition, Assessment, and Conceptualization of This Multifaceted Construct," *Clinical Psychology Review* 29, no. 2 (March 2009): 119–21, https://doi.org/10.1016/j.cpr.2008.10.003.

[194] Marieke K. Van Vugt, Maarten Van Der Velde, and ESM-MERGE Investigators, "How Does Rumination Impact Cognition? A First Mechanistic Model," *Topics in Cognitive Science* 10, no. 1 (January 2018): 176, https://doi.org/10.1111/tops.12318.

[195] Ibid.

[196] Edward R. Watkins and Henrietta Roberts, "Reflecting on Rumination: Consequences, Causes, Mechanisms and Treatment of Rumination," *Behaviour Research and Therapy* 127 (April 2020): 1, https://doi.org/10.1016/j.brat.2020.103573.

[197] Ibid.

substance abuse, binge-eating, self-injury, and suicidal behavior caused by depression, anxiety, and stress; it is a leading cause of insomnia and psychosis.[198] Similarly, studies from Luca Cerniglia et al. (2022),[199] Eva Thorisdottir et al. (2019),[200] and Muhammed Aksu, Kadir Ozdel, and Faith Yigman (2019)[201] have found causal links between excessive social media use—both active and passive—and the genesis of these exact same consequences.

The combination of these findings suggest that these authors demonstrate that both scrolling and rumination bear some of the exact same negative and maladaptive consequences on an individual's cognitive and mental well-being. That, however, is not enough to solidify an understanding of scrolling as extended rumination. Instead, I argue that rumination and the action of scrolling on TikTok bear enough similarities in their very structure for scrolling to be defined as *extended rumination*. I will take for granted that smartphone use is *coupled* with an agent's cognition through sensorimotor connectivity, as Bruineberg and Fabry argued, and thus qualifies smartphones as cognitive extensions.[202]

This argument is based on the kinds of value-laden content that typically get promoted by recommender systems on social media platforms and their ubiquity. Recall,

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[198] Watkins and Roberts, "Reflecting on Rumination," 1-6.

[199] Luca Cerniglia et al., "A Latent Profile Approach for the Study of Internet Gaming Disorder, Social Media Addiction, and Psychopathology in a Normative Sample of Adolescents," *Psychology Research and Behavior Management* Volume 12 (August 2019): 651–59, https://doi.org/10.2147/PRBM.S211873.

[200] Ingibjorg Eva Thorisdottir et al., "Active and Passive Social Media Use and Symptoms of Anxiety and Depressed Mood Among Icelandic Adolescents," *Cyberpsychology, Behavior, and Social Networking* 22, no. 8 (August 2019): 535–42, https://doi.org/10.1089/cyber.2019.0079.

[201] Muhammed Aksu et al., "The Relationship between Social Problem Solving, Cognitive Factors and Social Media Addiction in Young Adults: A Pilot Study," *Journal of Cognitive-Behavioral Psychotherapy and Research*, no. 0 (2019): 1, https://doi.org/10.5455/JCBPR.51403.

[202] At the very least, if one disagrees with my stance that scrolling is 'extended' rumination, my argument can be reformed and weakened to say 'scrolling is ruminative,' and my points will still hold weight.

recommendation algorithms on Content Discovery Platforms employed under the attention economy are trained to present users with videos that are most likely to keep their attention fixated on their smartphone. Since TikTok's recommender system seeks to optimize viewership and engagement on the application above all other metrics, it in part prioritizes the presentation of the most popular videos available on its platform. As a blog entry on *Later* by Jessica Worb (2023) states, "[t]he more engagement and views a TikTok video receives, the more likely it will be served to larger audiences."[203] Among these engagement metrics include the amount of 'completions and re-watches' a video receives along with the amount of likes, comments, and shares it collects.[204]

As an article in *The Wall Street Journal* by Keach Hagey and Jeff Horowitz (2021) writes, content that elicits *negative* affective reactions such as anger, hate, fear, or frustration tends to receive far more engagement than neutral content.[205] Thus, controversial videos—such as those of Andrew Tate claiming women ought to bear responsibility for being raped[206]—get more views, more comments, and more shares than value-neutral content.[207] The machine learning techniques employed in recommender systems do not *intend* to distribute divisive content more than other kinds; this is not a malfunction of their design, but instead an unfortunate feature. As a result, these kinds of divisive tiktoks end up pervading the *For You* pages of users who are

[203] Jessica Worb, "How Does the TikTok Algorithm Work? (10+ Hacks to Go Viral)," *Later* (blog), February 16, 2023, https://later.com/blog/tiktok-algorithm/
[204] Ibid.
[205] Keach Hagey and Jeff Horowitz, "Facebook Tried to Make Its Platform a Healthier Place. It Got Angrier Instead," *The Wall Street Journal* online, September 15, 2021, https://www.wsj.com/articles/facebook-algorithm-change-zuckerberg-11631654215?mod=e2tw.
[206] Emma Kelley, "Big Brother's Andrew Tate says women should 'bear responsibility' for being raped in vile tweets," *Metro UK* (blog), October 19, 2017, https://metro.co.uk/2017/10/19/big-brothers-andrew-tate-says-women-should-bear-responsibility-for-being-raped-in-vile-tweets-7011756/
[207] That is, not nearly as many users will comment on a silly cat video than would on a Tate video.

predicted to watch them. American data engineer Frances Haugen stated in a 2021

interview on CBS's *60 Minutes* that political parties have been explicitly quoted telling

officials at Meta (parent company of Facebook and Instagram) that "if [they] don't

publish angry, hateful, polarizing, divisive content, crickets. [..] If [they] don't do these

[negative] stories, [they] don't get distributed."[208]

While this testimony was submitted to officials at Facebook and ought to raise

serious worries, the same is true for TikTok. The Global Network for Extremism &

Technology's Abbie Richards (2022) notes that "[w]hile TikTok receives much attention

for its dances and memes, the proliferation of [hateful] content is often overlooked

despite the amplification [it receives] on the platform."[209] Politico's Mark Scott (2021)

reports that creators of this content bypass moderation policies on TikTok more easily

than on other platforms by "using proxies to promote hateful messages without explicitly

using banned words or images on TikTok."[210, 211] As a result, extremist hateful content

is flourishing on TikTok, and becoming more pervasive as divisive content creators

become more elusive from the platform's content moderation policies.

As I showed in Chapter 3, TikTok is far from void of socio-political value-laden

content on its platform. Given the ubiquity of this kind of content paired with its

negatively charged nature, a rigid understanding of scrolling as rumination can be

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[208] Keith Zubrow, "Facebook Whistleblower Says Company Incentivizes 'Angry, Polarizing, Divisive Content,'" *CBS News* online, October 4, 2021. https://www.cbsnews.com/news/facebook-whistleblower-frances-haugen-60-minutes-polarizing-divisive-content/.
[209] Abbie Richards, "Examining White Supremacist and Militant Acceleration Trends on TikTok," *Global Network for Extremism and Technology*, July 18, 2022, https://gnet-research.org/2022/07/18/examining-white-supremacist-and-militant-accelerationism-trends-on-tiktok/.
[210] Mark Scott, "Extremist Content is Flourishing on TikTok: Report," *POLITICO*, August 24, 2021, https://www.politico.eu/article/tiktok-extremist-content-white-supremacy/.
[211] For example, if a video promoting suicide were to type "$ui*ide" in its captions as opposed to "suicide," it could easily bypass moderation technologies, which are also automated through artificial intelligence.

formed. Scrolling involves consuming value-laden content on TikTok. Consuming value-laden content on TikTok is characterized as an attentionally guided activity (as per Chapter 1) that therefore involves obsessively and compulsively engaging oneself with negatively charged videos. And so, I argue that consuming value-laden content on TikTok *is* extended rumination.

David Harley (2022) calls this phenomenon *digital rumination*,[212] and his analysis into the topic solidifies my understanding of scrolling as ruminative. According to Harley, the 'mindlessness' that typically accompanies passive social media use paired with the ubiquity of negatively charged recommended content leads "to feelings of dissatisfaction and unfulfillment with negative effects on wellbeing."[213] In turn, "the [negative content] provided by social media algorithms [is] repetitive and immutable which when combined with this [mindless] delegation of attentional control could lead to a form of *digital rumination*."[214]

Harley moves to demonstrate—through testimonies obtained from interviews with 16 individuals—that obsessive, mindless social media use paired with the ubiquity of negatively charged content on their interfaces results in individuals outright *feeling badly*. Here, interviewees reported recognizing that their scrolling is not providing pleasure, joy, or discovery in the ways that TikTok CEO Shou Zi Chew claimed it does in his testification before Congress in March of 2023—as I showed in Section 2 of Chapter 2—but instead that their scrolling directly induced prolonged, addictive-like negative emotional states similar to those of rumination.[215]

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[212] Dave Harley, *Mindfulness in a Digital World* (Cham: Springer International Publishing, 2022), 79, https://doi.org/10.1007/978-3-031-19407-8.
[213] Ibid.
[214] Ibid.
[215] Ibid., 62.

When it comes to being able to autonomously endorse or repudiate the value-laden content a user encounters on their *For You* page, the process of self-reflective reaffirmation is greatly impeded upon given scrolling's ruminative characteristics, and, consequently, rumination's negative effects on cognition.

4.2.2 How Rumination Interferes with Authentication

Having characterized scrolling as extended rumination, I will here move to articulate how scrolling impairs one's ability to perform the thorough self-reflective reaffirmation required of them to autonomously endorse or repudiate hate-fueled value-laden content on TikTok. While research on excessive rumination has uncovered a great deal of effects on cognition, affection, and cognitive control,[216] I will restrict my analysis to two: attentional bias and problem-solving. In what follows, I will show how rumination's inducence of *negative attentional biases* and impairments on *problem-solving* interfere with a TikTok user's ability to claim autonomous ownership over the values they may encounter and internalize on their *For You* page.

Attentional bias, as defined by the American Psychological Association (2020), is "the tendency to prioritize the processing of certain types of stimuli over others."[217] It refers to a cognitive phenomenon whereby an individual selectively attends to specific information available in their environment while actively disregarding others, and is often driven by emotional or cognitive factors. Attentional bias *can* be positive, where

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[216] Mieke Beckwé et al., "Worrying and Rumination Are Both Associated with Reduced Cognitive Control," *Psychological Research* 78, no. 5 (September 2014): 651–60, https://doi.org/10.1007/s00426-013-0517-5.

[217] Omer Azriel and Yair Bar-Haim, "Attention Bias.," in *Clinical Handbook of Fear and Anxiety: Maintenance Processes and Treatment Mechanisms.*, ed. Jonathan S. Abramowitz and Shannon M. Blakey (Washington: American Psychological Association, 2020), 203, https://doi.org/10.1037/0000150-012.

individuals will demonstrate an attentional preference to pleasurable or rewarding stimuli in their environment. But, it can also be negative, where individuals demonstrate a tendency to focus on threatening or pessimistic stimuli in their surroundings.[218]

Excessive rumination has been linked to an increase in attentional bias toward negatively charged external stimuli and thoughts in ruminating individuals, with Ernst H.W. Koster and colleagues (2011) showing that "rumination [is] associated with an attentional bias for negative [stimuli], even when depressive symptoms [are] statistically controlled."[219] Max Owens and Brandon E. Gibb (2017) confirmed this in a study, which found that participants who admit to engaging in higher levels of rumination—even with underlying or preexisting depressive symptoms accounted for—exhibited significantly more considerable attentional bias to negatively valanced stimuli in their environment than those who admitted to ruminating less.[220]

Nolen-Hoeksema, Wisco, and Lyubomirsky write that "[r]umination may also be associated with biases in information processing, specifically a tendency to attend to [...] negative information rather than positive information."[221] While most researchers inquiring about the relationship between rumination and negative attentional bias merely claim an 'association' between the two phenomena—and thus avoid making the conclusion that rumination *causes* a tendency to attend to negative stimuli—Nolen-

[218] Azriel and Bar-Haim, "Attention Bias," 203.
[219] Ernst H.W. Koster et al., "Understanding Depressive Rumination from a Cognitive Science Perspective: The Impaired Disengagement Hypothesis," *Clinical Psychology Review* 31, no. 1 (February 2011): 141, https://doi.org/10.1016/j.cpr.2010.08.005.
[220] Max Owens and Brandon E. Gibb, "Brooding Rumination and Attentional Biases in Currently Non-Depressed Individuals: An Eye-Tracking Study," *Cognition and Emotion* 31, no. 5 (July 4, 2017): 1065, https://doi.org/10.1080/02699931.2016.1187116.
[221] Susan Nolen-Hoeksema, Blair E. Wisco, and Sonja Lyubomirsky, "Rethinking Rumination," *Perspectives on Psychological Science* 3, no. 5 (September 2008): 411, https://doi.org/10.1111/j.1745-6924.2008.00088.x.

Hoeksema, Wisco, and Lyubomirsky argue that "cognitive deficits, biases, or changes in neural activity may be both causes and consequences of rumination."[222] My account will consider negative attentional bias as a consequence of excessive rumination.

As I explained repeatedly in Chapter 3, reflecting on a value in order to authenticate it as one's own requires one to adopt a significant degree of *open-mindedness* in order to interpret the conviction held in reflection from various perspectives. This open-mindedness is crucial along the entire process, as it allows users to do the following: embrace and welcome differing perspectives than their own; confront their own preconceptions, biases, and prejudices; and foster intellectual curiosity. This was especially important in the third step of my revised process, titled 'Critical Reflection,' where I argued that identifying the higher-order moral, social, and political implications that a value elicits necessitates both open-mindedness and empathy.[223]

I here argue that negative attentional bias interferes with one's ability to deploy the open-mindedness required of them. The negative attentional bias induced by scrolling's ruminative nature will force users to focus almost *exclusively* on the messages in the content they consume that elicit feelings such as rage, anger, frustration, or anxiety.[224] Ethan, the antifeminist scroller I introduced in Chapter 3, will have his negative attentional bias select the messages in Andrew Tate's content that evoke these feelings directed toward women and minority individuals. Should Ethan be given the

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[222] Nolen-Hoeksema, Wisco, and Lyubomirsky, "Reflecting on Rumination," 411.
[223] Chapter 3, Section 3.5.4.
[224] These feelings, as I showed in Section 6 of Chapter 3, can easily be manipulated into a feeling of motivation, which is typically revered as a *positive* feeling. However, if one is motivated *by* fear, rage, or anxiety, and is motivated *to* hate, repudiation, selfishness, and aggressiveness (such is the case in antifeminist rhetoric), then this motivation quickly loses its positive gloss.

chance to consume Tate's content open-mindedly, on the other hand, he can consider

alternative viewpoints that may elicit more empathetic affective responses with respect to

the victims of Tate's content, allowing him to approach his conviction that transgender

people do not deserve healthcare from multiple perspectives. With an open mind,

different stimuli will be attended to, and a more wide-ranging analysis can take place.

Negative attentional bias, however, greatly interferes with this. Of course, scrolling as

rumination is not its only feature that precludes open-mindedness from deployment.

Ethan perhaps already faces closed-mindedness and biases during his scrolling. My point

here, though, is that even if people like Ethan have these dispositions, scrolling—as

ruminative—certainly does not help improve them. I am here saying that it exacerbates

them.

At first, this does not seem to entirely interfere with self-reflective reaffirmation;

surely, scrollers are required to identify the hateful moral, social, and political

implications of value-laden content on TikTok as opposed to treating it as frivolous

humor. Scrolling in such a way that ignores these implications would be dangerously

naïve. However, I argue that the ruminative nature of Ethan's scrolling will only allow

him to focus on the *surface-level* negatively charged aspects of Tate's content, whereas

he is instead required to identify the underlying *higher-order* moral, social, and political

implications of such messages. That is, instead of Ethan's reflective attention being

directed merely at the assertions that he is weak and miserable as a result of feminism, it

needs to be directed at how such messages perpetuate subordinative stereotypes, for

example.

By exploring rumination's effects on *problem-solving*, I argue that this

attentional bias will fail to be directed at these higher-order implications.

Nolen-Hoeksema, Wisco, and Lyubomirsky articulate that "rumination interferes with effective problem solving, in part by making thinking more pessimistic and fatalistic,"[225] which is accompanied by the causal claim that "difficulties in concentration and attention [and] poor problem solving [...] are consequences [of] rumination."[226] These impairments on a ruminating scroller's problem solving abilities result in an impairment on their ability to effectively uncover the higher-order moral, social, and political implications that underlie the negatively charged value-laden content they consume on their *For You* page.

Decoding the ramifications that accompany harmful value-laden content on TikTok requires an ability to deploy skills required to problem-solve, since most of this these higher-order implications are often veiled with humor,[227] emotionally charged rhetoric, or apparent *clarity* that seduces one's will from critical thought[228] in ways that do not track reason, as I showed in my discussion of propaganda in Section 6 of Chapter 3. These problem-solving skills involve, among other things, reasoning, critical thinking, and analytical aptitude[229]—all skills similar to those that Diana Meyers (2014) demands of individuals who undergo reflection.[230] If an individual faces an impairment in these skills, their ability to easily uncover the higher-order moral implications of the value-laden material they consume will be consequently impaired as well.

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[225] Nolen-Hoeksema, Wisco, and Lyubomirsky, "Reflecting on Rumination," 401.
[226] Ibid., 406.
[227] Sabrina Moro et al., "To Be Heard Through The #Metoo Backlash," *Soundings* 83, no. 83 (May 1, 2023): 90–101, https://doi.org/10.3898/SOUN.83.06.2023.
[228] C. Thi Nguyen, "The Seductions of Clarity," *Royal Institute of Philosophy Supplement* 89 (May 2021): 227–55, https://doi.org/10.1017/S1358246121000035.
[229] John Butterworth and Geoff Thwaites, *Thinking Skills: Critical Thinking and Problem Solving*, Second edition, Cambridge International Examinations (Cambridge: Cambridge University Press, 2013).
[230] Meyers, "The Feminist Debate," 121.

Given that a user's problem-solving is impaired as a result of the ruminative nature of their scrolling, the third step of my revised process—Critical Reflection—is even more obstructed than it was under the lack of open-mindedness that rumination's negative attentional bias induces. I established in Section 3.5.4 that agents "need not exert the most demanding of problem-solving and critical thinking skills"[231] so as to leave the possibility of autonomy open to all. Instead, I asserted that "they just need to do the best they can."[232]

In my discussion on Meyers' demand for these skills and aptitudes in Section 3.5.4, I claimed that "being in possession [of them] definitely *facilitates* an agent's ability to become autonomous with respect to her convictions."[233] So, while an agent remains *able* to reflect effectively despite these skills being frustrated as a result of scrolling's ruminative nature, their ability to do so is *lessened*. If his ability to critically think or problem-solve to the best of his abilities is frustrated, then we cannot reasonably expect that he can undergo the rest of the process effectively. That is, we cannot expect Ethan to properly question his alignment with the higher-order intricacies of the conviction that transgender people do not deserve healthcare[234] if he faces an impairment in his ability to identify these intricacies in the first place.

In the next two sections of this chapter, I argue for the existence of two more characteristics of scrolling that interfere with this process, and further compromise a user's ability to autonomously endorse or repudiate values encountered on TikTok.

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[231] Chapter 3, Section 3.5.4.

[232] Ibid.

[233] Ibid.

[234] These implications are numerous. For one, a higher-order underlying value implicit in this conviction is that transgender people are *less human* than cisgender people. Ethan does not have to decode *all* of these implications, but he *must* uncover at least one in order to move on with his reflection.

4.3 How Scrolling's Isolation Interferes with Value Authentication

If a user's ability to problem-solve and approach content open-mindedly is interfered with by scrolling's ruminative nature, the possibility remains that they may be able to rely on self-reflective reaffirmation's collaborative requirements to overcome these difficulties. That is, if they cannot do it themselves, they may still be able to depend on others to help out. In this section, I show how scrolling interferes with being able to do so.

This section will consider (i) the isolative nature of scrolling itself, (ii) its effects on inducing loneliness, and (iii) its genesis of echo chambers and epistemic bubbles. I will hold these considerations against the collaborative, relational requirements of self-reflective reaffirmation—namely, engaging in meaningful discussion and listening to alternative viewpoints and testimonies empathetically—to argue that they further interfere with one's ability to authenticate values.

4.3.1 Scrolling Both is Lonely, and is a Cause of Loneliness

In the very introduction of this thesis, I distinguished between active and passive social media use. Here, I articulated that active use involves "commenting, sharing, posting, networking and following"[235] and that passive use "comprises task-unrelated approaches to social media that can be interpreted as merely observing."[236] This thesis has been exclusively dealing with passive social media use. One of the most noticeable

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[235] Chapter 1: Introduction
[236] Ibid.

differences between active and passive use is that the former is socially interdependent and collaborative while the latter is isolative and individualistic.

Scrolling fundamentally does not involve a user interacting with others beyond watching short video clips as they are fed to them; it instead discourages interaction with fellow users. While platforms that promote active social media use—such as forum-based interfaces like Reddit, for example—encourage discussion, those that promote passive usage discourage such dialogue from unfolding. As a result, interfaces such as TikTok's *For You* promote a sense of detachment and isolation among their users.

Further, its personalized algorithmic curation of content creates what Eli Pariser (2011) calls a *filter bubble*.[237] In the forms of social media or news feeds, filter bubbles are the results of algorithms extrapolating personal information and interests to provide "a unique universe of information for each of us [...] which fundamentally alters the way we encounter ideas and information."[238] In other words, filter bubbles render media consumers isolated in their own personalized spheres of content. When it comes to how algorithmically personalized feeds promote isolation, Pariser articulates that "you're alone in [your bubble] … you're the only person in [it]. In an age when information is the bedrock of shared experience, the filter bubble [is] pulling us apart."[239] This is to say that scrolling is fundamentally *isolating*.

However, not only is the activity *itself* lonely in its nature as filter-bubbled and isolative, but studies have also linked excessive social media use with general loneliness in social settings, such as that of Brian A. Primack and colleagues (2017). Here, these

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[237] Eli Pariser, *The Filter Bubble: What the Internet Is Hiding from You* (New York: Penguin Press, 2011).
[238] Ibid., 5.
[239] Ibid., 6

authors found that "[y]oung adults with high [social media use] seem to feel more socially isolated than their counterparts with lower [social media use]."[240] Most studies neglect to assert a causal relationship between excessive social media use and loneliness, such as that of Emily B. O'Day and Richard G. Heimberg (2021).[241] Primack et al., however, suggest the possibility that "those who use increased amounts of social media subsequently develop increased social isolation,"[242] a claim for which one of their hypotheses is that "certain characteristics of the online milieu may facilitate feelings of being excluded."[243] The filter bubble generated through scrolling on personalized curations of content is a considerable candidate for one of these characteristics.

So far, I have supported two claims: first, scrolling *is* isolating and lonely, and second, scrolling is a *cause* of isolation and loneliness. These considerations bear further injurious consequences on an individual's ability to successfully engage in proper self-reflective reaffirmation with respect to harmful socio-political convictions.

4.3.2 How Loneliness and Isolation Interfere with Value Authentication

The following subsection will refer to the collaborative requirements of self-reflection to argue that the findings of the previous analysis complicate a user's ability to perform these practices. I follow by addressing how the 'comment sections' of videos cannot serve as viable milieus for meaningful conversation or testimony given their nature as echo chambers and epistemic bubbles.

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[240] Brian A. Primack et al., "Social Media Use and Perceived Social Isolation Among Young Adults in the U.S.," *American Journal of Preventive Medicine* 53, no. 1 (July 2017): 1, https://doi.org/10.1016/j.amepre.2017.01.010.
[241] Emily B. O'Day and Richard G. Heimberg, "Social Media Use, Social Anxiety, and Loneliness: A Systematic Review," *Computers in Human Behavior Reports* 3 (January 2021): 100070, https://doi.org/10.1016/j.chbr.2021.100070.
[242] Primack et al., "Social Isolation," 6.
[243] Ibid., 7.

In Chapter 3, I established that the practice of self-reflective reaffirmation ought not to be confined to the limits of individual introspection.[244] In order to reconcile self-reflective reaffirmation with an individual's socially embedded nature and a conception of autonomy as relational, I ensured the practice require engaging in meaningful conversations with others and listening to testimonies. In turn, this allows individuals to interpret convictions from different perspectives and to more reliably determine what biases may have motivated its endorsement in the first place. Applying these collaborative considerations allowed me to (i) reconcile self-reflection with autonomy's relational nature to a significant degree, and (ii) make the possibility of autonomy achievable for those who do not possess exceptional normative competence: "[an agent remains able to effectively become autonomous] so long as she is equipped with open-mindedness, a willingness to listen, empathy, and access to conversation with others."[245]

Reflection is greatly facilitated by depending on others to deepen an understanding of the value in question. If an individual is or feels *socially isolated* as a result of their scrolling, however, their ability to initiate these discussions is greatly impaired. The result of their isolation is an estrangement from individuals with alternative viewpoints, and thus a difficulty in obtaining these kinds of testimonies and engaging in dialogue. As a platform that encourages passive, isolated usage of digital

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[244] While I do believe that introspection can reveal personal biases, and that one can learn a lot about oneself by engaging in introspection, the efficacy of this practice is only achieved insofar as it is substantially meditative—that is, free from distraction. Instead of using introspective meditation as a means of identifying biases and confronting the self, I believe discussion with others and listening to testimonies to be a more realistic expectation from an every-day TikTok user.
[245] Chapter 3, Section 5.4.

media, TikTok does not provide the means necessary to engage in meaningful discussion with other users, as forum-based platforms do.[246]

Now, one *could* refer to the comment sections of the value-laden videos they encounter on their *For You* page in order to obtain testimonies of others—that is largely the only avenue for interdependence and collaboration that TikTok provides apart from direct messaging. However, these comment sections are only populated by individuals who have also been shown the same video, and are thus breeding grounds for both echo chambers and epistemic bubbles.

According to C. Thi Nguyen (2020), an epistemic bubble is "a social epistemic structure in which some relevant voices have been excluded through omission"[247] while an echo chamber is "a social epistemic structure in which other relevant voices have been discredited."[248] Comment sections are both. Women's voices are omitted from the comment sections of Andrew Tate's videos because women are generally not shown this kind of content; TikTok's AI does not predict women to interact with it. So, these comment sections are epistemic bubbles. Women's voices are also discredited, since their comments are often met with hostility from male users. So, these comment sections are echo chambers. As a result, if Ethan relies on the comment section for testimonies as a means of escaping his own filter bubble, he further subjects himself to a milieu wherein

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[246] Obviously, forum-based platforms are subject to epistemic bubbles and echo chambers and are not viable replacements to remedy this worry. My point is simply that they at least provide the means for meaningful discussion; TikTok does not.
[247] C. Thi Nguyen, "ECHO CHAMBERS AND EPISTEMIC BUBBLES," *Episteme* 17, no. 2 (June 2020): 142, https://doi.org/10.1017/epi.2018.32.
[248] Ibid.

the alternative viewpoints are omitted as a result of both TikTok's design features and the hostile nature of these comment sections.[249]

In sum, scrolling is overly individualistic, causes social isolation, and breeds epistemic bubbles and echo chambers in its comment sections. Individuals on TikTok are left stranded on a platform that does not provide any firsthand resources through which to initiate the meaningful discussions or acquire the alternate testimonies necessary to interpret value-laden content from multiple perspectives. As a result, a user's ability to rely on others on the platform to help inform their understanding of the value in question is frustrated, and so too is their ability to conduct a thorough reflection upon it.

4.4 How the Algorithmic Personalization of Content Interferes with Value-Authentication

In the following section, I explore how TikTok's *For You* page being marketed as a 'personalized' interface impedes on the process of self-reflective reaffirmation by distorting a user's conception of the *origin* of a questioned-upon conviction. I argue that the 'personalized' gloss of *For You* encourages users to identify *themselves* as the source of the values they encounter on their page, and show how this misinterpretation interferes with value-authentication and jeopardizes user autonomy. I then show why this identification of oneself as the source of a value is mistaken.

The anticipated argument I am entertaining here—call it the 'Algorithm Knows me Better Than I Know Myself" thesis—threatens to undermine much of what I have claimed in this project. It can structured as follows. This argument is not endorsed in this

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[249] This, of course, is assuming that scrollers such as Ethan are not occupying seats in university seminars on feminism.

precise form by the individuals I cite in this section, but it is certainly inspired by the things they say. I have also heard it in conversation with others.[250]

> **P1**: Thanks to the reach and sophistication of recommender systems, and their ability to adapt in real-time, my online profile is a more accurate portrayal of myself than my own self-understanding.

> **P2**: Content displayed on my *For You* page is shown based on my online profile and my interests at any given time.

> ∴**1**: Content displayed on my *For You* page is an accurate reflection of myself.

> ∴**2**: Each piece of content is relevant to my interests, hobbies, preferences, values, and therefore ought to be identified with.

This argument is the '*Algorithm Knows me Better than I Know Myself*' approach to understanding Content Discovery Platforms.

4.4.1 How Personalization Leads Users to 'See Themselves' in their Feeds

TikTok's website features a page titled "Learn why a video is recommended For You,"[251] yet the details contained in this article are rather ambiguous. For example, the platform cites that "[their] system recommends content by ranking videos based on a combination of factors based on your activity on [their] app, which includes adjusting for things you indicate you are not interested in."[252] TikTok seems keen on convincing its

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[250] Dr. Duncan MacIntosh and Dr. Nicole Ramsoomair both raised this point during a colloquium series presentation I had given in April of 2023 at Dalhousie University. I have also heard it in more colloquial settings—such as among friends at a bar—but Dr. MacIntosh and Dr. Ramsoomair's raising of this question leads me to assume it would receive reasonable uptake in academia as an objection to my entire argument.

[251] TikTok.com, "Learn why a video is recommended For You," *TikTok*, December 20, 2022. https://newsroom.tiktok.com/en-us/learn-why-a-video-is-recommended-for-you

[252] Ibid.

users in this article that it only uses in-app behavior to determine which videos are to be recommended in *For You*, claiming that "[their] recommendation system is powered by technical models, so "[they] tried to make the technical details more easily understandable by breaking down reasons like: (i) user interactions, such as content you watch, like or share, comments you post, or searches, (ii) accounts you follow or suggested accounts for you, (iii) content posted recently in your region, (iv) popular content in your region."[253] While TikTok claims that they are "working to bring meaningful transparency to the people who use [their] platform,"[254] they neglect to provide a full account of which bits of personal data are collected in the recommendation of content.

CNN's Brian Fung, in a March 2023 article titled *TikTok collects a lot of data. But that's not the main reason officials say it's a security risk*,[255] notes that a 2020 study of the data-collecting practices of TikTok revealed that the platform "does not appear to collect any more data than your typical mainstream network," such as Meta, Snap Inc., or Twitter. This, however, should not downplay the reach of its data-collecting mechanisms. Recall, Meta's privacy policy explicitly states that it collects data about its users that include: content one creates, likes, comments on; content from one's camera roll; messages sent and received, including their content; metadata (which refers to *data about data*, or, information about data); types of content interacted with, and how; purchases and financial transactions (both on and off Meta's services), including credit

[253] TikTok.com, "Learn why a video is recommended For You," *TikTok*, December 20, 2022. https://newsroom.tiktok.com/en-us/learn-why-a-video-is-recommended-for-you
[254] Ibid.
[255] Brian Fung, "TikTok collects a lot of data. But that's not the main reason officials say it's a security risk," *CNN* online, March 24, 2023, https://www.cnn.com/2023/03/24/tech/tiktok-ban-national-security-hearing/index.html

card information; contact information of one's friends, such as e-mail address, name, age, and phone number; information based on these others' activities; device and software information; what one is doing on said device, including mouse movements; location, camera access, photos; network information and IP address; education level, one's "demographics"; … the list goes on.[256] Interestingly, Meta frames these bits of data as "your activity and information you provide,"[257] as if users are consensually *giving* Facebook these bits of their personal information, despite admitting that "if you don't use Meta products, your information might still be collected."[258]

Given the reach of these data-collecting mechanisms, a serious case can be made that the collection of your personal information—tucked away on some server in the desert in Arizona[259]—is a more accurate portrayal of yourself than your own self-perception. The coverage of data-collecting mechanisms has led some, such as James Carmichael (2014) to argue that these algorithms *know you better than you know yourself.*[260]

In 2020, TikTok claimed that videos are recommended on *For You* based on factors including: "User interactions such as the videos you like or share, accounts you follow, comments you post, and content you create; Video information, which might

[256] Meta, "Privacy Policy."
[257] Ibid.
[258] Ibid.
[259] Raleigh Butler, "Meta is Adding Three Data Centers to Already Massive Mesa Campus," *DataCenter Knowledge*, May 6, 2022. https://www.datacenterknowledge.com/meta-facebook/meta-adding-three-data-centers-already-massive-mesa-campus
[260] James Carmichael, "Google Knows You Better Than You Know Yourself," *The Atlantic* online, August 19, 2014, https://www.theatlantic.com/technology/archive/2014/08/google-knows-you-better-than-you-know-yourself/378608/

include details like captions, sounds, and hashtags; Device and account settings like your language preference, country setting, and device type."[261]

While TikTok's recommender system does take personal data into account in the recommendation of content, it places minimal weight on these metrics. Instead, it prioritizes the amount of time a user spends watching a given tiktok to determine not just what they are interested in in general, but what they are interested in viewing *right now*.[262] This is to say that if, for example, I open my *For You* page and watch a video of Tiger Woods explaining how to swing a golf club properly, and I watch this video in full or re-watch it, TikTok's algorithm makes a note of it, and will put another golf video— say, one of a golf instructor telling me how to properly grip my club—somewhere within the next few clips it recommends. When I come across that video, and once again watch it in full, I thereby communicate to TikTok that I want to watch golf videos *right now*. Soon thereafter, my *For You* page will be populated by nothing but golf videos until I communicate that I am interested in something else.

As a result, under the '*Algorithm Knows me Better than I Know Myself*' approach, one's *For You* feed is more than a reflection of pre-internalized biases: it isn't a reflection of who you are, it's a reflection of *who you are right now*. In turn, this leads to an interpretation that TikTok is a few steps ahead of you; it knows you better than you know yourself. In turn, TikTok can automatically provide an online experience that is *perfectly* tailored to a user's individual present-moment preferences, and, consequently, their *values*.

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[261] TikTok, "Why a video is recommended."
[262] Ben Smith, "How TikTok Reads Your Mind," *The New York Times*, December 5, 2021, https://www.nytimes.com/2021/12/05/business/media/tiktok-algorithm.html

Two pillar interpretations of personalized social media feeds have now been established. (I): Data collection is so wide-reaching that algorithms know individuals better than they know themselves, and (II): Content Discovery Platforms are perfectly tuned to reflect exactly what a user will be interested in at a given point in time. Thus, users are not only engaging with a social platform when they scroll through recommendation-based social media feeds, they are engaging with a reflection of themselves.[263] Admittedly, this argument is more prevalent in online blogs than in academia, with Charles Tumiotto Jackson (2019) publishing a blog entry on *Better Marketing* titled "Social Media Is Just a Reflection of Who We Are."[264] Here, Jackson claims that "[y]ou are 100% responsible for the content you see on social media,"[265] and that "social media is undoubtedly the most accurate representation of who we are."[266] While this was not an assessment of recommended content on Content Discovery Platforms, it still holds weight when applied to points (I) and (II) I mentioned earlier in this paragraph.

4.4.2 How Personalization Interferes with Value-Authentication

Under the '*Algorithm Knows me Better than I Know Myself*' perception of *For You*, the ability to autonomously endorse or repudiate the value-laden content one encounters on their *For You* page is greatly compromised. If the algorithm thinks I would engage with a value-laden piece of content—and is so advanced that it *knows*

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[263] Charles Tumiotto Jackson, "Social Media is Just a Reflection of Who We Are," *Better Marketing* (blog), June 15, 2019, https://bettermarketing.pub/social-media-is-just-a-reflection-of-who-we-are-1b4cb6162a0c
[264] Ibid.
[265] Ibid.
[266] Ibid.

me—then I must have already had an endorsement of these ideas hidden somewhere in my subconscious psyche, otherwise I would not have been presented with the video in the first place.

This bears detrimental effects on one's ability to properly endorse or repudiate the values they encounter on their *For You* page. Take, for one, the second step of my revised process in Chapter 3, Section 3.5.4, titled 'Contemplative Exploration.' Here, I claimed that an individual who undergoes self-reflective reaffirmation must identify the *origin* of the value in question. This involves determining where the value being reflected upon came from, i.e., its source of socialization. If the source is identified as either malicious, ill-intentioned, untrustworthy, or unreliable, then it ought to seriously force a deeper questioning over whether one aligns themselves with the value it communicates—regardless of its content.

For example, if Ethan were to reflect properly on his conviction that transgender people do not deserve healthcare, he would recognize that such a belief was inculcated into him by none other than Andrew Tate—an agent who seeks no purpose from others' adoptions of his rhetoric other than financial gain and personal fame.

If, however, an individual operates under the '*Algorithm Knows me Better than I Know Myself*' approach to understanding TikTok's *For You* page, then they greatly challenge their ability to accurately identify this source. Instead, this interpretation leads them to identify *themselves* as the source of this conviction, and given a person's tendency to overly trust and rely on themselves, this detriments self-reflective reaffirmation significantly. As John Hardwig (1985) outlines, a model for what it means to be an intellectually responsible and rational person "is nicely captured by Kant's statement that one of the three basic rules or maxims for avoiding error in thinking is to

'think for oneself.'"[267] Here, Hardwig outlines that there has been a tendency among Western thought that "the very core of rationality consists in preserving and adhering to one's own independent judgment."[268] Now, if individuals take their own judgment to be the most trustworthy and the most reliable one around, and they are led to believe that the value-laden content presented on their *For You* page is reflective of their own pre-internalized convictions under the 'Algorithm Knows me Better than I Know Myself' approach, then there is reason to believe that they are *extremely* unlikely to repudiate such ideals; the value is already theirs—they can bypass the process entirely.

Additionally, the fourth step of my process of self-reflective reaffirmation, 'Evaluation and Stance-Taking,' is greatly interfered with as well under the 'Algorithm Knows me Better than I Know Myself' approach to understanding TikTok's recommender system. Here, individuals are meant to "evaluate the alignment between their values and their personal higher-order values. They assess whether their values contribute positively to their lives and those of others or if they hinder growth, perpetuate harm, or restrict opportunities."[269] However, if an agent is operating under the assumption that these values are *already constitutive* of her attitudinal self, then she is severely discouraged from questioning this alignment at all. Instead, she assumes she is aligned with these values from the start, and there is no need to question whether they constitute her worldview or not.

The consideration that the collection of one's data is a more accurate representation of oneself than is their own self-perception, though, remains a significant

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[267] John Hardwig, "Epistemic Dependence," *The Journal of Philosophy* 82, no. 7 (July 1985): 340, https://doi.org/10.2307/2026523.
[268] Hardwig, "Epistemic Dependence", 340.
[269] Chapter 3, Section 5.4.

consideration, and I am not in complete disagreement with its content. I do believe you can learn a lot about a person simply by scrolling through their *For You* page. In what follows, though, I reject this argument in order to properly assert that one's *For You* page is *not* an accurate portrayal of one's true, real-time self. This is meant to disparage the 'Algorithm Knows me Better than I Know Myself' approach to understanding TikTok's recommender system, and reinforce the need for critical reflection on the source of the values one internalizes, as well as one's alignment with such values.

4.4.3 Your For You Page is not a Reflection of Yourself

In what follows, I argue that the employment of *user-based collaborative filtering* in these models ought to prevent the "Algorithm Knows Me Better Than I Know Myself" argument from landing with force.

User-based collaborative filtering is a method that suggests content to a user not based strictly on patterns recognized in their personal, individual data, but also based on the online behavior of *other* users who have similar interests or preferences as our scroller. This is an unsupervised technique that *clusters* users into larger groups based on similarities of patterns in online behavior and data collection. When one user is artificially clustered into a group of assumed similarly minded individuals, they are recommended content that typically gets engaged with by the constituents of such a group.

For example, even if there is *nothing* about my online profile or personal data that would indicate an interest in gardening, if the users with whom I am clustered have shown a tendency to interact with gardening content, then the algorithm will slip a few clips of gardening content into my feed, hoping that it will seduce me enough to keep

scrolling. If others like me are into it, then maybe I am too, and maybe this kind of content will keep me hooked on TikTok.

As a personal testimony, my online profile paints me as a 24-year-old straight, white, upper-middle class male who, among other things, likes golf, barbecuing, lawn care, fishing, and Lynyrd Skynyrd. I do *not* like hating the LGBTQIA2S+ community. I typically interact with content that consists of sports highlights, meat cooking tutorials, how to get your grass green, guys on canoes reeling in bass, and videos of live southern rock n' roll concerts from the 1970s. Predictably, I am not clustered within groups of feminists. Nor is it the case that users who interact with similar content are typically situated on the liberal-leaning side of the political coin. And so, TikTok has been incessantly presenting me with right-wing, men's rights, anti-trans content, simply because my online profile is clustered within the group of users who engage with such content themselves; Since Rhett and Wyatt from Alabama are not all that supportive of feminism, yet—like me—they like Lynyrd Skynyrd, I must also not like feminism.

Thus it is *not* entirely the case that the content shown on one's personalized feed is necessarily a reflection of some pre-existing internal bias they already have. In any single piece of content, it is impossible to know whether it was recommended using item-based collaborative filtering—which recommends content based strictly on one's individual online behavior, not that of others—or if user-based collaborative filtering was employed. If a piece of content was presented using the latter, then it can seriously be unreflective of the personal subconscious desires or preferences one has. User-based collaborative filtering challenges our ability to confidently assume that any value reflected in the content occupying these feeds are at the same time constituents of one's

personal perspectival identity. It may merely reflect the values that people with some similar *interests* subscribe to.

And so, if a person's *For You* page is a mixed pot of (i) content suggested to an individual based on his online profile and the collection of his personal data, along with (ii) content that is merely suggested because there are other individuals like him who have demonstrated a tendency to engage with such content, and there is no reliably possible way of determining which content got suggested using user-based filtering and which got suggested using content-based filtering, then there is no reliable way of determining whether any individual piece of content is reflective of one's inner, true self.

The 'Algorithm Knows me Better than I Know Myself' approach to understanding TikTok's recommender system is not only false, but it greatly places one's epistemic autonomy in jeopardy should it be endorsed.

4.5 Conclusion

In this chapter, I showed that in addition to scrolling's mindless gloss and its rapid-fire presentation of short videos, three other features of scrolling on TikTok's *For You* page either directly or indirectly interfere with a user's ability to autonomously endorse or repudiate the value-laden content they consume while scrolling. There are undoubtedly more, but I here showed how scrolling as ruminative, scrolling as isolative, and scrolling as 'personalized' obstruct reflection from unfolding effectively. These factors combine to justifiably characterize TikTok as a platform that does not provide its

users with the opportunity to become autonomous with respect to the values they encounter on their *For You* page.[270]

In turn, TikTok users are more easily susceptible to having their worldview, moral compass, and political orientation greatly influenced by their interaction with value-laden content on their *For You* page in nonautonomous ways. Instead, values are likely to get passively internalized without being laundered from this influence. As a result, an individual user's ability to claim autonomous ownership over these ideals is compromised. Given these findings, TikTok can be justifiably categorized as an autonomy-inhibiting platform that can exert manipulable influence on the minds of those that use it.

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[270] While the possibility remains that an individual may be able to reflect on internalized values acquired on TikTok at some later time, somewhere else, it is difficult to see that these points do not also carry over to this 'later-time' reflection. My point here is that value-laden content is not given the opportunity to be authenticated on TikTok, while scrolling. I believe my points have enough weight to carry over to a 'later-time, somewhere-else' reflection, but this has not yet been established.

Chapter 5: Conclusion and Discussion

In this paper, I first rejected the argument that passive social media use is a form of extended mind-wandering by showing how the attention economy guides user attention toward social media interfaces such as TikTok's *For You* page. This undermined a line of reasoning that could support the claim that scrolling on TikTok is a harmless activity that can induce discovery and relief from boredom, and instead allowed for a more realistic approach to assessing its harms and downsides.

After having done so, I instead argued that TikTok be classified as a legitimate source of value-inculcation that has the capacity to imbue antifeminist values into its users. I then moved to argue that in order to autonomously endorse or repudiate values of this tenor, an individual must reflect on their alignment with such values in a deep, thorough, extensive, and collaborative way.

I then discussed how various design features of TikTok's *For You* page either directly or indirectly interfere with a user's ability to perform effective reflection on its interface. I explored three characteristics of scrolling, and showed how each interferes with a user's ability to autonomously endorse or repudiate value-laden content they consume online. This analysis could have included a discussion of many more of scrolling's features, and these individual characteristics and their effects on individual autonomy ought to be explored further.

These findings allow me to conclude that TikTok does not provide an interface whereby users are encouraged or even able to claim autonomous endorsement of the values laden in the harmful, socio-political content they consume while scrolling.

Additionally, future research should inspect whether young men can *ever* be said to be autonomous with respect to antifeminist convictions, and whether such findings would be beneficial or harmful to the feminist cause. On another note, I greatly suggest the conduction of research that suggest methods to reel young men and boys out of their tendencies toward right-wing ideologies. I worry greatly about the future of the feminist movement given the number of young men and boys I have personally witnessed subscribe to these ideals. I believe regulating social media content can contribute but am unsure of the extent to which it can help in this regard.

This paper contributes to ongoing discussions about the need to regulate the attention economy and to impose restrictions on those who trade in it. Further studies on the attention economy—many of which ongoing—should be conducted on the intersection of freedom of speech and content moderation, the morality and legality of privacy violations, and scrolling's effects on sustained attention and focus, among others. Such findings should motivate inquiry into how to enhance user autonomy online, or whether online autonomy is even possible. For now, I suggest that Content Discovery Platforms' jeopardization of individual autonomy ought to be reason enough to support the widening and tightening of content moderation policies and techniques and urge changes in the makeup of their interfaces. I believe that my findings paired with these future studies ought to urge the outright *banning* of such interfaces, although making the case for that is outside the scope of this project. But, with my analysis of what scrolling is like and how it impacts autonomy, I hope to have laid the foundations for future work on an argument for the banning of Content Discovery Platforms.

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