INTRODUCTION

> I don't know why. They "trust me. . . ." Dumb fucks.
> —Mark Zuckerberg, Facebook CEO[1]

We do not use social media and other internet platforms because we "trust" them, or at least nobody in my social circle seems to be such a "dumb fuck" in the words of Facebook founder and CEO Mark Zuckerberg. We use such platforms *despite* a lack of trust because they are no longer opt-in systems. The structure of the contemporary economy and governance increasingly demands digital participation.[2] We are generally aware that the cost of this participation is our privacy. We submit to ceding our privacy upon realization that participation is not optional and escaping the scope of digital surveillance is near impossible, even if participation were truly optional.[3] But what if the costs are greater than a total loss of privacy? It is hard to imagine that the asking price for access to internet platforms could be higher, but it is. I will be making the case throughout this book that the cost of admission also includes the continued marginalization of LGBTQIA+ communities and the amplification of misogyny and heteronormativity as they become automatically reproduced across the internet. This has both symbolic and material impacts on society. Decades of scholarship have demonstrated that representation in the media matters, that public visibility helps determine our collective assessment of who matters, which issues are important, and what our obligations are as a society.[4] It also has material impacts on members of the LGBTQIA+ community, like lack of access to health information, online community, online revenue streams, and the precarity of having to seek out things like dates, community, and customers offline.

The rhetoric of Silicon Valley is filled with imagined inevitabilities.[5] This is perhaps nowhere truer than in the rise of online content moderation.

Billions upon billions of pieces of content are being uploaded to internet platforms every year. How could any individual, human or corporate, ever hope to keep up? Human nature can be brutish, hypersexualized, and vile. How can we hope to stem the deluge of offensive content reflective of these "facts"? In typical TED Talk fashion, we are asked to believe that there is only one solution, but the silver lining is it's a panacea: automated content moderation. By leveraging advanced machine learning and artificial intelligence (AI) techniques, the web can learn to police itself (and algorithmically organized humans can pick up any slack). In so doing, machines will be able to parse what we'll term *sexual speech*, a broad term meant to encapsulate all potentially "adult" content from discourse about sex, to sex education, to pornography, and other online sex work. However, a machine learning algorithm is only as good as its input data and training parameters. Unfortunately, when it comes to moderating sexual speech, the data is hopelessly flawed, and the parameters designed by Silicon Valley coders are not much better. They all contain heteronormative biases so severe it would be comical if it were not so damned tragic.

Our collective social discourse in the United States, particularly that which occurs online, contains rampant anti-LGBTQIA+ biases. Contrary to many popular narratives, these biases have increased in recent years. The Gay and Lesbian Alliance Against Defamation's annual Accelerating Acceptance report conducted by the Harris Poll reports radical declines in LGBTQIA+ acceptance in the United States since 2016. The percentage of non-LGBTQIA+ 18- to 34-year-olds classified as allies—those who report being "very" or "somewhat" comfortable with LGBTQIA+ individuals in all situations—dropped precipitously in the Trump era. Whereas 63 percent of the US population were classified as allies in 2016, that number dropped to 45 percent by 2018, and the total of male allies dropped from 62 percent to only 35 percent.[6] Many of the most powerful internet platforms are based in the United States and are deeply impacted by these biases. The prejudices of a particularly vocal subsection of the population infect the training data, code, and coders behind automated content moderation to deleterious effect. The resulting algorithms end up over scrutinizing, policing, and suppressing LGBTQIA+ discourse, including community forums, resources, outreach initiatives, activism, sex education, women's bodies, sex workers, and pornography. People targeted for algorithmic censorship have little recourse. While large, vertically integrated corporations like mainstream heteroporn production companies—the

types of San Fernando Valley companies that produce aggressively heterosexual, frequently misogynistic, and now almost exclusively gonzo or point of view (POV) porn—may escape censorship, but niche content producers of sexual speech ranging from LGBTQIA+ advocacy to feminist and queer pornography are rarely so lucky.

The result of this new regime of automated content moderation is what I call the *digital closet*. This term is meant to signify the ways in which LGBTQIA+ individuals may be allowed to enter the digital public sphere but only so long as they bracket and obscure their sexual identities. Their very being is so pornographied by automated content filters that they are largely barred from sexual expression online. To participate in our digital world, as is increasingly necessary today, requires a silence that is alienating and damaging. Any exit from the digital closet will be met with swift punishment. LGBTQIA+ people will find their content flagged and censored, their account banned or de-prioritized and thus rendered invisible, will lose any streams of online revenue, and will find this system weaponized against them by alt-right[7] trolls looking to trigger all the aforementioned punishments. To add insult to injury, all of this will occur while tube sites like Pornhub operate walled gardens of heteronormative sexual expression, unhindered by the new platform economy. It seems as if a treaty has been made between the people in a moral panic over the proliferation of pornography and the internet platforms at the expense of the LGBTQIA+ community. *Porn* will be given a corner of the internet where it will flourish, as long as it's not *that* kind of porn.

PANDORA'S BOX OF PORN

> [T]he arc of internet sex censorship is long, and it bends as far away from justice (and reason) as possible. Corporations controlling the internet had been steadily (and sneakily, hypocritically) moving in this direction all along, at great expense to women, LGBT people, artists, educators, writers, and marginalized communities—and to the delight of bigots and conservatives everywhere.[8]

A common narrative over the past two decades has been that the internet opened a Pandora's box of porn. The argument goes something like this: the proliferation of internet connectivity and digital video cameras has created

a situation in which not only are conservatives lacking sufficient manpower, financial resources, and political capital to combat pornography but also the very possibility of doing so has become technologically infeasible. Practicality demands that conservatives abandon their embattlements, allow pornography to sweep the nation, and focus on other, more achievable goals. Donna Rice Hughes, president and CEO of Enough Is Enough, a leading anti-pornography nonprofit organization, has said, "When you have a nonprofit like mine, donors want to see progress. And to be honest, we haven't seen any."[9] Tony Perkins, president of the Family Research Council, has said, "I mean, even before the internet, the government didn't do a good job of policing [porn]. So how do you get the genie back in the bottle?"[10] The religious right, in particular, is seen to have backslid on the issue of pornography. Jerry Falwell Sr. helped crystallize the Moral Majority by crusading against pornographers, stirred to action by an interview President Jimmy Carter gave in *Playboy* magazine. His son, Jerry Falwell Jr., called former President Donald Trump "God's man," despite his extramarital affairs with a Playmate and a hard-core adult film actress, and in one photo with Trump, Falwell Jr. can be seen posing with Trump in front of a framed issue of *Playboy* with Trump on the cover.[11]

For some liberals, libertarians, and leftists—an odd coalition that tends to align about as frequently as the planets, often in relation to free speech issues—this deluge of pornography represents not only a battle won but also the introduction of a digital pornotopia. This latter perspective is best exemplified by an internet meme called *Rule 34*, which states, "If it exists, there is porn of it." While the origins of this meme are difficult to track, most attribute its initial popularity to a 2005 web comic by Peter Morley-Souter that was drawn after he stumbled upon *Calvin and Hobbes* erotica online.[12] It has since been popularized on 4chan message boards and Reddit threads, specifically showcasing literotica, fan fiction, slash fiction, and hentai, all low-cost and easily anonymized media for the grassroots production of any and all imaginable pornography. The fulfillment of Rule 34 is made certain by *Rule 35*, which goes, "If no porn is found at the moment, it will be made." The sum of these two rules doesn't just equal the signifier for a sex position, it also creates a self-fulfilling libertine prophecy of an internet that can satisfy any erotic desire, no matter how niche or deviant.

It is easy to see how both sides of the aisle have arrived at this conclusion about the inevitability of pornography's ubiquity. While industry numbers

are hard to come by or accurately assess due to the large number of privately owned porn companies, a 2015 estimate valued the global porn industry at $97 billion, with $10–$12 billion of that coming from the United States alone.[13] Porhhub, the largest online porn disseminator releases detailed annual statistics on its users that best exemplify the seeming ubiquity of pornography. In 2018, Pornhub had 33.5 billion visits and is currently averaging more than 100 million visits per day. It served up 30.3 billion searches (about a thousand per second) and transferred 4,403 petabytes of data (about 147 gigabytes per second). Every minute over 200,000 videos were viewed, fifty-five of which were Kim Kardashian's sex tape, the most popular Pornhub video of all time. The site had 4.79 million new videos totaling over a million hours of new content uploaded in 2018 alone, an average of twelve videos and two hours of content uploaded per minute. More people voted on their favorite videos in 2018 than voted in the 2016 US presidential election.[14] For reference, Pornhub, which is just one of a number of porn tubes owned and operated by MindGeek, alone ranks as the twenty-eighth most popular internet site globally. For comparison, Netflix holds the twenty-fifth spot.[15]

While it is important to acknowledge the unprecedented scale of pornography's dissemination on the internet, it is also important to keep in mind that these changes in scale are endemic to digital media and communications technologies, particularly internet-based platforms. For the first time in history, we can literally saturate every waking moment of our lives with media content, and we increasingly choose to do so.[16] As we'll see throughout this book, isolating the explosion of pornographic content from its technological milieu can lead to mistaken conclusions not only about what porn people are consuming but also, more importantly, *why* they are consuming it. It also provides a more acceptable outlet for unchecked dystopian technophobia by bracketing its application to a historically stigmatized domain. In doing so, conservative ideology can more easily frame our cultural discourse on sexuality by situating the proliferation of pornography as a unique and distinct crisis that needs to be combated via ideological warfare (i.e., "the war on porn"). These sorts of tactics recur across the historical record of cultural contestations over sexual speech. They often lead to détentes where conservatives reconcile themselves to the existence of pornography, provided it doesn't deviate too far from an imagined majority's sexual mores. It will be my argument that allowing these discourses to proceed unchecked most often leads to the reification of heteronormativity.

Highlighting the technological infrastructures within which these changes to the production and consumption of pornography occur affords us two key insights. First, the political economy of contemporary pornography is deeply entangled with the political economy of the internet writ large. Pornography is operating under the same platform paradigms as other sectors of the digital economy, leading to similar problems with homogenized content in filter bubbles or echo chambers, and it is subject to similar critiques in terms of labor practices (extraction of free labor, vampirism of the tube economy, and so on), environmentalism (carbon emissions from data-intensive video storage and streaming, and so on), and penetration of everyday life (gamification of user interfaces, personalization, and so on). Just like other sectors of the digital economy, porn is subject to an attention economy amid what Mark Andrejevic has called *infoglut*—the glut of information online.[17] Just because porn *exists* does not mean it is *seen*, and the capacity to locate and access pornography beyond the first page or two of results on anything from Google to Pornhub requires a specific kind of literacy that we might call a *pornoliteracy*. While it may be true that queer and niche pornography is readily available to those who know how to find it, we cannot take for granted either that (1) this means there is not a broad movement toward heteronormativity online that brackets and sequesters LGBTQIA+ sexual speech or (2) that everyone, especially young people, have the requisite pornoliteracy to know how to find it. The problems of contemporary pornography only become clear within this larger context of the attention economy, infloglut, and echo chambers online.

Second, a focus on the connection between pornography and its technological infrastructures allows us to identify a history to this conjuncture that is too often dehistoricized in popular discourse. This dehistoricization is doubly motivated. First, it is part of the crisis logic that is wielded rhetorically to garner clicks in the contemporary attention economy. Second, it allows conservatives to engage in scare tactics under the cover of this crisis logic. The "crisis" of pornography is nothing new and, in fact, repeats each time a new media or communication technology debuts in public. History is littered with episodic crises where pornography proliferates via new media and communications technologies, triggering conservative attempts to contain it.

Many histories of pornography examine its intersection with the printing press and printmaking techniques, such as lithography. Take, for example,

the story of Marcantonio Raimondi, a printmaker and engraver employed by Raphael at the center of libertine culture in Renaissance Rome, who published a volume of male-female pornographic art titled *I Modi* by Giulio Romano, Rafael's most talented assistant and the only Italian artist mentioned by Shakespeare. Pope Clement VII imprisoned Raimondi—Romano fled before being captured—yet was unable to stop the spread of copies across all of Europe.[18] A similarly famous instance occurred two centuries later when John Cleland published *Fanny Hill* in 1748. Despite Cleland's decision to cease publication of the erotic novel after his imprisonment on corruption charges, the book was pirated and replicated widely across the Western Hemisphere.[19]

Pornography is always closely tied to media and communication technologies, and we can find similar crises emerging with the introduction of the daguerreotype, resin glue, and cheaper printing techniques (e.g., pulp fiction literotica, and romance novels); Polaroid cameras; VCRs; camcorders; cable TV; premium telephone services; Minitel; computers; and the internet.[20] The previous war on pornography was centered on the introduction of VCRs, camcorders, and cable TV, which collectively lowered production costs and, more importantly, allowed audiovisual pornography to be disseminated directly into the home. Conservatives would cling to this latter change in particular and introduce the trope of children's unwanted exposure to pornography as their last charge in that war on pornography. In the standard narratives, their political will gave out in the wake of a series of defeated regulations at the hands of the Supreme Court and the radical alterations to the political economy of pornography introduced by the internet. As we will see, the idea that the anti-pornography movement ever gave up or ceased making progress is false and more likely due to a lack of attention to the issue in mainstream media between the September 11 terrorist attacks and the 2008 recession.

Usually, these episodic crises end when pornographers become horizontally and vertically integrated enough to form large industrial corporations that can leverage a near-monopoly market share to systematically avoid regulation or shape it to their advantage. Heteronormative pornographers are usually best positioned to survive these clashes with censors. Affluent white heterosexual men are predominantly the ones positioned to be able to take on the expense and risk of adopting new technologies early on.[21] As such,

heteronormative porn often comes first because it appeals to the broadest market of early adopters. Its creators amass capital early on and position themselves at the center of the political economy. It is only in the middle of these cycles when media technologies are accessible and affordable but not yet overly regulated that more niche pornography can flourish. Wars on porn often crush niche pornography first due to its lack of access to capital. These first victories often exhaust the political capital of anti-porn crusaders and appease at least conservatives by achieving a heteronormalization of pornography.

In short, the Pandora's box narrative of pornography is overly reductive. It is a mask used by conservatives to stress the uniqueness and distinctiveness of a new coupling of pornography and technology such that it can be articulated as a crisis, all in aid of mobilizing political capital. It also hides the way in which political economies of pornography eventually stabilize, favoring large industrial corporations that frequently homogenize content in a heteronormative fashion to appeal to the wealthy white early adopters with disposable income to spend on pornography. If we want to get a clearer picture of just what is going on, we need to examine the cultural contexts, technological infrastructures, and political economies within which successive pornographies emerge. It is only by doing so that we can historicize both the dystopic crisis narrative and utopic pornotopia narrative that dominate our thinking about pornography.

Further, as I will show throughout the book, the porn industry's deepest, darkest secret isn't that porn is exploitative, socially corrosive, or a catalyst for misogynistic violence—though these can all be true. It's that porn is *boring*. In fact, the entire logic of the industry is built around combating this fact. The industry's worst nightmare is that we might all come to this realization when cycling through the thousand or more professional gonzo POV anal videos and amateur incest role-play videos uploaded to porn tube sites every day. Porn is boring because it's caught in a heteronormative filter bubble. The entire infrastructure is articulated such that porn producers must navigate between the Scylla of boring porn that reifies the same heteronormative tropes such that it can be tagged with the appropriate keywords and rendered locatable via index and recommendation algorithm and the Charybdis of abnormal porn whose very innovation renders it invisible within this heteronormative filter bubble.

COLLATERAL DAMAGE IN THE WAR ON PORN

There is a much larger problem that the war on porn introduces than its heteronormalization of pornography, and lest the reader think that they've gotten themselves into an entire book on hard-core pornography, they can rest assured that the bulk of the book, in fact, is focused on this spillover effect where any and all sexual speech gets overly censored. Every war on porn produces this collateral damage, by which I mean that regulation is more often than not applied overbroadly and ends up censoring large amounts of nonpornographic content, particularly sex education materials, LGBTQIA+ activism, and LGBTQIA+ community-building discourse. This overbroad censorship is especially prevalent once the rhetoric of children's unwanted exposure is used to drum up support for anti-porn regulation. Once this rhetorical trope is leveraged, it easily becomes possible for people to perceive the unwanted censorship of some nonpornographic material as immensely preferable to even a single piece of pornography slipping through and being seen by children.

In the Comstock era at the turn of the twentieth century, for instance, this overbroad application of obscenity regulations led to the censorship of art, literature, and sex education materials, such as those circulated by suffragettes like Elizabeth Cady Stanton, which provided information about reproductive health and birth control methods. In the middle of the twentieth century, the Supreme Court's efforts to channel "community standards" in regulating obscenity led to their censorship of LGBTQIA+ magazines, despite letting *Playboy* build a global pornographic empire. This same problem recurs today, except it is occurring at web scale, and the regulations are being produced secretly by internet platforms and adjudicated by opaque algorithms and inaccessible offshore temporary content moderation laborers who often render their decisions in a matter of seconds. Every post, picture, and link on the internet is now subject to this invisible censorship mechanism.

While this book will be primarily focused on the impacts that the overzealous censorship of sexual speech online has on LGBTQIA+ communities, decades of feminist scholarship tells us that heteronormativity's deep connections with patriarchy and misogyny mean that it is a detriment to straight people as well and one that is borne inordinately by women of color.[22] This line of argument is taken up most forcefully by Jane Ward in her recent

book *The Tragedy of Heterosexuality*, where she argues that heterosexuality is "erotically uninspired or coercive, given shape by the most predictable and punishing gender roles, emotionally scripted by decades of inane media and self-help projects, and outright illogical as a set of intimate relations anchored in a complaint-ridden swirl of desire and misogyny."[23] Ward argues that feminism and queer theory ought to look outward and examine more closely the tragedy of heterosexuality, evidenced by a long history of what she terms the "heterosexual repair industry." The contradictions and tensions in heterosexuality, which will be further examined below, have produced over a hundred years of industries—including eugenics, psychiatry, sexology, porno magazines, homosocial spaces (from fraternal clubs to video game squads), self-help books and seminars, hygiene products (soaping, douching, bleaching), the beauty industry, the fitness industry, seduction and relationship coaches, and so on—meant to "fix" straight people and deliver the promises of heterosexual, monogamous, marital bliss. In Ward's eyes, heterosexuals suffer from boredom, complaint, lack of imagination, the straight gaze and objectification, bad sex, and an obsession with genitals, all of which might be alleviated by queering straightness and introducing feminism to dissipate the rampant misogyny.[24]

In short, *everyone* suffers from the heteronormativity of the internet, a point that I will try to gesture toward throughout the book without losing the more precise focus on LGBTQIA+ communities. I think that this focus on a well-recognized category of marginalized identity that is already connected to broader activist networks is strategically useful, as it stands a better chance of leading to the mobilization of resistance against the internet's heteronormativity. Further, the legal recognition of sexuality (e.g., Title IX) as a protected identity class makes this a tactically strong point from which to attack content moderation online. Lastly, the case studies in the book most clearly highlight a trend toward anti-LGBTQIA+ prejudice in the operations of algorithms and content moderation online, despite the wider implications this has for cisgender heterosexual audiences.

All of these considerations are essential because there has been no large-scale study to this point on the impact of heteronormative content moderation online. Only a few pioneering journalists have kept any sort of record of the myriad people and pieces of their nonpornographic content that have been censored. I will rely on them heavily throughout the book to demonstrate that pornography is not all that is at stake

here. The internet itself is being policed by overbroad, heteronormative algorithms that are routinely censoring art, literature, and LGBTQIA+ content across the world. Most of the book will be dedicated to making this process more transparent, showing how everything from internet discourse writ large, to the coders at internet platforms, to the code itself, to the offshore content moderators have, intentionally or not, become party to globalizing this uniquely American, white, middle-class form of heteronormativity.

The first chapter will look at the current landscape of political activists focusing on censoring pornography, including, perhaps unexpectedly, the alt-right. I show how evangelical conservatives, anti-porn feminists, and the alt-right have become unlikely bedfellows in the war on pornography and demonstrate how their arguments against pornography are extremely heteronormative—and often misogynistic. This chapter's focus on the alt-right has the added benefit of contextualizing some of the discourse going on among the largely male, frequently libertarian-leaning coders responsible for producing the algorithms that police the internet.

The second chapter looks at the coders, code, and moderators that make web-scale censorship possible and demonstrates how each level of the apparatus, from coders to code to reviewers, works to reify heteronormativity. I analyze research into the culture and political leanings of the average Silicon Valley coder and contextualize it through a close reading of James Damore's infamous Google memo. I examine the image recognition algorithms that are used to automate content filters at web scale and demonstrate how heteronormativity is literally embedded at the foundation of their code, in their very data structures. And finally, I examine the work of offshore content moderators who are given heteronormative guidebooks, taught to deprioritize assessments of obscenity and focus instead on political speech, and given only a matter of seconds to decide whether content violates community standards surrounding sexual speech.

The third chapter focuses on the collateral damage from the ongoing war on porn. I look in detail at the censorship of LGBTQIA+ community resources, sex education materials, art, literature, and other forms of speech that flirt with the sexual or erotic but would rarely be categorized as pornography by today's standards in the United States. This chapter also examines the passage of the Stop Enabling Sex Traffickers Act (FOSTA-SESTA) by the US Congress in 2017, a purposefully overbroad regulation of internet

communications that has radically accelerated censorship efforts and has already had detrimental impacts for the LGBTQIA+ community.

The fourth chapter returns to the opening issue of pornography and examines its current political economy within the context of internet infrastructures. I show how the architecture of the web produces two different avenues for the heteronormalization of pornography: first, I show how Google SafeSearch structures web traffic even when it is turned off, channeling traffic to mainstream heteroporn and offering unique opportunities to large-scale pornographers to capture the majority of web traffic through confined search terms that are easy to optimize for; second, I show how the structure of porn platforms, such as tube sites (e.g., Pornhub, xHamster), reinforce heteronormativity through their data structures, particularly the keywords by which the site can be navigated, which tend to structure even amateur content uploaded to the site. The end result is that Pandora's box of porn ends up being more of a Sisyphean eternal return of the same boring old heteroporn.

Before moving on, however, it is worth getting clear about what exactly I mean by the word *heteronormativity* and the limitations of the book for fully addressing the ways that sexuality intersects with other logics of marginalization like race, class, ability, and nationality. Readers who feel like they have a strong handle on heteronormativity are welcome to jump right to the first chapter, but I think the term warrants deeper consideration. As I'll show, it is a nebulous concept, intentionally ambiguous, shot through with contradictions, and one that masquerades as a (scientifically legitimated) universal set of norms and morals despite actually being historically contextual. To pin it down, one has to analyze its essential links to a diverse set of concepts, including queerness, LGBTQIA+ sex acts, the closet, gender roles, reproductive sex, and the family, to name a few. The form of heteronormativity that is getting embedded into the very infrastructure of the internet is one that was developed by predominantly white, middle-class, ostensibly heterosexual Americans over the past 150 years or so. As such, the analysis that follows focuses specifically on the American iteration of heteronormativity.

WHAT EVEN IS HETERONORMATIVITY?

Heteronormativity has never been a stable construct in the United States. In fact, we might productively understand it as a purposefully vague concept

that uses its constantly shifting meanings to avoid ever being pinned down and rendered falsifiable. One of the most important components of heteronormativity is, thus, its capacity to engage in code switching. What I mean by this is that heteronormativity as a concept contains a number of ambiguities, sometimes even contradictions, that provide it with the flexibility to evade analysis and critique, particularly in nonspecialized public discourse like popular arguments, be they at the dinner table or in the comments section of an article posted online.

Take, for example, what I would argue is the foundational ambiguity of heteronormativity: Is sexuality the result of a procreative instinct or a libidinous drive toward pleasure? As Jonathan Kay has demonstrated at length in his book *The Invention of Heterosexuality*, the term *heterosexuality* has a history, and its emergence was tethered to navigating this particular ambiguity.[25] Prior to the 1890s, in the United States, sex was most frequently understood as an instinct to reproduce the species. The sexual ethic was primarily based on procreation. Masturbation, sodomy, and bestiality were banned not so much because they were less natural sexual desires but because they were nonprocreative. In fact, no sexual desire was considered pure or normal, as procreation was a religious and civic obligation for the colonists, not an outlet for seeking pleasure. As Katz writes, "In these colonies, erotic desire for members of a same sex was not constructed as deviant because erotic desire for a different sex was not construed as a norm. Even within marriage, no other-sex erotic object was completely legitimate, in and of itself."[26] Onanism, the spilling of seed outside of a fertile womb, was always-already deviant and had few gradations. Legal retributions, up to and including execution, were possible for sodomy, bestiality, and masturbation.[27] Thus, in this articulation, sexual desire is always a sin, an urge that needs to be controlled even within the confines of marriage and directed solely toward procreation.

At the turn of the twentieth century, this sexual ethic began to metamorphose as psychologists began analyzing human sexuality in greater detail. These psychologists began to understand sexuality as an innate—and thus *natural*—drive that was oriented as much or more toward achieving pleasure as toward procreation. The earliest known use of the term "heterosexual" was actually in reference to this form of sexual deviance—desiring male-female sex for its own sake. As psychologists continued to examine it, its connection to the procreative function came to be silent, left implicit to the concept, and the previously deviant impetus toward different-sex erotic pleasure came to

be emphasized and thus normalized. In a Faustian bargain, sexuality was liberated from its mooring to procreation but in exchange was tethered instead to a biologically essentialist drive toward male-female couplings.[28]

In tandem with this development of a biologically essentialized libido, the Victorians were exploring romantic love as a similar mechanism for reconceptualizing sexuality. While publicly reticent to speak on sexual matters, the Victorians privately explored different-sex erotics and their connections to romantic love.[29] This was echoed in America, where, as John D'Emilio and Estelle B. Freedman have shown, "Throughout much of the nineteenth century, the meaning of sexuality for white middle-class Americans balanced uncomfortably between reproductive moorings of the past and the romantic and erotic leanings of the present, between female control and male license, between private passion and public reticence."[30] This too became part of the Faustian bargain, as romantic love became an increasingly acceptable legitimator for different-sex erotic desire, provided its ultimate goal was monogamous marriage. We can see how deeply this prong of heteronormativity remains in contemporary ideas of polyamory, which is gaining increasing social acceptability by couching its ideas about nonmonogamous relationships within the language of romantic love, in contrast to "hookup culture." While I certainly do not mean to condescend to people working at a social frontier and experimenting with new social scripts for erotic and amorous relationships, I do think there is something telling about the focus on the latter term and the role that it plays in legitimating the movement.

Lastly, it is worth noting that this new version of heterosexuality that ambulated between procreative, libidinal/erotic, and amorous legitimations contained deep class antagonisms from its inception. It only emerged once the bourgeoisie felt secure in its social standing and sure that its new heterosexual discourse had the capacity to strongly distinguish itself from "the eroticism of the rich" and "the sensuality of the poor, the colored, and the foreign."[31] By internalizing the control of sexual desire within the confines of medical and psychological acceptability—in short, by maintaining heterosexual desire in private sex acts tending toward monogamous marriage—the middle class assured itself of its moral superiority, and it leveraged this superiority to establish external controls over the sexual practices of the working class and racialized others. It also established a safety valve for sexual desire, as libidinous middle-class men were frequently permitted transgressions with working-class and/or racialized women, another contradictory

gender-based double standard that shoots through heteronormativity as a concept.[32] As Katz writes, "The invention of heterosexuality publicly named, scientifically normalized, and ethically justified the middle-class practice of different-sex pleasure."[33] And it is worth keeping in mind that this justified pursuit of pleasure was in practice often limited to the middle class, even in the more permissive free love periods of the mid-twentieth century, as it required a socialization and style of living restricted to those with privilege. White working-class communities maintained more pronounced gender roles and earlier childbearing, and Black communities often maintained close kinship networks and faced economic instability. These factors limited the freedom for sexual experimentation that was enjoyed by the white middle class. Heteronormativity thus constitutes the attempt to universalize a white, middle-class sexual morality and is subsequently always permeated by class and racial tensions.

The largest category of difference that heteronormativity inflects is gender. It does so first through its deep entanglement with cisnormativity. Here anatomical sex is conflated with gender, and this slippage is leveraged to provide biological essentialism to gender roles. This is a tactic that the alt-right uses repeatedly, as we'll see in chapter 1, and one that gets embedded in platform algorithms and internet architecture, as we'll see in chapter 2. In fact, this cisnormative entanglement is so strong in many of the materials that I examine in the book that I repeatedly found it slipping into my own writing. Using the appropriate language while also accurately representing and analyzing cisnormative rhetoric, data categories, and company policies was a challenge I'm afraid I've inevitably failed at despite my best efforts and will rely on others to help correct. As we'll see in these cases, cisnormativity is often a bastion for heteronormativity. As Kristen Schilt and Laurel Westbrook have demonstrated, "doing gender in a way that does not reflect biological sex can be perceived as a threat to heterosexuality."[34]

Second, heteronormativity's obsession with gender at times makes it difficult to differentiate between gender and sexuality. This is because heteronormativity is definitionally tethered to the nuclear family and the gender roles it dictates. The family is a powerful and persistent force in American life because it is not simply a structure imposed from above or ideologically inculcated in an unwilling or unwitting population. Investing in the concept of marriage is a highly rational choice for the majority of the population because of the massive material and ideological privileges it grants to its

adherents, ranging from fiscal benefits (e.g., cohabitation or tax incentives), to promises of emotional security and care later in life, to the offer of a privileged site for rearing children. The family also offers a sense of "naturalness," including a set of social scripts that work as formulas for—and almost algorithms for automating—complex social interactions, such as dating, socializing, and procreating. The family is thus difficult to critique because it offers, though often fails to deliver, widely held social ideals like intimacy, commitment, nurturance, and collectivity.[35]

That said, it is a myth that marriage is a naturally occurring dynamic in society. First and foremost, like heterosexuality, the family is not a singular concept but instead varies widely in its definition and form across space and time. As Michael Anderson notes,

> The one unambiguous fact which has emerged in the last twenty years is that there can be no simple history of *the* Western family since the sixteenth century because there is not, nor ever has there been, a single family system. The West has always been characterized by a diversity of family forms, by diversity of family functions and by diversity in attitudes to family relationships not only over time but at any one point in time. There is, except at the most trivial level, no Western family type.[36]

What does seem common across this history is that the family is never actually defined by networks of kinship so much as it is determined politically and economically by the needs of the state and capital to reproduce the population and reinforce patriarchal authority.[37]

Jacques Donzelot has traced such a shift from governance issued from families to government *through the family*, demonstrating a shift from the patriarchy of the head of the family to a patriarchy of the state.[38] In this new structure, the dynamic articulation of the structure of the family is constantly modulated by the state to serve the interests of capital. The family is both the privileged social site and a "prisoner" of the state, being used to police sexuality, reproduction, education, the inculcation of ideology, and the general formation of good citizens. A huge portion of the family's function within the capitalist state is to reinforce gender norms, most notably because they offer a means through which unpaid care and domestic labor can be morally assigned to a portion of the population—namely women. Despite feminist victories in the twentieth century that, at least partially, granted women financial and sexual independence, this function is only amplified by the neoliberal turn.

The evacuation of state welfare responsibilities in the latter half of the twentieth century only amplified the need to extract unpaid care and domestic labor from the population. In short, as Barret and McIntosh note, "[I]f marriage is the basis of the family, then this supposedly individual and freely chosen form has a state instrument at its heart."[39] The family thus serves as a key site for the perpetuation of heteronormative ideology as administered by the state.

The reproduction of the working class has also historically involved a policing of sexuality. Friedrich Engels pointed out as early as the nineteenth century that it was no coincidence that monogamous marriage and prostitution became cultural staples in the same moment.[40] What we can take from this is that the internal structure of marriage shapes the kind of sexuality that can exist outside of marriage, and, as Barrett and McIntosh explain, marital monogamy is not the answer to the problem of sexuality but the cause of "deviant" or "abnormal" sexual behavior.[41] Much like proponents of Ptolemy's geocentric model of the solar system through the ages, proponents of marital, monogamous heterosexuality continually fail to realize that the starting point to their sexual schema is flawed. Instead, they continually create exceptions and carve-outs to explain the model's failure to map onto human desire. The majority of these exceptions and carve-outs were historically for male, heterosexual desire, such as the acceptance of male promiscuity and the maintenance of precarious female bodies through which they could sate their desires in excess of the opportunities offered through marriage. Though the twentieth century also saw some partial concessions to female, heterosexual desire, allowing for premarital sex but only within the confines of amorous relationships with the apparent promise of long-term monogamous viability. These concessions to female sexuality were always contradictorily coupled with a misogynistic backlash though; women who took advantage of them were labeled "sluts," unfit for male commitment and thus the financial and ideological benefits of monogamous marriage, and, paradoxically, women who abstained were labeled "prudes" or "bitches," not deserving the time or energy required to build the foundation for a monogamous marriage.

LGBTQIA+ sex acts have historically occurred at the limits of these exceptions and carve-outs, stretching the Ptolemaic model of heterosexuality to its limits, demonstrating its internal contradictions, and, thus, frequently triggering violent and reactionary policing from the state and its privileged mechanism of sexual power, the family. In a sort of détente, the state is willing to tolerate these acts so long as they remain silent or

invisible and in so doing alleviate the threat of exposing the contradictions of heteronormativity. "The closet" can be understood as the mechanism through which a space—a silent or invisible space, and thus a partial or nonspace—is produced at the myriad sites of these contradictions in heteronormativity that can capture, contain, alleviate, and thus nullify the threat of deviance and aberration. As Eve Sedgwick writes, "'Closetedness' itself is a performance initiated as such by the speech act of a silence—not a particular silence, but a silence that accrues particularity by fits and starts, in relation to the discourse that surrounds and differentially constitutes it."[42] Sedgwick has persuasively demonstrated how these silent and invisible spaces are just as essential to the structure of heteronormativity as are its more vocal and visible portions. Their silence and invisibility are foundational to the structure of heteronormativity. Similarly, the increasing silence and invisibility of LGBTQIA+ sexual expression online is emblematic of a digital closet and is foundational to a heteronormative internet.

We can see this more concretely when it comes to the problem that LGBTQIA+ communities face when trying to publicly organize movements based around acts that state power relegates to the closet. As Michael Warner and Lauren Berlant have shown, confining sexuality to the private sphere of the bedroom, and LGBTQIA+ sex acts to the closet, is always at odds with civil rights activism.[43] This is because LGBTQIA+ individuals don't have the luxury of confining their sex acts to the bedroom. Instead, they must don the identity that comes with those sex acts, even when they are out in public. Here it is impossible to confine sex to the bedroom, to keep it silent and invisible, because LGBTQIA+ sex acts form the keystone to cultures, communities, and identities that definitionally exceed the confines of the closet. Nancy Fraser has similarly argued that when sex acts are the organizing principles of entire identity formations, then barring them from the public sphere and treating them as purely matters of private concern effectively brackets sexual politics from democratic mechanisms and procedures.[44]

Gayle Rubin has forcefully argued that sex is by default considered to be a "dangerous, destructive, negative force."[45] The United States reverses its famous juridical dictum when it comes to sex: all erotic behavior is considered sinful until proven innocent. For Rubin, this is a remnant of Christian religiosity that makes sex more meaningful ethically, culturally, and politically than it needs to be. As we have seen, at the turn of the twentieth

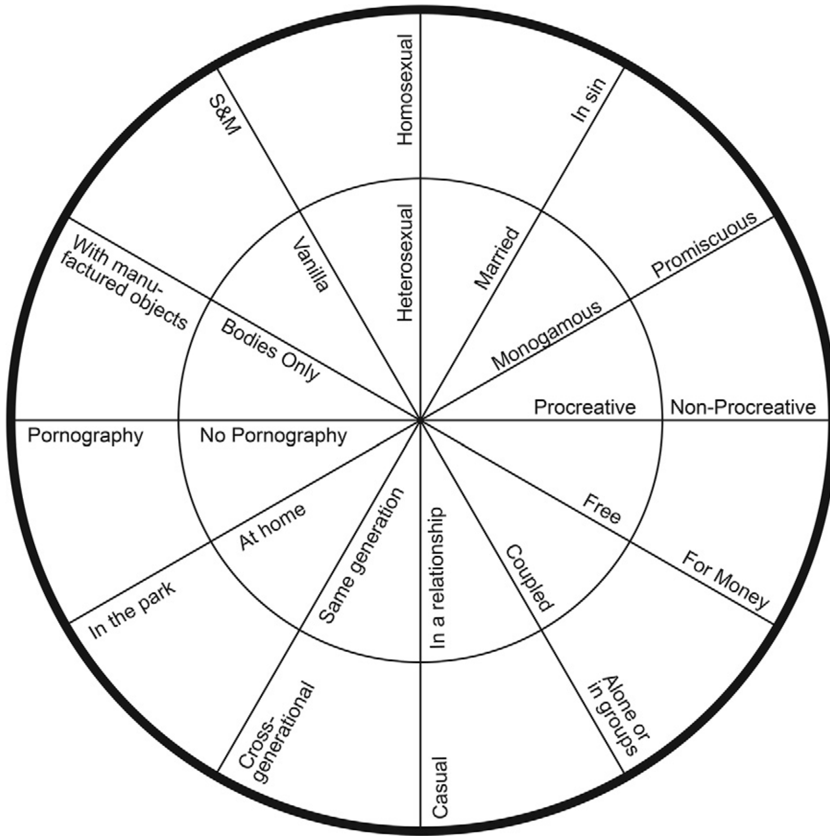

Figure 0.1
Gayle Rubin's Charmed Circle and the Outer Limits. *Source:* Gayle Rubin, "Thinking Sex: Notes for a Radical Theory of the Politics of Sexuality," in *Pleasure and Danger: Exploring Female Sexuality*, ed. Carole S. Vance (New York: Routledge, 1984), 281.

century, the proof of innocence shifted from a Christian imperative toward procreation to a scientific and medical imperative toward healthy outlets for the libido. This paradoxical shift brought with it an increase in the number of categories used to describe sexual misconduct, which Rubin visualizes through her diagram of the charmed circle and the outer limits (see figure 0.1). The charmed circle consists of several descriptors of sex acts that have frequently been understood as "good," "normal," "natural," and "blessed." The outer limit consists of descriptors of sex acts that have frequently been understood as "bad," "abnormal," "unnatural," and "damned."

Rubin's concept of the charmed circle is certainly dated and could benefit from several additions, such as one's gender identity conforming to versus differing from anatomical sex on state identification documents. That said, it can help us wrap our heads around the slippery concept of "queerness" and the paradoxical nature of heteronormativity. The paradox of heterosexuality is that it has conflicting definitions. On the one hand, heterosexual sex acts seem to be definitionally dominated by the anatomical sex of the people engaging in them—gay and lesbian sex acts are categorically different from straight sex acts, regardless of how kinky those straight sex acts are. On the other hand, one can deviate from heteronormativity even in anatomically male/female sex acts in several ways, like, for instance, using sex toys, engaging in BDSM, having cross-generational love affairs, or having group sex. For an example of this paradox in action, take, for instance, the fetish called *vore*, which most often involves the simulation of men being eaten by women (or a female playing the role of an imaginary being). Vore has a small but dedicated group of pornographers producing content readily available if one knows the appropriate keyword to search with. The oddness of heteronormativity is that it positions vore as being only different in degree from heterosexuality, whereas missionary sex acts between people in a long-term monogamous relationship who happen to have the same genitalia are positioned as being different in kind. Yet somehow at the very same time, it can condemn vore as an aberration.

The utility of the concept of queerness, at least for the purposes of this book, then is that it functions as an umbrella term for capturing all of the types of sex acts that are positioned as deviations from heteronormativity without equating the degree or the stakes of their deviation. It is important to note here that the idea that homosexuality differs in kind from heterosexuality, while vore differs only in degree, in combination with the publicly identifiable performative dimensions of LGBTQIA+ identities, leads to different stakes for gay, lesbian, or trans people, for instance, than for vore fetishists. In essence, they face different degrees, and maybe different kinds, of marginalization, and the former have all too real bodily, psychological, familial, and financial risks associated with their identities that the latter might not. Queerness is thus a slippery concept because it is articulated in response to an irresolvable paradox at the heart of heteronormativity. It at the same time must capture all forms of deviation while preserving their unique differences and stakes.

It is impossible to neatly tie up the proliferating contradictions contained within heteronormativity or the dynamic forms it takes across space and time. I hope that this short overview of some of the forms it has taken and contradictions it has contained might be indicative, if not wholly representative of, the current functions and stakes of heteronormativity in American society. I also hope to have demonstrated the essential connections between the concept of heteronormativity and its attendant phenomena, like reproduction and the family, gender roles, LGBTQIA+ sex acts and the closet, and queerness. As we will see throughout the following chapters, the emergence of porn filters is deeply tethered to the perpetuation of heteronormativity and has dire stakes for the future of LGBTQIA+ communities and sexual expression. With this necessarily partial and hopelessly imperfect articulation, I would now like to turn to one last matter of concern, which is the role that feminism and intersectionality will play in shaping this book, as well as its limitations for fully addressing all of their attendant concerns.

SEX-CRITICAL FEMINISM AND INTERSECTIONALITY

Locating one's work within feminist scholarship on pornography is difficult, as feminists have had a sustained and multifaceted conversation on pornography for the past fifty years. Chief among these difficulties is navigating between a sex-negative carceral feminism and a sex-positive postfeminism, both of which fail to address the material conditions of sex work or provide adequate social justice frameworks for sex workers. The sex-negative, carceral, and/or anti-pornography varieties of feminism draw on what Melissa Gira Grant describes as "the prostitute imaginary."[46] This imaginary is one in which the sex worker is articulated as "other," full of sexual excess, loss of social standing, and the possibility of contagion. The sex worker is both a structurally necessary outlet for desire and a dangerous temptation. In their book *Revolting Prostitutes*, Juno Mac and Molly Smith explain the prostitute imaginary through the historical social understanding of the vagina:

> Ugly, stretched, odorous, unclean, potentially infected, desirable, mysterious, tantalising—the patriarchy's ambivalence towards vaginas is well established and has a lot in common with attitudes around sex work. On the one hand, the lure of the vagina is a threat; it's seen as a place where a penis might risk encountering the traces of another man or a full set of gnashing teeth. At the same time, it's viewed

> as an inherently submissive body part that must be "broken in" to bring about sexual maturity. The idea of the vagina as fundamentally compromised or pitiful is helped along in part by a longstanding feminist perception of the penetrative sexual act as indicative of subjugation.[47]

As Mac and Smith note, this conceptualization is interlinked with heteronormative anxieties about trans people and gay men. It connects to heteronormative anxieties over the status of trans people's genitals, their ability to "pass," and, subsequently, their capacity to "trick" cisgendered heteronormative people into having sex with them. As Leo Bersani notes, it also connects to heteronormative anxieties over gay men, who might "turn" heterosexual men gay and threaten contagion through HIV.[48]

This formulation of feminism often uses humiliating and misogynist language to describe sex workers in an attempt to differentiate "decent," "respectable," "independent" women from "sluts," "whores," and "holes."[49] As Jo Doezema explains, "What [these] feminists most want of sex workers is that they close their holes—shut their mouths, cross their legs—to prevent the taking in and spilling out of substances and words they find noxious."[50] As we'll see in the following chapter, in the worst instances, this dehumanization of sex workers leads to carceral feminism, which allies itself with Christian conservative anti-pornography crusaders in its focus on criminal justice reform to address the ills of sex work and pornography. This is often framed in the lens of "penal welfare" or "therapeutic policing," whereby police intervention is considered necessary to dislodge sex workers from their environments, leverage the criminal justice system to push them into rehabilitative services, and make deviant lifestyles so uncomfortable that people will accept state interventions.[51] Carceral feminism joins Christian conservatism in leveraging a focus on human trafficking—particularly of children—to rhetorically legitimate its sex-negative, anti-pornography, carceral position.

The predominant alternative to this approach is often formulated along the lines of what many feminist scholars have described as "postfeminism," which works to transcend feminism, positioning it as a mission accomplished and envisioning a subsequent world in which women are empowered to act as men's equals.[52] As Sarah Banet-Weiser notes, postfeminism understands this empowerment to act as men's equals in problematic ways, stressing things like "leaning in," being a "girl boss," and embracing and expressing female sexual desires, all of which often get channeled through structural patriarchy and end

up looking a lot less like what feminists had envisioned empowerment to look like.[53] Their corollary in the sex work community is those that stress the value of sex work, describing it as enjoyable, rewarding, freely chosen by empowered and autonomous actors. In doing so, they attempt to make sex work look less like work and more like the type of sex that is more common and socially acceptable.[54] This presents inherent problems though, as it tends to equate the desire of the worker and the client, eliding the commercial interaction in such a way that can downplay the sex worker's needs as, well, a *worker*.

What all these forms of feminism have in common is that they tend to reinforce rather than destroy structural patriarchy, translating feminist demands into a palatable and defanged heteropatriarchal discourse. Further, by envisioning empowerment through this patriarchal lens and achieving partial empowerment for *some*, they end up losing sight of allies left behind—most frequently Black and Indigenous people of color (BIPOC), the LGBTQIA+ community, the disabled, the working class, and those from the Third World or Global South. As Mac and Smith note, "Sex positive sex work politics are useful for the [postfeminists] who advocate them *and* for carceral feminists who push for criminalization. These groups *share an interest* in glossing over the material conditions of sex workers' workplaces."[55]

In this book, I hope to avoid identifying with either pole of this unfortunate dichotomy, though the range of sources I draw on, voices that I incorporate, and issues that I touch on may make this commitment difficult to track throughout the book. I'd like then to set out a few parameters for the project that might help keep things clear and that I will try to remain consistent on and refer back to throughout the book. When it comes to sex work, I identify with anti-prostitution and sex-critical feminists in their commitment to ameliorating the material conditions that leave people no option other than sex work *and* that make sex work bad work (lack of access to health care; inability to benefit from labor laws and regulations; exposure to violence, danger, and trauma; social stigmatization; and marginalization, and so on). Highlighting an anti-prostitution framework is complicated by the digital nature of much of my investigation, as much less of the feminist discourse and empirical evidence deals with the peculiarities of sex work online. My aim in regard to online sex work is to make some of the material and structural components that undergird it transparent so that sex workers and their allies might better critique internet platforms and organize and advocate for change.

The primary focus of the book, however, is not on sex work but instead on the broader infrastructure of the internet—from misogynist and heteronormative discourses to the coding labor, algorithms, and content moderation policies that govern what is visible and invisible online to the impact that this infrastructure has on *both* sex workers *and* the broader LGBTQIA+ community online. Much of the book focuses on advocating that internet service providers (ISPs) and social media platforms stop censoring LGBTQIA+ speech online that few would consider pornographic. However, in places—particularly chapter 4—that do look at pornography, I try to strike a balance between the seemingly contradictory advocacy for more porn *and* less porn. This position is rooted in the assumption that porn is not going anywhere; it is here to stay. As such, I'm advocating for more *varieties* of pornography, rather than more total content, so that the porn that exists and is readily available to people might be more diverse, representative, and imaginative, allowing people more freedom to explore their erotic desires. On the other hand, I'm advocating for *fewer* people to face the negative ramifications of the mainstream heteroporn industry and online sex work, whether this is achieved by democratizing the ownership, profits, and production of porn *or* by providing a social welfare and social justice framework robust enough that online sex work is truly optional. This broader focus on LGBTQIA+ censorship online tends to highlight the former of these commitments, often tempting me to celebrate attempts to democratize and diversify pornography online. That said, I remain equally committed to the latter position and hope to highlight the material conditions of online sex work as well and some of the steps we might take to make it more just, equitable, and optional.

The overbroad censorship of sexual speech online has amplified consequences for people that face intersectional forms of marginalization—in the United States, the most predominant of these is race. In this book, race primarily makes an appearance through intersectional analyses of who bears the weight of overzealous censorship most heavily. In the many, many posts about and reports of sexual speech being censored online that I came across, race was rarely mentioned as a factor and was difficult to disentangle in the case studies I performed. While I did find evidence of racial bias in some of the datasets I looked at, I had trouble making a direct and empirical connection to the censorship of sexual speech—and LGBTQIA+ content in particular—that I was tracing for the book.[56] Instead, I mostly found race

at the margins in my account, as an intersectional factor that, along with class, nationality, ability, and transgender identity, caused certain people to be inordinately impacted by LGBTQIA+ censorship online. This censorship is not a weight born equally across the LGBTQIA+ community and is connected to a much longer history of policing the sexuality of working-class, racialized, and otherwise marginalized populations, as I've shown above.

While I will try to gesture toward these intersectional concerns throughout the book, the extent of the new ground that needs to be covered and the intent to make a convincing argument that heteronormativity is getting embedded in the infrastructure of the internet will inevitably at points occlude these intersectional concerns and prevent me from doing them full justice. As such, it is my hope that I can refer readers to scholars who highlight these other perspectives in their work and that readers might look at their work alongside this book and find ways to correct and expand my analyses. Scholars like Charlton D. McIlwain and André Brock have shown that BIPOC communities, and African Americans in particular, have been early and influential adopters of internet and computer technologies.[57] Their work stands in contrast to dominant narratives about the "digital divide," the lack of technological literacy in BIPOC communities, and assumptions that the internet is a predominantly white space. Scholars like Janet Abbate, Mar Hicks, and Nathan Ensmenger have produced similar work in regard to gender.[58] I've found little similar scholarship problematizing these narratives when it comes to class and nationality but imagine similar work could be done productively on these topics.

Scholars like Joy Buolamwini, Timnit Gebru, Ruha Benjamin, and Safiya Noble have worked to show how the logic of racialization is at the center of many algorithms, datasets, interfaces, and platforms that make up the internet and our everyday computational environment. Buolamwini and Gebru have most notably demonstrated empirically that racial and gender bias are deeply embedded in many of our most prominent facial recognition algorithms.[59] Ruha Benjamin coined the term "the new Jim Code" to describe the ways in which computer and internet technologies are producing a new form of scientific racism, reflecting and reproducing existing inequities under the veneer of seemingly more objective and progressive technological apparatuses—specifically machine learning and predictive analytics.[60] Safiya Noble has coined the term "technological redlining" to similarly describe

the ways in which algorithms "reinforce oppressive social relationships and enact new modes of racial profiling."[61] She demonstrates how Google Search engages in technological redlining, shaping the experience and representation of race online in ways that reinforce the oppression of Black people. Scholars like Elizabeth Ellcessor have made similar arguments about disability, demonstrating the ways in which internet technologies reinforce the ableist architecture of everyday life by not adequately addressing accessibility concerns and connected this to disabled representation online.[62] Again, to my knowledge, there is less robust scholarly discourse on similar issues vis-à-vis class and nationality online. Throughout this book, I will make similar arguments about the ways in which gender norms and heteronormativity are reinforced by algorithms and datasets online. By reading my work alongside these, and many other, important contributions from critical race scholars, my hope is that we might lay the foundation for a more fully intersectional analysis of normativity, marginalization, and power as it operates in our digitally networked world.