

INTRODUCTION

POLITICS AND POSSIBILITY

A Queer Feminist Introduction to Monogamy

The dyad, for so long opposite sex and now increasingly also same sex, is portrayed as the fundamental unit of love and family.

—**The Critical Polyamorist, “Couple-Centricity, Polyamory and Colonialism” (2014)**

The family is the best way to advance capitalism, as the base unit through which capitalism distributes benefits. Through our reliance on the marital family structure . . . we allow the state to mandate that only some relationships and some forms of social networks count.

—**Yasmin Nair, “Against Equality, Against Marriage” (2010)**

So, nature is not a physical place to which one can go, nor a treasure to fence in or bank, nor an essence to be saved or violated. Nature is not hidden and so does not need to be unveiled. Nature is not a text to be read in the codes of mathematics and biomedicine. It is not the “other” who offers origin, replenishment, and service. Neither mother, nurse, nor slave, nature is not matrix, resource, or tool for the reproduction of man. . . . Nature is a topic of public discourse on which much turns, even the earth.

—**Donna Haraway, “The Promises of Monsters” (1992)**

“Creationists and evolutionists don’t agree on much, but they both believe that monogamy is the most natural form of reproduction for the human species.” In this opening line of an op-ed published in the fall of 2012, legal historian John Witte Jr. named a Christian and (neo)Darwinian consensus on monogamy’s naturalness.¹ His remarks suggest that they arrived at this conclusion

independently and corroborate one another only due to the facticity of the claim. Just weeks beforehand, Missouri congressman Todd Akin had been met with a firestorm of bipartisan attack for being “unscientific” when he declared that a woman can’t get pregnant if she’s raped, because her body “has ways of shutting that whole thing down.”² The assumption that the link between monogamy and reproduction is human nature, according not just to God but also to *evolution*, is at the heart of Akin’s ill-considered speculation about the womb’s capacity to recognize rape-sperm.³ If indeed we are here to reproduce in the bonds of coupledness, it stands to reason that bodies have mechanisms for ensuring that destiny. The entrenched scientific naturalization of dyadic family structures is deeply implicated in antifeminist sexual politics. It is also ubiquitous, as my epigraphs from *The Critical Polyamorist* and Yasmin Nair suggest, and informs most research on human sexuality. As Avery Gordon reminds us, if we are to imagine living elsewhere, we must know where we live.⁴ We must then understand the politics of pervasive assumptions about human nature and coupling. Nature is, as Donna Haraway so eloquently instructs, a discourse on which so much turns, including possibilities for other worlds. Refiguring monogamy’s nature is the work of this book.

This book intervenes in assumptions about human nature and biology that underlie discourses that reinforce monogamy’s compulsory status and the framing and practice of alternatives in the contemporary United States. Attempts to imagine human nature as nonmonogamous, however marginalized, often reproduce the logics underlying monogamy’s naturalization: that we are fundamentally sexual beings, that sexuality is indeed something discrete and knowable, and that the structuring of human relationships and society around sexuality is natural. The book demands a critical reorientation toward the monogamy question in the natural sciences, social sciences, and humanities. It offers a radically interdisciplinary exploration of the concept of monogamy in U.S. science and culture, propelled by queer feminist desires for new modes of conceptualization and new forms of belonging.

I take those concepts and forms as imbricated with one another in ways that make disciplinary ways of knowing themselves an object of critical inquiry. This book borrows from feminist and queer theory, the natural sciences, philosophy, anthropology of science, critical science studies, history, and literary and cultural studies to explore monogamy’s meanings and the materiality to which they are attributed as *co-constituted*. Through a genealogy of monogamy as a bioscientific object, ethnographic fieldwork in a neuroscience laboratory, and critical feminist readings of documents from genomics to com-

ics, I show how challenging the lens through which human nature is seen as monogamous or nonmonogamous forces us to reconsider our investments in coupling and in disciplinary notions of biological bodies.

Through its analyses of the limitations and possibilities of naturalizing and denaturalizing queer feminist challenges to monogamy, the book introduces a new set of questions: What resources might we cull for thinking beyond the nature/culture binary? What modes of conceptualization might enable new forms we cannot yet imagine? What approaches might enable us to hold the politics of science and the possibilities of biology in the same frame, such that our new conceptions of materiality reflect the breadth of feminist and other contributions to knowing bodies? Reading early twentieth-century sexology, contemporary science journals, news journalism, polyamory literature, lesbian comics, and theory as sites of knowledge about bodies, the book proceeds from the insight that knowledge and power are not only always enmeshed with one another but also always implicated in possibilities for new becomings. That is to say, *living elsewhere* and *becoming otherwise* are entangled processes. The politics of science and the possibilities of biology are not then separate sets of concerns, but questions we must work to integrate.

The naturalness of monogamy—for individuals, groups, or species—is persistently posed as a “true” or “false” question: are we or are we not wired for monogamy? I reframe the question, asking instead, what is the relationship between how we imagine social belonging and how we understand human nature? I argue that to imagine how we relate to one another differently is to open up new possibilities for how we understand what we are biologically. Narratives in which humans are imagined as complementary sexually dimorphic populations made to pair off are in fact at the heart of neo-Darwinian frameworks that shape how we understand not only relating but also biology and behavior in general.⁵ Diverse claims about the human as a monogamous species—a species that pairs off to rear its young—establish tight relationships between sexual desire, reproduction, and parenting. In a context in which the heterosexual, reproductive, nuclear family is understood as the building block of a culture and economic system that seem inevitable, these claims “make sense.” They have certainly not, however, gone unchallenged. Claims that the human is *not* a monogamous species, that the cultural ideal of monogamy is a distortion rather than an expression of our true nature, proliferate. For decades feminist science studies scholars have shown us that science is not a mirror held up to nature but rather processes of knowledge production that reflect and reinforce political and cultural norms.⁶ Contestations in scientific narra-

tives are conflicts in culture. In the chapters that follow I uncover assumptions about biology, sexuality, difference, and belonging as the shared conditions of intelligibility for these seemingly antagonistic stories about monogamy.

When we refer to monogamy, we refer to phenomena—sexual fidelity, the ideal of coupling, pair bond formation—made intelligible through various disciplinary and disciplining modalities. Monogamy is not *either* biological or cultural and historical; neither is it simply *both*. We live in what Donna Haraway has called a “naturecultural” world where what we *know* and what is are intimately enmeshed and co-constituted. Feminist engagements with embodiment as a naturecultural or material-discursive phenomenon have radical potential for transforming science and the worlds it helps materialize. I ground the book in this conception of matter as powerful, meaningful, and always political, by integrating *critical engagement* with the knowing that precedes us with attention to the *materiality* those disciplinary knowledges purport to explain in often startlingly unimaginative ways.

Theorizing Compulsory Monogamy

Historically, feminists have had a vexed relationship with monogamy, from debates over polygamy and patriarchal marriage in feminist movements of the late nineteenth century to contemporary debates over monogamy, polygamy, and polyamory.⁷ An exciting and undertheorized body of feminist writing on monogamy has sought to extend earlier feminist challenges to naturalizing assumptions about sexuality, bonding, and forms of belonging. Adrienne Rich’s critique of compulsory heterosexuality in her seminal essay “Compulsory Heterosexuality and Lesbian Existence” is a paradigmatic example of those early challenges to the naturalized ideal of heterosexual marriage.⁸ In her essay Rich argued that rather than being natural or innate, heterosexuality is naturalized by making alternatives to it invisible. Over two decades later, contemporary feminists critical of monogamy have drawn on Rich’s strategy to make both heterosexuality and monogamy visible as culturally entrenched norms. Elizabeth Emens’s groundbreaking essay “Monogamy’s Law: Compulsory Monogamy and Polyamorous Existence” is a particularly compelling example of this later generation of feminist work. In “Monogamy’s Law,” Emens argues that the “twoness” requirement of marriage is as deeply embedded in U.S. culture and law as the “different sex requirement.”⁹ Rich articulated heterosexuality as a problem for feminists by arguing that it perpetuates the social and economic privilege of men and separates women from one another. Feminist

critics of monogamy have similarly put monogamy on the map for feminism. These thinkers have passionately articulated the asymmetrical expectations and costs of monogamy for women and men and critiqued constructions of women as property.¹⁰ They have explained how overinvestment in one person can make it difficult to leave an unhappy relationship and can contribute to the devaluation of friendships and communities.¹¹ Others have written about monogamy vis-à-vis bisexuality, trans, and asexuality studies. Collectively, these thinkers have made a powerful case for understanding monogamy as compulsory and compulsory monogamy as a problem for feminism.

These broad and diverse feminist engagements with monogamy defy easy categorization. It is tempting to try to break the literature down into (Marxist) materialist, psychoanalytic, and philosophical perspectives. However, while certain authors have various commitments to these and other primary disciplines, most of the analyses are interdisciplinary.¹² And although the literature spans decades, it cannot readily be organized chronologically. It could be argued that the earliest critiques came out of middle-class straight women's dissatisfaction with being trapped in patriarchal marriages that left them isolated and dependent while their husbands worked, and that later critiques came out of a succession of sexual liberation and identity movements. The former has been more or less subsumed into a reductive narrative about second wave feminism's critique of patriarchy.¹³ Meanwhile the latter—especially queer critiques of the reproductive family and social science research on gay male dating and social movements—has received far more attention as a locus of resistance to compulsory monogamy.¹⁴ This schema oversimplifies the deep interconnectedness of straight and queer feminist critiques of monogamy, ignoring the ways lesbianism as a way of life was explored as an alternative to straight monogamous marriage and how both heterosexual and same-sex marriage remain important in feminist critiques of monogamy.¹⁵

I would like to reclaim here a critical feminist response to monogamy as a queer feminist legacy. In so doing, I organize my discussion primarily around feminist concerns with monogamy's relationship to compulsory hetero/sexuality and its institutionalization in marriage. I end this section with a briefer discussion of feminist accounts of the roles of homophobia, biphobia, and transphobia in maintaining monogamy as “the only way.”¹⁶

Feminists concerned with challenging or transforming the institution of marriage have had to look at monogamy. Since the personal became political, marriage has been a problem at the center of the project of creating new relationships and types of social and political organization. In the original *Our*

Right to Love: A Lesbian Resource Book (1978), one contributor described the centrality of monogamy to “the problem” thus: “One of the most significant rules imposed on this relationship [marriage] is that of monogamy, an extremely well-entrenched code, completely supported by law, religion, and custom. Upon this framework, taught by parents, schools, churches, synagogues, the law, medicine, and reinforced by the media, women and men are expected to build their lives.”¹⁷ As many have noted, this code serves patriarchy, literally, by allowing patrilineage.¹⁸ If a woman has more than one (male) partner, paternity is uncertain.¹⁹ In the context of little or no public support, being able to make formal and informal financial demands of “fathers” has been important for mothers. Many have argued that earning potential and economic vulnerability in general are key to the imperative for women to marry and thus to understanding their investments in monogamy.²⁰

Given these conditions, monogamy “promotes the practice of women seeing each other as property.”²¹ As one critic concisely put it: “Both *monogamy* and *non-monogamy* name heteropatriarchal institutions within which the only important information is: *how many women can a man legitimately own?*”²² Indeed adultery laws have historically applied only to women’s extramarital sexual relations, not men’s, and “husband-swapping” was never a term with wide currency.²³ Women belong to men, while the reverse is not (with some notable exceptions) true. These practices are often reinforced by gendered constructions of desire: while men are said to have “drives,” discourse around women’s sexuality is centered on notions of romantic love and belonging, to which monogamy is central.²⁴

The security that monogamy offers is not only economic but is linked to the need for other types of protection. Many have pointed out implicit and explicit links between monogamy and rape culture. Girls are inculcated with fear from the time they are quite young and learn that part of being sexually responsible is learning where to go, when, and with whom: how to avoid rape.²⁵ The protection of a man, from both physical assault and damage to one’s reputation, thus becomes highly valued: “By allowing one man full access to her body, a woman can obtain his protection from other men.”²⁶ Offering the protection of a partner as an alternative to control over one’s own body and sexuality, “monogamy becomes a central element in sexual power relations.”²⁷ Many have argued that for young girls and grown women alike, the most efficient way to negotiate the ever-present risks associated with being seen as promiscuous and/or a lesbian is to “settle down” with one boy or man.²⁸ Monogamy,

then, though it is repeatedly left unsaid, is an absolutely central feature of femininity. Compulsory monogamy is thus deeply raced and classed, as it is the subject most estranged from normative femininity's white and middle-class coding, most vulnerable to violence, and thus most in need of monogamy's protection.²⁹

If monogamy is central to femininity, another central concern of especially lesbian feminist critique is the ways men have benefited from monogamy to women's collective detriment.³⁰ Athena Tsoulis articulates the gendered power dynamics inherent in the rhetoric of romantic love: "Monogamous love, eulogized in our society, is the tool by which women are controlled. The familiar idealised pattern of falling in love and living with the man of our dreams for ever and ever (we hope) has infiltrated our thinking. It is no accident that 'love is blind' and leads women into an irrational loss of control. It leads us to *making men the centre of our world, re-directing our energies and severing ties with others* in an all-consuming fashion."³¹ According to this view, the romanticization of exclusivity and the fantasy that there is one person "out there" who will fulfill most if not all of our needs undermines the importance of women's relationships with one another and depoliticizes their shared interests by individualizing them. Women's overinvestment in a single relationship, emotionally and in terms of their labor, typically works to men's advantage, providing them with the support and free time to focus energies on career, personal growth, and/or other relationships.³² This "overinvestment" results in women's constrained ability to "develop other parts of ourselves" and often makes leaving an abusive or unfulfilling relationship extremely difficult.³³

Since at least the 1990s, feminists concerned with subjectivity have moved beyond foci on safety and economics to consider various psychosocial investments in monogamy. Christine Overall, for example, describes women's often naturalized investments in monogamy in terms of identity formation. She argues that women, more than men, are encouraged to construct their identities relationally and that "because in Western culture sexual relating is defined as the ultimate form of intimacy, the result in women's romantic/sexual relationships is often an expansion of the sense of self to include those with whom they have sexual relationships."³⁴ This pressure is reinforced, she argues, "by the definition of the heterosexual couple as the building block of the culture."³⁵ Thus a woman is likely to experience her partner having a new sexual partner as more threatening than a new friend, hobby, or other commitment (Overall uses vegetarianism as an example), which may also take up a partner's time

and energy. One partner having a new sexual partner forces what Overall calls “the monogamous partner” to expand her realm of intimacy and may thus be experienced as violent.³⁶ Hence women’s greater investment in monogamy.

The reification of sex as the most important kind of relating underlies this overinvestment. Queer feminists have critiqued monogamy for its privileging of sexual desire as a basis for structuring relationships and have sought to challenge the designation of particular types of relationships as distinct and hierarchically organized. Becky Rosa explains: “For monogamy to exist there needs to be a division between sexual/romantic and non-sexual love, with the former prioritized over the latter.”³⁷ Challenging this hierarchy inherent in the ideal of monogamy can lead to the reevaluation of friendship and at the same time challenge what Rosa refers to as “compulsory sexuality,” that is, the way sex is seen as essential to healthy adulthood, romantic love, and future-oriented relationships.³⁸ Sociologist Kristin Scherrer argues along similar lines that monogamy is such a sex-centric concept that asexual long-term relationships become difficult to imagine within its logics.³⁹ What counts as a monogamous relationship, in terms of what partners share (and do not), both with one another *and* with other people, is complicated by asexuality in ways that render monogamy’s conceptual limitations quite pointedly problematic. Asexual relationship paradigms posit distinctions between romantic/aromantic and sexual/asexual. That is to say, a romantic partnership may be an explicitly nonsexual one. In this way, asexuality poses a problem not only for monogamy’s compulsory sexuality but also for its conflation of sex and romance. The special status of sex, implicit in discourses of both monogamy and nonmonogamy, will emerge as a central preoccupation of this book.⁴⁰

Some feminist critics of monogamy have extended concerns with the coformation of monogamy and heteronormativity to ways homophobia, biphobia, and transphobia function to reinforce compulsory monogamy. Some have argued that in a homophobic society wherein lesbians are seen as already transgressing norms of femininity, they are under greater pressure to be monogamous.⁴¹ Possibilities for fulfilling relationships seem to be limited by the pervasiveness of this ideal: “We [lesbians] want to honor each other, and to do that we believe we need to use the model of the heterosexual imperative. That is the married, monogamous one.”⁴² Gay men are not immune to these pressures and are often under intense pressure to respond to gendered assumptions about sexuality that presume first that all gay men are male, second that relationships among males are necessarily nonmonogamous, and finally

that male libido is particularly dangerous among gay men, where it leads to sex considered high risk.⁴³

Bisexuality studies of the 1990s was an important site for the theorization of compulsory monogamy and its relationship to control of women's sexuality. Many theorists of bisexuality have argued that compulsory monogamy is exacerbated for women by "biphobia" in both lesbian and heterosexual communities. Stereotypes of bisexuals as nonmonogamous, or as incapable of monogamy, have created an increased pressure for them to *be* monogamous, to prove that they *can*.⁴⁴ In her explanation of this dynamic, Murray explores the concept of "safe" people—those who are explicitly off-limits sexually. Due to pervasive assumptions about the nature of sexual desire, it is assumed that sexual feelings are either absent or present depending on the location of this safety net. For example, straight men and women are often thought incapable of being "just friends," whereas gay men and straight women are assumed to make the best of friends. Another assumption embedded in these stereotypes is that sexual feelings get in the way of friendship. This makes bisexuals dangerous, as they are assumed to be attracted to everyone. It seems that the assumption with nonmonogamous bisexuals (real or imagined) is that no one is out of bounds. The object of desire is not understood simply as "*anything* that moves," as one bisexual magazine's title put it, but *everything*! The nonmonogamous bisexual is never "safe," even when partnered. Some celebrate this as a radical challenge to the "love laws"; others are concerned with the ways it can engender "polyphobia" and reinforce compulsory sexuality.⁴⁵ Because sexuality is often inferred on the basis of the gender of one's partner, a monogamous bisexual woman is likely to be read as either a lesbian or as straight.⁴⁶ As Hemmings points out, "it is a present with only one lover of only one sex . . . that poses the most problems for a bisexual identity."⁴⁷ The conflation of bisexuality and nonmonogamy in the popular imagination may then be attributed as much to the assumption that all desire must be embodied or actualized as to stereotypes of bisexuals as immature or sexually voracious.⁴⁸

While the connection between nonmonogamies and trans identities is not so deeply entrenched, in "Trans and Non-monogamies" Christina Richards illuminated trans parallels to these gay and bisexual critiques. She draws on survey data to show that some trans-identified folks find the freedom to relate sexually and romantically with more than one person validating of the complexity of their gender identities. She also notes the risk of this insight serving to further pathologize trans folks.⁴⁹ Her findings reveal the extent to which a monogamous model of relating presumes not only the complementarity of

two dimorphic sexes but also, even in queer reconfigurations, the stability of gender and sexuality over time. Thus compulsory monogamy reflects and reinforces not only sexist schemas of heteronormative relating but also deep investments in the stability of gender itself.

This scholarship renders monogamy visible as a powerfully entrenched norm and makes it an object of critical inquiry. Working from these compelling queer feminist analyses, this book asks what else is at stake in the way we define, value, and resist compulsory monogamy. Monogamy's place in the production of normal and abnormal bodies is among my central concerns in the book. Marriage has been deeply implicated in regulatory schemas of race and nation,⁵⁰ and monogamy must be understood within this frame. This insight informs my decision to begin the book with a genealogy that reveals what I call "monogamy's nature"—that is monogamy as an object of scientific knowledge and a form of embodiment—as an artifact of colonial science and thus implicated in processes of racial formation and nation building.

While the book is not *about* gender or race per se, processes of gendering and racialization are integral to how we imagine not only monogamy but also nonmonogamous alternatives.⁵¹ This project is shaped by queer-of-color critique and black and postcolonial feminist theories that provide critical resources for reading universalizing queer and feminist rhetorics of liberation whose logics reproduce race and class and indeed sexuality as we know it.⁵² While "it has now become axiomatic to argue that race, gender and sex, that racial identity and sexuality, are inextricably linked through various discursive operations," as Celia Roberts notes, "theorizing [the specificity of those] interconnections between sexual and racial differences remains a core problematic within feminist theory."⁵³ As Nadine Ehlers argues, we must work from the knowledge that the deployment of sexuality is "always already racialized."⁵⁴ Indeed, we must constantly interrogate the invisible whiteness that purportedly race-neutral claims about sexuality and sexual difference belie.⁵⁵ The workings of racism's *erotic life* in monogamy discourse is indeed a "core problematic" in this book. My readings here are attuned to the specificity of assumptions about race and difference that shape configurations of "ideal" and "natural" sexuality. I am, throughout the book, committed to the use of feminist science studies as a vital tool for reading the interconnectedness of seemingly distinct formations of difference with histories in the biosciences.⁵⁶

Indeed monogamy must be counted among those concepts whose intelligibility and power is inextricable from its biologization, from its emergence as *sexuality*. Concepts problematized by these feminist critiques of monogamy—

sex as the highest form of intimacy, the naturalness of jealousy, compulsory heterosexuality, and compulsory sexuality—are not only racially gendered social and religious norms. They also reflect the idea that humans are sexual, straight, reproductive, and designed and destined for certain roles and tasks. That is to say, these assumptions are also deeply embedded in naturalizing scientific discourse and continue to reproduce themselves there.

On the Politics of Science

While feminists have theorized monogamy as a powerful social norm, scientists study monogamy as a mating system or strategy.⁵⁷ Monogamy's normalized status cannot be disentangled from its scientific naturalization. Critical feminist science studies offers resources for illuminating the dynamic relationship between science and the contexts out of which its claims emerge and which they shape in turn. To understand compulsory monogamy, we must take an interest in the politics of science. Conversely, attention to the politics of scientific knowledges about bodies reveals the deep cultural importance of monogamy. In a culture where coupling is of paramount importance to how our lives and worlds are structured, monogamy will be important to science both as a category of analysis and as a set of implicit assumptions about how to think about the natural world. How we approach monogamy as an object of knowledge will enable and delimit new possibilities. In this section I consider the importance of feminist engagements with sciences of difference and their epistemological underpinnings to understanding and ultimately undoing monogamy.

In its most capacious sense, science is a project of trying to understand or explain the natural world, but not all theories about what nature is or how best to understand it or any of its aspects or parts are considered science. Science has rules, the criteria for what makes scientific knowledge scientific, for what knowledges constitute science. The basic rules are finite: scientific knowledge is based on the scientific method and is objective, that is, value neutral and therefore universal and reproducible. Philosophers of science have variously referred to this pretense as “the God’s-eye view” or “the view from nowhere”; Haraway has called it “the God trick.”⁵⁸ Feminist science studies scholars have argued that part of what this ruse disguises is that what usually counts as scientific methodology allows only for the study of what can be measured, thereby excluding from the realm of scientific inquiry phenomena that cannot readily be understood in terms of their component parts. Science as such

thus demands conceptualizations of natural phenomena that minimize the complexity of its objects: here, monogamy.

The basis of the study of monogamy as a mating strategy is the evolutionary assumption that each individual organism, human or otherwise, has as its primary “goal” the perpetuation of its own genetic material through reproduction. A mating strategy evolves according to increased chances of species survival. It is widely accepted that for more than 90 percent of the animal kingdom, this means spreading genetic material as far and wide as possible.⁵⁹ Humans are counted among the small percentage of species considered naturally monogamous.⁶⁰ Monogamy, the story goes, evolves in circumstances where having two “parents” to feed and protect offspring increases their chances of survival and thus the continuation of the species.⁶¹ While no evolutionary basis for sexual fidelity exists, *coupling* is considered normal for humans. Rather than an object of inquiry itself, monogamy is often an a priori assumption informing scientific research, as is the case in the laboratory on whose findings headlines announcing the discovery of a monogamy gene were based, which I take up in chapter 2’s laboratory ethnography.

In studying monogamy, scientists generally look for different mating strategies in males and females and link these strategies to scientific descriptions of gametes: sperm are seen as plentiful and mobile, hence males optimize their chances of reproduction by spreading their genetic material around. Eggs in females on the other hand are represented as both immobile and finite, so females presumably maximize their genetic survival by selectively choosing how to make the most of their seed.⁶² In an unusually transparent illustration of this logic, science writer Joe Quirk describes men and women as “sperm spreaders” and “egg protectors,” respectively, in order to explain their different dispositions toward monogamy.⁶³ This “Victorian script” is at the heart of evolutionary understandings of human behavior.⁶⁴ Elizabeth Lloyd has famously shown how evolutionary explanations of female sexuality have misrepresented basic physiological processes by consistently beginning from heterosexual pair bonding as the essence of human nature. Female orgasm was for decades only intelligible as an evolutionary adaptation that rewards pair-bonded (monogamous) female primates for having frequent sex with their male mates. The linking of female orgasm to intercourse persistently renaturalizes female monogamy, as I will show again in my treatment in chapter 2 of the neuroscientific present. While biologically suspect, this link remains an unquestioned assumption underlying the formulation of a wide range of questions and experiments aimed at understanding sexual desire and relating.⁶⁵

These scientific strategies and representations come to naturalize different gendered meanings for monogamy: monogamy is assumed a priori for females, while a variety of different theories emerge in different moments to explain male monogamy.⁶⁶ While scientific naturalizing stories about monogamy are geared toward illuminating the evolutionary mystery of male monogamy (“the monogamy gene” is indeed a male gene), the scientific naturalization of nonmonogamy requires that female monogamy be dethroned as a scientific myth. Both the gendered story of monogamy and attempts to correct its very Victorian sensibilities about the desires of ladies and gentlemen are also racialized. Feminist histories of science have provided resources for understanding how these gendered scripts mark investments in whiteness.

The simultaneity of black slavery in European colonies and North America and the formation of biological sciences led to the emergence of a science of racial difference, which, through an analogizing logic, became deeply enmeshed with the science of sexual difference.⁶⁷ Those racial and sexual categories that continue to shape formations of racial and sexual differences—black and white, female and male, gay and straight—coevolved. Through analogizing logics, they gained evolutionary significance vis-à-vis one another. In a culture deeply invested in racialized gender norms that posited European ideals of masculinity and femininity as complementary halves, sexual differentiation became an exemplary measure of evolutionary superiority.⁶⁸ The more distinct from one another “male” and “female” bodies of a given race (or species) were described to be, the more evolved that population was imagined to be. Through this logic, racialized groups became sexual and gender deviants, and “masculinized,” “feminized,” or otherwise “ambiguous” “sexes” became racialized as inferior biological types.⁶⁹

Vital to understanding discourses of monogamous and nonmonogamous difference is the critical insight that the co-constitution of categories of racial and sexual difference did not simply create a giant underclass of *not straight white propertied men*. It produced a multiplicity of complexly gendered types. It placed some “races” closer to the feminine end of the spectrum and others closer to the masculine end of the spectrum, producing a multiplicity of “abnormal,” deviant genders—for example, hypersexualized and strong (read masculine) black women, dangerous black men, meek Asian women, sexually passive Asian men, and so on. As Sally Markowitz warns in “Pelvic Politics,” when we talk about the reproduction of “the gender binary,” we always risk reproducing whiteness, because gender was never binary, never just two.⁷⁰ In the case of the science of love, we have to ask, whom do we envisage spreading

his seed around, whom do we imagine protecting hers? When we talk about species-beneficial mating behaviors, who is the desirably reproductive model for this vision of monogamic bliss? And in the case of challenging inversions of this evolutionary claim, who is the romanticized “other” who stands in for a nature outside of or before culture? I engage these questions directly in chapters 1, 2, and 3, and they provide the critical grounding of my return to the embodiment/materiality of monogamy in the book’s final chapters.

Feminist engagements with science have offered important analyses of the racism inherent not only in the science of gender but also in the epistemological authority of science. Feminist science studies scholars have argued that we must acknowledge the cultural specificity (Euro-American) of the epistemic, taxonomic, and biomedical models with which we take issue.⁷¹ This insight is at the heart of my project here, a project of articulating a critically engaged materialism that explicitly and concertedly resists reinvoking a universalizing metaphysics. To engage scientific stories and make use of them, as this book does, and as feminists are increasingly likely to do, need not mean retreat from critique of science’s epistemic authority.

For decades feminist science studies scholars have sought to theorize new ways of imagining “objectivity” or new criteria for evaluating knowledges about the natural world. The highly influential and often overlapping concepts of “strong objectivity,” “situated knowledge,” “agential realism,” and “contextual empiricism” fuel this discussion.⁷² While the authors of these concepts are not always regarded as having similar aims, their visions of feminist science share common elements: a recognition that knowledge is partial, situated, not universal; a desire to lay bare the political effects of all scientific truth claims; and most important, some vision of what it might look like to politicize scientific knowledge production in a way that allows for an answerability, an accountability, beyond the realm of internal critique, that science as we know it lacks.⁷³

The conceptual terrain of dialogue about feminist science over the years owes much to Sandra Harding’s concept of “strong reflexivity,” wherein the producers of knowledge see themselves as broadly accountable and are committed to considering the blind spots imposed by their specific social locations. This reflexivity is the precondition for what she calls “strong objectivity.” Strong objectivity is contrasted to the “weak objectivity” that the sciences employ. According to Harding, objectivity in science is not weak because it is flawed in method or avoidably biased but rather because it starts, inevitably, from the questions, concerns, and interests of scientists (people) and the

institutions of which they are a part. Strong objectivity on the other hand begins from the “standpoint” of the lives of the most marginalized. That is, it presumes not the essentially epistemically superior position of, say, women but rather the benefit of attempting to generate and approach questions from different vantage points, whoever the asker. The multiplicity of competing truths produced within primatology, for Haraway, exemplifies the range of situated knowledges science *could* produce; these competing narratives provide us with additional resources for imagining “human nature” and making the world differently. Haraway argues that even as we challenge and remake its contents, we need science, our myth, just as we need all of the other creative means we have at our disposal.⁷⁴

Karen Barad, like Haraway, frames her critiques of the concept of objectivity in terms of resisting a problematic subject/object split. It is impossible, she argues, drawing heavily on physicist Niels Bohr, to distinguish the object of study from “the agencies of observation.”⁷⁵ According to Bohr, there is no “observation independent object,” there are only phenomena—observation is part of any phenomenon. Barad proposed the concept of “agential realism” as a way of resolving the tension set up between “realism” and “social constructivism” (“real” object and subjective observation). In so doing, she asks us to think of science as “material-discursive” practices.⁷⁶ In this formulation, objectivity and agency are bound up with responsibility and accountability: we, producers of knowledge, are thus bound to consider the possibilities—both enabling and violent—of interacting with the world by studying it. In this sense we become responsible not only for the knowledge we seek, but for what exists. My project is shaped by this feminist understanding of agency. I am concerned with the role played by naturalizing claims not only in representing monogamy and nonmonogamy but also in making them “real.”

Helen Longino, like Barad, wants to foreground accountability as she proposes ways we might politicize the production of scientific knowledge. She argues that science should absolutely be expected to “reflect the deep metaphysical normative commitments of the culture in which it flourishes”⁷⁷—this does not make science “bad.” Criticism of the assumptions that underlie scientific inquiry and reasoning should thus be considered an appropriate, necessary part of science. Longino has grounded her own vision of feminist science in an explicit rejection of the good/bad science formulation on which the vision of expelling science’s bias is premised. For Longino, among others, reading for androcentric bias is not enough. We have to look at conventions, like passive voice and attributing agency to data, as well as at interpretive frames that

limit the possibilities for what we might come to know. We have to insist that the frameworks we use are always political choices, whether or not we see them as such, and that they do not in fact “emerge” from data. Ultimately, like Harding, Haraway, and Barad in their own ways, Longino insists that we have to acknowledge our agency and our role as knowledge producers in shaping the course of knowledge. In practice, this means “alter[ing] our intellectual allegiances.”⁷⁸

For Harding, the project of implementing strong objectivity cannot be assimilated into the logic of research or dominant philosophies of science; it would supplant science as we know it. For Haraway, we cannot implement such changes to science without changing our lives—we will be able to imagine the natural world differently when we are able to structure our own lives in ways that are not premised on a logic of domination. The new myths of the natural world we are able to create will in turn foster and support new worlds as our old science myths have done. Barad’s vision of accountability has implications for the individual choices we make as knowledge producers, whereas Longino’s vision requires that the material conditions of scientific knowledge production be concretely addressed. Despite their differences, together these epistemological interventions suggest the absolute centrality of the *politics* of science to its potential as a resource for feminism.

In recent years, a growing body of scholarship has endeavored to reclaim the biological for feminism. Richer understandings of the world might be gleaned, they suggest, by taking into account the processes of “the body” rather than positing cultural explanations as a totalizing substitute for biological ones. Much scholarship in this field-in-formation directly or indirectly highlights the ways the nature/culture binary has worked to delimit feminist and nonfeminist approaches to the body and invites us to reconsider what we think we know about what bodies are and how they work.⁷⁹ This scholarship’s resonance is powerful, because experience, however complexly mediated, is deeply embodied, and because feminisms need theories of what we are and might become, theories that upset and reconfigure the naturalized categories that operate to delimit what we can say, think, and imagine for our futures. It is my contention that if these possibilities of biology are to be realized, they must be grounded in critical feminist genealogies and accountable to feminist insights about the politics of science.

On the Possibilities of Biology

How do we (feminists) talk about the biology of monogamy? What would it look like to take “the body” seriously as a queer feminist scholar of monogamy? Feminist endocrinologist and science studies scholar Deboleena Roy provocatively declared that the body to which feminists long to return “doesn’t yet exist.”⁸⁰ Roy makes a case for our agency in bringing into being that body, that nature, for which we long. In this section I address the importance of *critique*—and the sorts of critical interventions I reviewed in the previous section—to that project. I am particularly concerned with the importance of maintaining a critical perspective on the *politics of science* in attempts to theorize the naturecultural, material-semiotic coming-into-being of new ontologies. New materialist *engagements with matter* have often been articulated as a project in tension with *feminist critiques of science*.⁸¹ I contend that this framing of feminist materialism is not only misleading (as others have argued), but an obstacle to bringing into being materialities with which we are willing to live, to paraphrase Roy. Haraway describes as “naturecultural” a world beyond the nature culture binary—a world in which what we have come to think of as nature and what we have come to think of as culture have coevolved together. This section reflects on the challenges of thinking natureculturally, and specifically the risks of slipping into a renaturalizing mode that resolves those challenges too easily. These risks and challenges are at the heart of the book’s methodological innovation.

Indeed, across science and nonscience disciplines, the utility and accuracy of the conceptual distinction between “nature” and “culture” as discrete spheres or phenomena has been profoundly challenged. In recent years, a “new materialism” has been said to have emerged, one that treats nature as vital and complex.⁸² Feminist theory has been a highly visible force in this reclaiming of matter. Even as attempts to do naturecultural research have been led by feminists—perhaps most famously Donna Haraway, Karen Barad, and Elizabeth Grosz—new materialism is often staged as an intervention in critical theory in general and in feminist theory in particular, rather than as part of those traditions.⁸³ Sara Ahmed launched a lively debate in and beyond the pages of the *European Journal of Women’s Studies* in her impassioned intervention into new materialism’s “founding gestures.”⁸⁴

Ahmed argued that the emergence of this field is animated by a discursive move in which feminists attempting to reclaim “biology” for feminism position themselves in opposition to the “anti-biologism” of feminism. In this early

parsing of the field as a distinct feminist project, Ahmed named Elizabeth Grosz, Vicky Kirby, Susan Squire, and Elizabeth Wilson among the most important thinkers “gathering” around this move to recoup the biological for feminism.⁸⁵ She argued that this move relied on an unfair and inaccurate representation of feminism: “I want to consider what it means for it to be routine to point to feminism as being routinely anti-biological, or habitually ‘social constructionist.’ I examine how this gesture has itself been taken for granted, and how in turn that gesture both offers a false and reductive history of feminist engagement with biology, science and materialism, and shapes the contours of a field that has been called ‘the new materialism.’”⁸⁶ In her response, Noela Davis argued that Ahmed’s counterexamples actually illustrate the problem: the importing of an old materialism, a stable albeit misrepresented body, into feminist projects.⁸⁷ She insisted on the importance of taking feminism to task for critiquing science in such a way that biology and culture are allowed or made to seem separate.

I am indebted to insights on each side of this split and want to hone in on a slippage that I believe happens on *both sides*, making it difficult to chart a path that takes both sets of insights seriously. “Biology” refers here not to the science but rather to the body “itself.” This slippage is important because it makes it appear as though the science of “biology” were an unmediated representation of “the body itself,” a fallacy whose debunking is at the heart of feminist science studies.

In both Ahmed’s assessment of new materialism and Davis’s rebuttal, Elizabeth Wilson’s work figures as an exemplary site of intervention into a feminist theory inhospitable to integration of the biological. In Ahmed’s assessment, this supposed intervention names an “imaginary prohibition” against engaging biology. In Davis, Wilson’s work articulates cogently a difficult and necessary intervention that Ahmed’s “deflationary logic” obscures. As the framing of the relationship between feminism and materialism in Wilson’s work has been such productive terrain for this debate, I return to two oft-cited passages from her work and then back again to Ahmed’s critique in order to illustrate this slippage on “both sides.”

In the introduction to *Psychosomatic: Feminism and the Neurological Body*, Elizabeth Wilson asserted that “feminist theories have usually been reluctant to engage with *biological data*: they retain, and encourage, the fierce *anti-biologism* that marked the emergence of second wave feminism.”⁸⁸ Here “anti-biologism” is the cause of feminist reluctance to engage with data. Feminist reluctance to engage with *data* is in fact well supported by feminist engagements

with the processes by which it is produced, in feminist science studies. Yet the term “anti-biologism” suggests a reluctance to thinking about embodiment that obscures a long history of lively feminist debate about how to talk about the leaky, bleeding, desiring body.⁸⁹ In another frequently referenced passage, in the introduction to *Neural Geographies: Feminism and the Microstructure of Cognition*, Wilson referred to feminism’s “distaste for biological detail,” “despite an avowed interest in the body.”⁹⁰ Here, “biological detail” takes on a very narrow meaning, one confined to the kind of *detail* only accessible through very specific scientific disciplinary approaches that privilege reductionist explanations over others. Bodies, then, are reduced to this detail through the positing of an inconsistency in an “avowed” commitment to the body and a “distaste” for data. In this move, feminist theories of embodiment and corporeality are represented as disingenuous—theories not really of the body but of something else, ostensibly the body’s outside: culture. In this interchangeable use of “biological detail,” “the body,” and “biological data,” there is no conceptual space for engaging feminist skepticism about *science* and its privileged epistemic status. All critiques of science are rhetorically subsumed into the category of “anti-biologism,” where they serve as implicit evidence of the hypocrisy of feminist claims to care about the body.

At the same time, Ahmed’s reclamation of those feminisms that she argues Wilson’s interventions overlook does not resist this slippage but rather reiterates it. She points to examples of feminist health materials researched and disseminated in the 1970s and 1980s that drew directly on scientific research, as well as to feminist science studies scholars who helped to revise our biological knowledge. Both Wilson and Ahmed enact a slippage between biology as the *study of* the body—or the body produced in the context of scientific inquiry—and biology as “the body itself.” With this slippage in mind, I argue that we must insist on some distinction between feminist critiques of *science* and feminist refusals to engage *the body* that are rightly critiqued by Wilson and others. This will necessitate drawing a distinction between “engaging data” and asking new questions about the body, and then carefully accounting for the interface between data and new modes of conceptualization. This will in turn necessitate a certain kind of resistance to disciplinary divides that despite the widespread institutionalization of some forms on interdisciplinarity remain quite fixed.

In this book, I seek to undiscipline approaches to bodies and make space for invention.⁹¹ Key to this methodological intervention is the interruption of stories about a progression *from critique* (of politics) to *engagement* (with biology).

The slippage between the body (bodies?) and science is such an easy one to make because it emerges from disciplinary ways of knowing that have kept nature and culture separate and cultivated them as discrete disciplinary objects. Feminist critique enables the possibility of “new” sorts of engagements with and understandings of matter. We cannot afford to reduce feminist critiques of science to some flattened category of “social constructionism”—a now familiar narrative, summarily echoed by Stacy Alaimo and Susan Heckman in the introduction to their collection *Material Feminisms*: “Initially, feminist critiques of science focused on the androcentrism of science—the masculine constructions, perspectives, and epistemologies that structure scientific practice. Following the social studies of science, feminists argued that scientific concepts constitute the reality they study, that science, like all other human activities, is a social construction. Despite the persuasiveness of this position, however, questions began to arise about the viability of this approach.”⁹² This is a common progress narrative, telling as it does a story that takes us from the bad old days of feminist critiques of science to feminist new materialism.⁹³ We see here again that problematic slippage between science and its objects. Let me repeat a sentence: “Feminists argued that scientific concepts constitute the reality they study, that science, like all other human activities, is a social construction.” What does it mean to say that scientific concepts “constitute the reality they study”? The reading of the insight that science is a representational practice, not a window on “nature itself,” as a statement about the very existence of nature, is not a very accurate or helpful one. In the move to represent “feminist critique of science” as comment on the inherent nature of its object, a slippage occurs that reveals more about the politics of new materialist frames than about the “critics” from whom they ostensibly break.

The citational practices of many new materialist thinkers calls up a genealogy of European philosophers—beginning with Lucretius—invested in offering ultimately totalizing scientific explanations of the world and our place in it, toward the ultimate goal of replacing “god” as an explanatory regime.⁹⁴ Colored as it is by an implicitly Judeo-Christian worldview that allows us to imagine nature as law-governed and by an atheistic proto/modernity that separates the rational from the irrational, this genealogy is an uncomfortable one for a feminist materiality.⁹⁵ This narrow genealogy also comes at the expense of recognizing a breadth of resources we might cull in service of a radical materialist vision, some of which have been relegated to the status of “feminist antibiologism.” We need our theories of the naturecultural world to be grounded in critical genealogies, such that we are thinking expansively about

TABLE 1.1 Slippery Rhetorics of Nature and Culture

Object	Nature ("The body itself")	Culture ("Nature"/history/discourse/corporeality)
Disciplinary site	Science ("Scientific data")	Humanities (Theories of subjectivity and embodiment)

how to generate new approaches, spaces, and languages for representing it.⁹⁶ Rather than claiming the unreality of the world it seeks to know, critique of science problematizes the *special status* of scientific ways of knowing when and wherever knowledges can claim that status. If "nature"—in problematizing scare quotes—is in fact always already *culture*, as Vicki Kirby argued in her highly influential reading of Judith Butler,⁹⁷ then it would seem that removing the scare quotes has only returned us to a natureculture that was always already *nature*, the proper object of science. That is to say, if we run the risk of reducing the naturecultural to culture, as Kirby suggested, we run a similar risk of reducing it to nature.

Influenced as I have been by the pedagogies of science writing, I made a little chart to help map the persistent rhetorical conflation of natureculture's constitutive objects with the disciplinary homes to which they traditionally belong (table 1.1). I map these distinctions because I am concerned with *what happens* in those moments when feminists trying to productively reimagine the world natureculturally use "materiality," "matter," or "nature" or "the body" "itself" when they are actually referring to scientific data. These slippages between "the body" or "nature" and "science" constitute a conflation of objects and disciplines, or topics and methods, that paradoxically reinscribes the nature/culture binary with which we have long wrestled and which a *feminist materialism* ought to offer us new resources to navigate. The case for engaging scientific methodologies and ways of knowing *must be made* with regard to our queries about the naturecultural world, not presumed self-evident. And how we make that case matters. The increasingly axiomatic claim that we (feminists and/or humanists) must engage with "science" in order to bring the material body into our knowledge-making takes for granted that scientific data is the source of uniquely direct knowledge of vital bodies. It is my contention that we cannot productively engage data without explicit attention to the politics of *science*.

It is important to recall that the stories of the biosciences have been broadly and vigorously critiqued by academics and activists alike for abstraction, inac-

curacy, and irrelevance with respect to illuminating questions of import about embodiedness.⁹⁸ Much of what we (I am most certainly including scientists here) *know* of our species-life, human interconnectedness with the nonhuman world, treatments for ailments, and the strange agencies of the nonanimal world has indeed been generated outside of laboratories and outside the province of “Science” with a capital S.⁹⁹

Let me be clear that my perspective in this book is not that feminist uses of scientific concepts and/or data are to be avoided. It is, on the contrary, that nuanced and careful narratives about relationships between feminism, science, and the body enable the work of producing newly accountable knowledges about the materiality of the naturecultural world. We cannot develop new approaches when we are linguistically trapped by notions of disciplinary proper objects that continually dissolve “natureculture” back into *either* of its old constitutive parts. We need “critique” to help us remember that “the body” is *still not* “scientific data,” nor is “biology” flesh “itself”; it is, rather, a field of study, a discipline, a discourse on the body, in Haraway’s famous formulation.¹⁰⁰ The naturecultural world in its perpetual becoming is real. Sciences and the humanities offer a variety of tools—and, so importantly, not the only tools—for understanding, representing, and shaping our worlds.

Dyke Materializations

My aim in the book is to approach monogamy as a naturecultural object: one with histories, contexts of intelligibility, and embodied realities. This means first that monogamy’s status as an object of scientific knowledge must not be taken for granted but rather situated in time. I do this in chapter 1, which offers a genealogy of the debate in turn-of-the-century sexology over whether or not monogamy was natural, showing that monogamy’s twentieth-century status as a facet of human nature was ultimately dependent on the evidence of a colonial archive, which is thus the legacy of contemporary non/monogamy. In chapters 2 and 3 I examine competing contemporary stories about monogamy’s nature. In chapter 2 I analyze the dominant narrative, that it is natural, and in chapter 3, that it is not (at least not for everyone). Chapter 2 is based on ethnographic fieldwork in a neuroscience laboratory on whose research reports of the discovery of a monogamy gene were based. This chapter demonstrates how assumptions about human monogamy are naturalized and shape notions of the normal (sexual/social/pair-bonded) and the abnormal (asexual/asocial/promiscuous) that are built into the modeling of gene-brain-behavior

connections in contemporary neuroscience. In chapter 3 I examine feminist challenges to the prevailing naturalization of monogamy in the form of often quite marginalized claims about the naturalness of *nonmonogamy*. There I show how these stories present certain kinds of challenges to compulsory monogamy and at the same time leave intact many of the assumptions about sexuality, biology, and difference underlying the naturalization of monogamy. In chapter 4 I turn to lesbian feminism and develop a *dyke ethics* that engenders more nuanced thinking about both monogamy and embodiment. This dyke ethics considers monogamy and nonmonogamy within a broader schema of friendship and community valuation. It also supports a theoretical and ethical disposition of respect for the simultaneously political and embodied nature of desire.

The book's engagement with the politics of science and the naturecultural reality of desire culminates in a "re/turn" to the molecular "matter" of monogamy attuned to the multiplicity of modalities, methods, and systems for knowing bodies. That is to say, as it participates in the reimagining of ontology as open-ended "becoming," it refuses the *privileging* of the scientific body as a resource for that re-visioning.¹⁰¹ In chapter 5 I read Audre Lorde's "Uses of the Erotic: The Erotic as Power" as a *biopossibility of the erotic* to "dis-organize" the non/monogamous body at the molecular level and to offer instead a vision of a materiality of human bodies that decenters sexuality, and even sociality, to make way for new forms of being and belonging.¹⁰² Rather than asking how the science of monogamy might inform feminist engagements with it, the book draws on a wide range of insights and approaches to make sense of monogamy in ways that engender possibilities for materializations with which we can live.¹⁰³ In the epilogue, I consider the potential contributions of the book's engagements with monogamy to larger questions about possibilities for approaches to the material grounded in genealogies of radical critique: of the normal, of science, and of the idea that what exists is all there is.