

## Wrenching Torque: On Being Professionally Nonbinary

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Foucault made me trans. My memory is that it happened while I sat in one of those slightly too small wooden desk/chair combos that fill the classrooms of liberal arts colleges, discussing *History of Sexuality, Volume I* (though I revisited the syllabus for that fateful course recently and discovered it was actually *Herculine Barbin*<sup>1</sup>). It went, in that moment, like this: *gender is made up*, followed by, *I don't have to do it*. A peregrination through taxonomies that somehow felt both liberating and reminiscent of the table of contents of *Psychopathia Sexualis* followed, culminating, eventually, in a throwing up of hands and an embrace of the refusal that was the term *nonbinary*—though back then, we used a hyphen: non-binary.<sup>2</sup>

This path to self-ontologizing was my first sustained encounter with the history of science. My rejection of binary gender and other precise classifications in its wake shares, of course, a debt to the trans world of Tumblr circa 2010, specifically, and trans and queer and feminist thought more broadly.<sup>3</sup> But it was the historical contingency, and the targeted prodding at the thing that was supposed to be the source of truth, that really got me. I was hooked on

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1. *Herculine Barbin: Being the Recently Discovered Memoirs of a Nineteenth-century French Hermaphrodite*. The English translation features an introduction by Michel Foucault.

2. Richard von Krafft-Ebing's *Psychopathia Sexualis* is an 1886 compendium of sexual pathologies. On the language of refusal, which I encountered several years later, I am indebted to Audra Simpson, *Mohawk Interruptus: Political Life Across the Borders of Settler States* (Durham, NC: Duke University Press, 2014).

3. Throughout, I treat such categories as queer and trans and sex and gender and history of science and STS with willful imprecision. Consider this an exercise in letting go of the dream of a perfect taxonomy.

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the idea that history-as-method could crack the categories of sex and gender and sexuality wide open. It had, after all, for me.

## INVERSION

When I came back to the history of science several years later, ready to use it to smash the cis-tem (as it were), I found that the wellspring of my own radical reconfiguration of self was not the utopian queer force I remembered.<sup>4</sup> The history of science *was* the cis-tem. There was a history of sex science, but it was, for the most part, deeply cisnormative and heteronormative. The focus of these texts was not, for the most part, liberation *from* sex and gender so much as an effort to explain these categories' construction. This is important work, to be sure, but something was missing. For me, explaining only the dominance of sex and gender binaries risked reinforcing them. It foreclosed the possibility that life could be otherwise.

This makes sense, given some of the lessons contained in the very literature I was trying to engage. In "Skeletons in the Closet," for example, Londa Schiebinger argued that eighteenth-century renderings of "female" skeletons cannot be taken at face (skull?) value precisely because women were largely excluded from the scientific inquiry that produced them. Declared inferior by male anatomists, women had no standing to push back against literally infantilizing portrayals of sex development. When it came to *histories* of sex science, something similar seemed to be going on. Given the dearth of trans-written and trans-oriented scholarship, it's no surprise to find so many (trans) skeletons in the field's closet.<sup>5</sup> Feminist approaches to sex science laid necessary groundwork for disrupting biologized notions of essential, hierarchized difference between men and women. But because they have often been driven by an unspoken *cis* feminist politics, there remains a baseline assumption that sex has something to do with an inherent physical state—that most people are, in fact, men and women for reasons having to do with their bodies.

4. "Cis" here referring to cisgender—basically, not trans. Elsewhere, I lay out the shortcomings of a perpetual cis/trans binary as a historical analytic. For now, think of it as a shorthand. See Beans Velocci, "Binary Logic: Race, Expertise, and the Persistence of Uncertainty in American Sex Research," PhD dissertation, Yale University, New Haven, Connecticut, 2021.

5. Without getting into the intricacies of identity and experience and precise classification, there have just not been that many trans people with stable academic jobs over the past several decades for both obvious and subtle structural reasons. See Susan Stryker, "Institutionalizing Trans\* Studies at the University of Arizona," *TSQ* 7, no. 3 (2020): 354–66.

Sex, in that framing, remains fairly coherent as a system of sorting according to binary norms. Schiebinger, whose feminist approach has helped make my own critique possible, took time to reassure readers that “it [was] not [her] purpose to explain away physical differences between men and women.”<sup>6</sup> Given that “Skeletons in the Closet” was published in 1986, this is an entirely unsurprising strategy. The history of twentieth-century trans political formation aside, there is always a risk of not being taken seriously if one goes too far, not to mention a need for caution about one’s career (you are seeing my own performance of that, here, and perhaps find me teetering close to the brink).

I held out for more scholarly work, hoping someone *would* explain away those differences. And scholars indeed started to wedge open a possibility that biologically distinct maleness and femaleness has never been just a static base upon which the superstructure of gender was (and is) built. Sarah Richardson, for example, developed the idea of gametic sex as a “dynamic dyadic kind” far more complex than existing visions of genomic maleness and femaleness would have it.<sup>7</sup> At the same time, the title of Richardson’s *Sex Itself* was still more literal than I wanted: to me, sex still seemed framed within it as a biological reality hewing close to normative categories of male and female, even after accounting for science’s wildly gendered exaggerations. This orientation, which so fruitfully tracked how science helps construct differences between men and women, still made it difficult to see how the idea that *those* were the right categories—and that sex itself was a useful category at all—got cemented in the first place.

But scholarship on the construction of sex was an easy target for my frustration. As I read more widely, it became clear that this was a problem of uptake in the broader field of history of science, too. Even when scholars launched a critique that understandings of sex are excessively narrow—think of Anne Fausto-Sterling’s *Sexing the Body* and its emphasis on the commonality of traits often ejected from the binary as “intersex,” or Thomas Laqueur’s *Making Sex* and its articulation of the “two sex” model as something that developed over time—their interventions somehow remained self-contained.<sup>8</sup>

6. Londa Schiebinger, “Skeletons in the Closet: The First Illustrations of the Female Skeleton in Eighteenth-Century Anatomy,” *Representations* 14 (1986): 46.

7. Sarah S. Richardson, *Sex Itself: The Search for Male and Female in the Human Genome* (Chicago: University of Chicago Press, 2013).

8. Anne Fausto-Sterling, *Sexing the Body: Gender Politics and the Construction of Sexuality* (New York: Basic Books: 2000); Thomas Laqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, MA: Harvard University Press, 1992).

Such books were enthusiastically cited in the broader literature as a useful thought experiment canonized as *the* text on sex, while twenty years passed without substantial shifts in how scholars subsequently deployed sex (or more often, gender) as a category.<sup>9</sup> (It remains to be seen if recent work historicizing binary sex, my own included, evades this circumscription.)

Running along an orthogonal axis were the queer histories of sexology I had encountered elsewhere. The more I read in history of science and STS, the more I found impediments within the history of sexuality. For one, that body of work overwhelmingly treated science as a series of texts, not as a practice pursued by people. But more than that, work in the history of sexuality, too, struggled to imagine possibilities beyond binary sex as an embodied truth. If anything, it was even more jarring to read about people falling outside of normative sex categories left and right without an analysis of what that meant for sex as a classification system. Surely, I thought, sex could not be so straightforward if there were so many anomalies.<sup>10</sup> My point is this: when I, perhaps naively, sought comrades in the history of sex science, I kept seeking.<sup>11</sup>

I ended up turning, instead, to work on classification and ontology.<sup>12</sup> The texts that helped me start breaking apart the category of sex were those that

9. It might be telling that the history of sex science has focused *so* heavily on intersex, and more recently, transness, which I argue elsewhere sequesters anomalous forms of sex and gender into an exceptional category rather than casting doubt on sex as a system of classification. See Velocci, “Binary Logic.”

10. Thomas Kuhn wound up being an unlikely inspiration on this front. *The Structure of Scientific Revolutions*, 4th ed. (Chicago: University of Chicago Press, 2012).

11. I have been teaching my students (and myself) how to engage with such work generously, to look for allies in undoing the violence of sex classification even when doing so feels as if it might be *too* generous. But I am also committed to questioning calls for generosity as one more version of the constant thrum of *trans people should be more polite*. To live with both demands at once, to be generous and honest as best I can, I frame trans scholars not giving up on this profession as, itself, a form of generosity.

12. Zoe Todd has pointed out that the ontological turn in STS and allied disciplines has largely ignored Indigenous thought on the matter (and on matter, if you will). See Todd, “An Indigenous Feminist’s Take on the Ontological Turn.” As a settler scholar trained in settler institutions, I came to thinking about ontology through texts canonized by STS, which is reflected here—that is the “river of thought,” as Todd recently put it on Twitter, in which I learned to swim. I am not citing the many Indigenous scholars that Todd notes as doing deep thinking on ontology because, to be quite honest, I have only recently begun reading that work and it feels more extractive than generous to insert them into my footnotes to make myself feel better about being late to the game and to perform being a “good settler.” Scholars in feminist, Indigenous, and Black studies—Sara Ahmed; Eve Tuck, K. Wayne Yang, and Rubén

questioned the stability of objects that on first glance seem to just exist: Annmarie Mol's *The Body Multiple*, for example, as well as Michelle Murphy's *Sick Building Syndrome and the Problem of Uncertainty* and Karen Barad's *Meeting the Universe Halfway*.<sup>13</sup> The queerest thing I could find (if unintentionally so) was Geoffrey Bowker and Susan Leigh Star's *Sorting Things Out*, with its insistence that classification systems are the products of active work and political choices, with limitless capacity for violence.<sup>14</sup> These books, and others like them, offered a way for me to articulate that if the world and things in it are constantly being brought into being, then we can bring the same tools to bear on the books themselves—to ask what gets produced, and why. What we find, when we look, is a world with little explicit commitment to queer or trans life, a shared investment in troubling taxonomies notwithstanding. Bowker and Star did seem to intuit something about transness as relevant: they mention, in a chapter on classification under Apartheid, transsexuality as emblematic of “borderlands” existence, citing Sandy Stone's “The Empire Strikes Back” in the process.<sup>15</sup> It only left me wanting more.

Certainly, my own non-fitting into one of two invented-but-naturalized sex/gender categories made me particularly prone to analyses of classification. (It's also possible that some preexisting allergy to classification made me particularly prone to nonbinariness—but certainly nonbinariness brought my disdain for clear-cut categories to the fore.) But with the encouragement and tools of this literature, I began to look for it everywhere: medical diagnoses,

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Gaztambide-Fernández; the Cite Black Women Collective; and many, many others—have made clear the politics of citation, and that work has informed my efforts to cite both generously and transparently about the specificity of my own training and knowledge. Reading Max Liboiron's *Pollution is Colonialism* in the early stages of drafting this piece again reminded me to take citation seriously as more than leaving a trail of evidentiary breadcrumbs. But blame me, not them, if I'm completely off the mark in my approach here. Zoe Todd, “An Indigenous Feminist's Take on the Ontological Turn: ‘Ontology’ is Just Another Word for Colonialism,” *Journal of Historical Sociology* 29, no. 1 (2016): 4–22; Zoe Todd, Twitter post, November 4, 2021, 1:34 pm, <https://twitter.com/ZoeSTodd/status/1456313940833677316>; Max Liboiron, *Pollution is Colonialism* (Durham, NC: Duke University Press, 2021).

13. Annmarie Mol, *The Body Multiple: Ontology in Medical Practice* (Durham, NC: Duke University Press, 2005); Michelle Murphy, *Sick Building Syndrome and the Problem of Uncertainty: Environmental Politics, Technoscience, and Women Workers* (Durham, NC: Duke University Press, 2006); Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007).

14. Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things Out: Classification and its Consequences* (Cambridge, MA: MIT Press, 1999).

15. Bowker and Star, 222.

species distinctions, what counts as a soup.<sup>16</sup> Of course, I am not saying that every trans or nonbinary person is going to share this suspicion of neatly delineated categories—which should come as no surprise, after all, given that very suspicion. But for me, at least, through the bringing together of histories of sex science and theories of classification, there was a distinct gestalt shift that happened, from *sex isn't real* to *probably nothing else is either*. My eyes turned upside down; all of the infrastructures inverted. But the infrastructures were still there, and they had their own investments.

## TWIST

To the point of cliché, scholars have repeatedly highlighted the etymological connection of “queer” and “torque,” mostly quoting Eve Sedgwick. In their introduction to the *GLQ* special issue “Queer Inhumanisms,” for example, Dana Luciano and Mel Chen recount, “As Eve Kosofsky Sedgwick reminds us, ‘The word “queer” itself means across—it comes from the Indo-European root *-twerkw*, which also yields the German *quer* (transverse), Latin *torquere* (to twist), English *athwart*.’”<sup>17</sup> In “Queers in (Single-Family) Space,” Sedgwick, with her co-authors, had also expanded beyond the Latin root to encompass “English *athwart* and *torque*.”<sup>18</sup> “Torque” is also an operative term in *Sorting Things Out*: the twisting of lives to fit classification systems. I’m less interested in etymology, original meaning not being destiny and all, and more intrigued by the *retroactive* queerness of *Sorting Things Out*. We might think about torque as both a place where queer studies and history of science are already aligned without knowing it and also a force that the history of science exerts on queer and trans people trying to write about sex. In other words, the queering capacities of work on classification and ontology diverge from possibilities of doing queer work.

As it stands, to do that work now is to become twisted between disciplines and their subfields. The landscape has certainly begun to shift since my initial encounter with it over a decade ago. Scholars like Jules Gill-Peterson, C. Riley

16. I recommend playing the game *Something Something Soup Something* if you have not yet considered soupness. <https://soup.gua-le-ni.com>

17. Dana Luciano and Mel Y. Chen, “Has the Queer Ever Been Human?” *GLQ* 21, no. 2–3 (2015): 189.

18. Michael Moon, Eve Kosofsky Sedgwick, Benjamin Gianni, and Scott Weir, “Queers in (Single-Family) Space,” *Assemblage* 24 (August 1994): 30.

Snorton, Leah DeVun, and Kyla Schuller have begun outlining a new agenda for the history of sex science more closely informed by queer and trans studies, and queer and trans life.<sup>19</sup> It is happening sometimes all at once: I got catapulted from being ABD and yelling into the void about the incoherent construction of sex, uncertain if anyone would ever hear me, to the (relative) stability of a tenure-track job in a prestigious department. But just as the promised deconstruction of sex categories goes only so far, the supportive structures in which to do the work have come in fits and starts and are not yet fully formed.

Interest is certainly there, if constrained. A trans STS listserv briefly surfaced after a thoroughly well-attended Trans STS gathering—room packed to the brim—at the 2019 4S meeting in New Orleans, but has since seemingly withered. There is increasingly a token queer or trans panel (often held at the less than prime time of 8 am) at the major relevant conferences of the dominant scholarly organizations. But so far it seems yet to have cohered into an enduring field with attendant institutional backing. In a recent retrospective on “Institutionalizing Trans\* Studies,” Susan Stryker referenced a Center for Critical Studies of the Body that would have included feminist STS alongside trans studies as the “first casualty” of her efforts to build an epicenter for trans studies at the University of Arizona—an n of 1, but telling nonetheless.<sup>20</sup> I bet I’m not alone in being both unsurprised about that lack of coalescence even as I remain a bit wary of what it might entail.

Beyond the question of formal structures, there are also more quotidian infrastructural problems: where to publish (thanks *HSNS* for publishing this), how to make journals get your name right, how to get trans-competent health care through university insurance plans, where to take a piss.<sup>21</sup> Talking about bathrooms is boring, but it remains the case that the only gender-neutral bathroom in my new department building is in a distant corner of the basement, several floors from my office (an office that I feel so grateful to have in

19. Jules Gill-Peterson, *Histories of the Transgender Child* (Minneapolis: University of Minnesota Press, 2018); C. Riley Snorton, *Black on Both Sides: A Racial History of Trans Identity* (Minneapolis: University of Minnesota Press, 2017); Leah DeVun, *The Shape of Sex: Nonbinary Gender from Genesis to the Renaissance* (New York: Columbia University Press, 2021); Kyla Schuller, *The Biopolitics of Feeling: Race, Sex, and Science in the Nineteenth Century* (Durham, NC: Duke University Press, 2018).

20. Stryker, “Institutionalizing Trans\* Studies,” 360.

21. On name problems, see the Name Change Policy Working Group (<https://ncpwg.org>). On universities hiring trans faculty and then not providing adequate health care (among other retention issues), see Stryker, “Institutionalizing Trans\* Studies.”

this enduring labor disaster that is the academy that it has made it hard to ask for anything more, including a place to pee without a multitrack trek). Doing this work is not just about finding an intellectual home—it also requires having a body in space.

Maybe the no-place-ness, though, is also unsurprising. In my refusal to be classified, I have been hired to exceed categories: my academic appointment, first in a cluster where all of us will perform some version of multiplicity, is to both History and Sociology of Science and Gender, Sexuality, and Women's Studies. As seems to be common knowledge among those familiar with the interdisciplines, this produces its own torque: who will vote on my tenure, which courses I will teach for which program, what department events I will prioritize, whom I will advise.<sup>22</sup> I have come to inhabit multiple offices, multiple listservs, have become intimately familiar with the diagonal path between two department buildings even in an era of ostensibly disembodied zooming about. And yet the goal is not simply to do two things. It is to exceed them in a way that gets out ahead of institutional possibility. In the same way that my university offers only M and F options in its hiring software and cannot accommodate the X on my license, it can only subject me to what has been several-times termed “guinea pig” status in the navigation of trying to do something different with the categorical tools at hand.

I have, then, become professionally nonbinary. I have been irrevocably torqued, as in queered, even as I have been torqued, as in wrenched, by the field—the history of sex—that could ultimately not account for my existence. So let me recap, in case you've been turned around: the history of science enabled me to reject how I had been classified; having engaged in that rejection, I became better at seeing and rejecting other classification systems, thus better at history of science; the texts I looked to for guidance helped me analyze sex classification *and* the academic structures ostensibly in support of that thinking—but I still have to contort myself and my tools in order to make any of this work. Are you twisted up in knots reading that? I am.

22. I describe a common problem in the interdisciplines, and perhaps even more so for those hired in the spirit of “diversity work.” While I don't want to draw analogies between, for example, gender and race, I do think there is an opportunity for solidarity in seeing the similar navigations that scholars have to pull off when hired between departments like African American Studies and English, or Ethnic Studies and History, or in my case, Gender, Sexuality, and Women's Studies and History and Sociology of Science, especially when they are themselves the kind of person under study in one of those institutional homes. See Sara Ahmed, *On Being Included: Racism and Diversity in Institutional Life* (Durham, NC: Duke University Press, 2012).



The metaphor begins to unravel. My intellectual and emotional trajectory has led me to the precipice of a book on how sex functions as a classification system precisely because it can hold within itself a snarl of contradictions. My goal in that is not to untangle, or to uncoil, or to cut through. The knot itself is the thing. But how does one inhabit the twists and loops without being crushed by their forces? Bowker and Star call torque a “nightmare texture” stemming from misalignment between individual lives and the classification systems that cannot or will not account for them—familiar enough to any trans person who has set foot in a DMV or medical office or airport.<sup>23</sup> As Stefan Helmreich points out, though, Bowker and Star’s “agonized twisting” misses another possibility: a take on torque as an aesthetic of movement embodied by the twisting dancer, credited to Hillel Schwartz.<sup>24</sup> The former feels unlivable, the latter excessively romanticized. I have been trying, instead, to imagine a way to get a wrench in the machine without throwing myself bodily into the gears. Stay tuned to see if it works.

23. Bowker and Star, 27.

24. Stefan Helmreich, “Torquing Things Out: Race and Classification in Geoffrey C. Bowker and Susan Leigh Star’s *Sorting Things Out: Classification and Its Consequences*,” *Science, Technology, & Human Values* 28, no. 3 (Summer 2003): 439.