

THE DESIRE TO DISCOVER GAY BRAINS

Neuroscience after the HIV/AIDS Crisis

Chris Zivalich

GENERALLY SPEAKING, THE complex way in which sexual practices, identities, and political movements are discursively and socially linked is irreducible to neat divisions and categorizations. However, a fascinating location of sexuality's meanings sits at its intersection with science. More specifically, science and popular culture in the past few years have co-produced salient concepts of sexuality as a prenatally inherited predisposition.¹ Consequently, re-

cent investigations behind the biological meaning of sexual orientation in the United States have been robustly funded by various institutions. Such manifold relationships remain analytically rich due to a dense, heightened moment of meaning.

In this article, I attempt to locate the way in which male "gayness" has been explained, studied, and politically legitimized within neuroscience, after the HIV/AIDS crisis of the 1980s, as a

¹ In this way, I am referring to the "Born This Way" song popularized by musician Lady Gaga, which captured a moment for LGBT sexual identity politics in which the notion of sexuality being innate rather than "chosen" formulated as a response to and effect of homophobic

religious and conservative discourses that emphasized the unnaturalness of homosexuality. "Born This Way" has become a recent anthem of sorts, both directly sung and tacitly used as an argument within sexual citizenship discourses.

difference in the brain. Drawing on the influential and hotly contested work of Thomas Kuhn (1962/1970) and his notion of the incommensurability of scientific paradigms, coupled with the important work of biologist-feminist Anne Fausto-Sterling (2000) and new materialist feminist scholarship, I argue that “male gay brain” politics is made possible through specific assumptions about gender, the central nervous system, and the desire to pathologize sexual behavior. Using the work of Simon LeVay, I also demonstrate the extent to which the harsh reality of homophobia during HIV/AIDS discourses at the end of the 1980s contributed to the possibility and specificity of “male gay brain” research.



To frame my discussion, I turn to Kuhn's controversial book *The Structure of Scientific Revolutions* (1962/1970), which has been interpreted diversely by historians, philosophers, and scientists. Jan Golinski (2012) notes in his analysis of Kuhn's work, that by highlighting the historical situatedness of scientific paradigms,

Kuhn “calls into question any assertions that presuppose the unity of science across time and space or its singularity as a cultural phenomenon” (Mauskopf & Schmaltz, p.25). In other words, his work sheds light on science as a way of thinking particular to a historical moment. Gay brains as a scientific paradigm and concept are thus, to borrow from Foucault (1978), specific to an articulation constrained by discursive regimes and genealogies of thought; “gay brains” are a paradigm of the moment².

HIV/AIDS

As such, the desire to locate a biological meaning behind gayness emerged in a particular way after the HIV/AIDS crisis of the 1980s (the reality of HIV/AIDS as a systematic problem in the U.S. today notwithstanding). Simon LeVay, a British-American neuroscientist, completed work in

² This is also not to say that “gay brains” are un-thinkable entirely in other moments of history. I do not believe in absolute, clear demarcation of paradigmatic chronologies. That being said, I emphasize that the gay brains of now (meaning from the end of HIV/AIDS in the 1980s to today), have particularities that are worth highlighting, evaluating, and situating.

1991 on “gay brains” predicated on his location as a historical subject. An article in *New York Magazine* by David France (2007), entitled “The Science of Gaydar,” describes how LeVay began research on gayness and the hypothalamus (a small portion of the brain with bundles of nuclei) after his partner died from complications due to AIDS. As France explains, it was AIDS that gave LeVay the opportunity to dissect dead bodies to see if gay men’s brains differentiated from those of straight men.

France writes that “before the epidemic, cadavers available for dissecting came with scant personal background besides age and cause of death. But because AIDS was still largely a gay disease, it was possible for the first time to do detailed neuroanatomical studies on the bodies of known gay men” (p.3-4). LeVay (1996) admits in his book *Queer Science* that AIDS may have influenced the particular brains he dissected due to multiple factors, such as affinities for receptive sexual roles that were more conducive to contracting HIV and medications that could have altered the hypothalamus (see

Chapter Six, “The Brain,” p.129-148). Still, gay men’s brains became thinkable as dissectible experiments as an effect of the material and cultural consequences of HIV/AIDS. The accessible bodies of dead gay men vilified by homophobic discourses and concomitantly ignored by the U.S. government, which failed to provide adequate funding and research during most of the 1980s (Crimp, 1987 & 2003), produced the conditions under which LeVay’s experiments became possible and politically useful as a way to verify and validate homosexuality’s nature.

MALE/FEMALE

Beyond this, LeVay’s assumptions about gender and ‘biological sex’ significantly influenced his work. LeVay’s dissection of men who died from AIDS-related complications was based on the notion that the hypothalamus differs in men and women, and that a cell cluster called INAH₃ in the hypothalamus is twice as large in men. Relying on similar logic, he concluded (albeit with a great deal of caution) that the men with AIDS had an INAH₃ comparable to straight women, and accordingly, smaller than

straight men (France, 2007, p.3-4). Furthermore, LeVay correlated the hormonal saturation of the hypothalamus to sexual behavior, which, as he described it, is partially “generated” by the INAH₃ (LeVay, 2000).

In order for such articulations to make sense, however, we have to examine the extent to which LeVay at the time assumed a coherence in gender, sexual difference, hormones, and sexual behavior as corresponding facts—something Fausto-Sterling debunks compellingly in *Sexing the Body* (2000), where she argues that many of the conclusions about the supposed differences between male and female brains presuppose men and women as different in the first place, profoundly shaping the way experiments on the hypothalamus are conducted, including what scientists are looking for in the already 'known' male or female brain (see Chapter 5 “Sexing the Brain,” p.115-145). Moreover, she insightfully notes that other important factors, such as frequency of sex and diet, affect the hypothalamus, and, echoing Cordelia Fine’s (2010) work on “neurosexism” in *Delusions of*

Gender, challenges whether hormones can be referred to as a “cause” of sexual behavior given the complexity and multiplicity of their effects throughout the entire human body (Fausto-Sterling, 2000, p.307). Thus, because of LeVay’s reliance on notions about sexual dimorphism in human brains and the hormonal origins of sexual behavior, his comparison of gay men’s brains to straight women’s relied on an epistemology that veiled and undermined certain assumptions (including the all-too-ready connection between bodies that are culturally prescribed as collectively feminine, i.e. presumably straight women and gay men).



NATURE/NURTURE

Next, I would like to look at new materialist feminism to understand the extent to which assumptions about biology and the brain shaped LeVay’s interest in neuroscience as the means by which sexuality might be explained—something I argue must take place beyond his assertion that “since neuroscience was my work, that just seemed like the way to go”

(France, p.3). As Joan Scott (1991) reminds us, the evidence of our experiences with which we cite and explain our own histories is discursively produced; it cannot be neutral or external to social production.



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Helpfully, in relation to the “why neuroscience question,” new materialist feminism, which attempts to explain materiality as a force of agency that interacts with humans, also critiques the propensity to value biology or social construction as the one-and-only cause of human behavior. As Samantha Frost (2011) notes, biology is welcomed, not discarded, within new materialist feminism and re-conceptualized “in terms of reductionism” rather than “terms of misattribution” (p.80). Essentially, new

materialist feminists challenge the nature/nurture binary by refusing to analyze materiality or socialization in a way that privileges one or the other as the ultimate cause of what people do, including sexually.

Therefore, new materialist feminist theories can, in part, answer why LeVay was interested in neuroscience and finding clusters of cells in the brain to explain gayness, even if he recognized the complexity of his work, its limitations, and the fact that it did not “prove” gays were “born that way,” as he noted in an 1994 interview (quoted in Nimmons, p.1). For example, Elizabeth Wilson (2004) examines the enteric nervous system (ENS) and argues that because the central nervous system (CNS) is privileged as the cause of our feelings, emotions, and affective responses, we ignore the fact that there are as many neurons in our intestines as there are in our brain. She argues that the ENS may be equally involved in producing what we feel, how it relates to our memory, and the way in which gendered power dynamics affect our everyday living (see Chapter 2, “The Brain in the Gut,” p.31-48). In short, she demonstrates that we

privilege the brain as the all-encompassing body part from which our desires, thoughts, and feeling derive.

Coupling Frost with Wilson, the conditions under which LeVay decided to look at gay men's brains can be understood as a project inspired by culturally embedded meanings about the brain, the biological body, and their sexual implications on human decision-making, identity formation, and subjectivity. By operating within discursive logics that centralize brains, LeVay was able to pre-determinedly accept the brain as the central origin of sexual behavior and accordingly, focused on small clusters of cells within it in order to understand why certain male bodies engaging in certain sexual acts were dying, and perhaps to counter the fact that they were also being hated. The brain's symbolic weight of causation enables it to become a potential means by which sexual practices, like that of gay men, could be legitimized.

As I conclude, I want to emphasize that sexuality's morphological manifestations are integral to understanding

our sexual behavior, practices, and identities. Indeed, biology, materialities, and what is often lumped together as "nature," do play significant roles in shaping what we do with our bodies, but it is perceiving this inter-implicated relationship as biological purity that I find problematic. We must see experiments on gay brains, or gay genes, gay hair whorls, and gay facial expressions (all well-funded projects under work at various institutions of higher education) as historical moments that partially explain the changing and shifting directions of science. However, such processes must not be parochially framed as the "reality" about sexuality. In the end, we can remember that scientific paradigms, echoing Kuhn, will always be embedded within discursive and historical conditions that are significant and shape the way in which things like a "gay brain" become desirable projects imbued with intelligible meaning. ◻

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