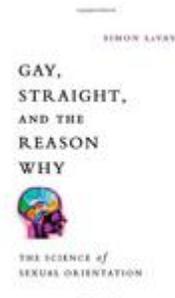


Science, Interpretation, and Identity in the Sexual Orientation Debate: What Does Finger Length Have To Do With Understanding a Person?

A review of



Gay, Straight, and the Reason Why: The Science of Sexual Orientation

by Simon LeVay

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Simon LeVay likely knew that writing *Gay, Straight, and the Reason Why: The Science of Sexual Orientation* was sure to spark controversy and criticism from all sides. It is a daunting task to bring science to a morally charged debate filled with rhetoric, religious presuppositions, and political conjecture. Many academics shy away from researching this topic, partially to avoid the fields of land mines awaiting in every direction. LeVay entered

this field before and knows the terrain well. One must, at the least, appreciate his courage at venturing again into the controversial topic.

Two very different possible directions to take with a reading of this latest work are evident at the onset. One can, for one, examine LeVay's work from within the positivistic epistemological assumptions that guide his arguments. Alternatively, one could focus on the more polemic debate, entering into the realms of interpretation and meaning of the data. Both perspectives are necessary, and we will do our best to address both as well as the relation between them in this review.

The Scientific Argument

We begin by setting aside the critiques of method, at least for the most part, to provide a review from within the paradigm from which LeVay is writing. From the positivistic scientific paradigm, LeVay reviews a significant breadth of literature that leads to the well-supported claim that sexual orientation is not a choice.

His is not a simple argument, such as stating that genes alone determine sexual orientation. Rather, his argument is piecing together the various biological influences that contribute to determining sexual orientation. For example, LeVay asserts, "Studies indicate that genes exert a significant, although not all-dominating influence on sexual orientation" (p. xv). He argues that such studies are important because "non-biological theories have shortcomings that lead to the search for biological explanations" (p. 27).

LeVay begins with a chapter discussing terminology and framing the discussion, and then approaches the book with two primary directions in reviewing the research. First, he examines characteristics of gay, lesbian, and bisexual individuals that are purportedly different from those of their heterosexual counterparts, including a tendency toward gender-nonconformist childhood characteristics, as well as inconsistent differences in visuospatial skills, verbal fluency, memory, and finger length. Second, he explores the literature examining the determinants of sexual orientation, including the role of sex hormones, genetic influences, the brain, and the "older brother" effect.

With the preponderance of scientific research supporting the genetic and biological influences on sexual orientation, it is very hard to justify a position that it is just a choice without ignoring or discounting scientific evidence. Indeed, most such arguments are rooted in a religious epistemology, not a scientific one, which is why the evidence that LeVay presents will not be convincing to many who maintain the belief that sexual orientation is a choice.

LeVay also does a nice job illustrating that the argument for sexual orientation as determined is not a singular cause-and-effect argument. Instead, he proposes that there are

multiple causes and varied pathways. At times, he alludes to the position that this complexity may help explain the within-group variances. However, these allusions remain just that.

From the positivistic paradigm, LeVay's review of the research passes the test, with some limitations related to small sample sizes and areas of contradictory findings in the research literature that he seems to dismiss rather arbitrarily. In the end, LeVay should feel quite good about this accomplishment, as it is the stance from which he is writing and the case he intended to make. Yet, we would be amiss if we did not address some limits of *Gay, Straight, and the Reason Why* that are emergent when the book is considered from a broader paradigm.

It bears repeating that even if the science debate is won, this will not end homophobia. Even though LeVay makes a convincing case that sexual orientation is not simply a choice, he runs the risk—whether unwittingly or uncaringly—of going too far. He so strongly argues, for example, that gays and lesbians are “different” in various ways that he stops just short of the boundary beyond which others have condemned “difference” in this arena as being equivalent with “deviance.” Where science meets its limitations, we must take up the moral and philosophical arguments, seeking to reach the hearts of those who, despite the scientific case, still choose to label being gay, lesbian, or bisexual a sin, immoral, or even a psychological disorder.

Beyond the Science Debate

As reflected in the title, this book seeks to know something—specifically, to know “the reason why” people become gay or lesbian. The search for knowledge boasts a lengthy and noble history of stimulating the best that quantitative science has to offer. In a somewhat fragmented way, LeVay—a neuroscientist—follows in that tradition. However, it becomes clear quite early on that he reports only that kind of knowledge that is utterly isolated from genuine understanding and deeper meanings. He does offer some cursory acknowledgment of the limitations and potential misuse of his method, as reflected in the following statement:

My own position is this: The scientific knowledge currently available does bolster the idea that gays and lesbians are distinct “kinds” of people who are entitled to protection from discrimination, especially by governments, rather in the same way that racial minorities are. But I also believe that there would be plenty of reasons why gay people should be accepted and valued by society, even if being gay were proven to be an outright choice. (p. x)

Unfortunately, LeVay consistently fails to explore the possible ramifications of these limitations, instead repeatedly choosing to minimize or completely dismiss them as

significant. Finally, other neuroscientists propose strikingly different definitions of science, relationship, and identity. These researchers advocate strongly for the notion of brain-based integration in the developing sense of self (Cozolino, 2006). LeVay does not even acknowledge such competing perspectives.

History demonstrates the riskiness in putting too much faith in science as applied in the moral realms. The same science that created “the bomb to end all wars” has often failed in delivering in the moral and ethical arenas in addressing the givens of human existence. The broader problematic issue refers back to the very title of LeVay’s book. The search for and apparent discovery of “the reason why” says absolutely nothing about human experience. What is likely, unfortunately, is that such seemingly “hard evidence” will be used in noncharitable ways to change, condemn, categorize, and otherwise judge people.

Although, as we have emphasized, from the positivistic paradigm LeVay presents a strong argument generating support for biological influences on sexual orientation, there remain some disturbing limitations in his interpretations of this data. For example, LeVay makes a rather convoluted case that sexual orientation may well stem—at least in part—from the influence of prenatal hormones that feminize development. Elsewhere he has seemingly reluctantly condoned “reorientation” therapy in terms of choice and autonomy.

The logical flaw, then, involves promoting—however cautiously and resistantly—a “therapy” that cannot possibly succeed (unless he has discovered but not yet publicized a way to “undo” prenatal experiences). In this book, LeVay states, “at least a few *highly motivated* gay people can be *helped* to engage in and *derive some degree of pleasure* from heterosexual relationships, and *to pay less attention to their homosexual feelings*” (p. 13, emphasis added). Essentially, this comment represents a neuroanatomical “Don’t ask, don’t tell.”

Similarly, LeVay makes the case repeatedly that gay men are similar to straight women and that lesbian women are similar to straight men in terms of neuroanatomy, perception, abilities, brain structure, brain function, and personality traits. At the same time, he acknowledges that an expert in the field would have only a good chance of determining gender based on looking at “some” brain structures.

One of these supposed correlations has to do with finger length. After citing “frustrating” conflictual results, LeVay arbitrarily decides that, because an “Internet-based study” with positive findings “had far more subjects than all the other studies combined . . . it does seem likely that real but small shifts exist in the average 2D:4D [finger length measures] ratios of white gay men in the direction of female-typical values” (p. 13). In many ways, these flaws demonstrate the limitations of the quantitatively defined science argument.

Identity

After considering all the scientific evidence, we are left with the question, “What does this mean for one’s identity, including, but not limited to, one’s sexual identity?” One can argue that psychological disorders, such as depression and anxiety, can be strongly influenced, or perhaps even determined, by genetics and events that occur in the prenatal environment. Biological determinism does not prevent one from labeling homosexuality as a disorder. From religious perspectives, sin can be conceived as being rooted in the human condition, which is carried in our biology or human nature itself. Scientific evidence does not prevent the label of homosexuality as sinful or immoral.

How does one make sense of the scientific evidence in coming to terms with one’s identity as a gay, lesbian, or bisexual? LeVay contends that issues of identity are philosophical rather than scientific matters, thus shrugging off the burden of struggling with such concerns. That issues of identity lend themselves to philosophical inquiry might be true, but only if one maintains a narrow definition of *scientific*. Qualitative research is just as scientific as the sorts of studies that LeVay selectively cites. It is an alternative form of research that is especially appropriate to studying constructs such as identity, meaning, and experience. Disappointingly, however, there is not a single qualitative research study cited.

Identity and a sense of self are very important to one’s psychological health. According to Hoffman, Stewart, Warren, and Meek (2009), one’s myth of self, or the way one conceives of his or her identity, and how this relates to psychological health may vary across cultural groups and individuals.

However, at least within Western culture, the myth of self is important for mental health. This philosophical assertion, if it is correct, suggests that the meaning we derive from all this scientific knowledge plays a highly important role in how one understands oneself. Not all myths of self are equal, and what is healthy for an individual is highly influenced by culture. If biological determinism is true, it is still necessary to consider the following: Does this have the same implications and meaning for individuals across cultures? Does the way one integrates this reality into his or her sense of self have importance? Here we must look to the lived experience of this biological reality to begin formulating our answers.

Conclusion

In some ways our critiques of LeVay may be unfair. He is writing from the positivistic paradigm connected with modernism, and our critique is influenced by a postmodern epistemology drawing on multiple ways of knowing. Yet, some of our critiques do fall within the modernistic paradigm, too.

In the end, we hope the criticism does not discourage people from reading this important book. In part, our differences stem from being postmodern scholar–clinicians, whereas LeVay is primarily a researcher. From a clinical perspective, we are concerned with what this knowledge means for the suffering clients we spend much of our time with, and LeVay’s strength is not in addressing these terms. Yet, it is important for scholars and clinicians alike across various paradigms to be aware of the research reviewed in *Gay, Straight, and the Reason Why*.

References

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