Can Biology Make You Gay (Friendly)?

The Biology of Homosexuality

By Jacques Balthazart

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In *The Biology of Homosexuality* Jacques Balthazart makes a detached scientific argument that biology can explain why some people are gay and others are not. Among books that make this argument, Balthazart's is distinct for its focus on laboratory studies of *animal* sexuality. Brace yourself for descriptions of studies that analogize your most intimate moments with your partner to the choices made by caged rats and mice in the laboratory (and the occasional reference to a sheep or a quail). This emphasis on animals, which reflects the author's research interests, has influenced his detailed descriptions of the experimental paradigms used to examine hormonal influences on sexual behaviour. In the latter part of the book, the author turns his attention to humans, and specifically reviews studies of intersex people and anatomical correlates of sexual orientation. In both sections he argues with detachment for a "unity of life" thesis that studies of animal sexuality provide a plausible analogy of human sexuality.

Balthazart also makes a moral point. He not only argues that biology makes some humans gay or straight (with other options rarely mentioned), he assumes throughout that biological models can make society *gay-friendly*. He expresses a hope up front that if people accept his argument that "sexual orientation is probably under the control of embryonic endocrine/genetic phenomena in which there is little room for individual choice", then society will then "rethink its attitudes toward homosexuals and their parents" (p. x).

Balthazart's intention seems to be to shift thinking about homosexuality away from the moral domain of personal choice toward the less morally worrisome ground of biology. This goal is laudable even if it is no longer particularly novel or exceptional for scientists to oppose homophobia in print. However, reading Balthazar's review of the biological evidence led me to conclude that biological science is anything but free of the moral obligations that come with choice. Let me clarify what I mean with examples.

First, Balthazart asserts the widely shared value that ideology should have no place in science, and that scientists should not confuse their political stance with the scientific evidence. More than once, he identifies the biologist Christine Vidal as making this error, and Vidal has publicly argued against Balthazart's position that gender differences in behaviour result from early hormonal organization of the brain. In contrast, Balthazart uncritically cites the work of scientists who have argued for explicitly homophobic uses of science about homosexuality, such as Paul Cameron and Günter Dörner. The choice of target for this critique is telling. It suggests that the reader should worry more about ideological bias that impacts the hypothesis that our brains determine our genders than ideological bias that uses science to promote homophobic positions. Balthazart's opposition to ideologically driven science is unremarkable, but his choice of targets is questionable.

Balthazart also expresses the very reasonable view that scientists should not harm other humans to pursue their research ends. He repeats at length the account of John Money's studies of David Reimer, whose penis was accidentally mutilated in infancy and who was later raised as a girl. Money used this case to promote a view that gender roles were entirely encoded through socialization, and Balthazart is right to critique not only Money's misrepresentation of Reimer's life, but also the abuse that Reimer suffered as a child in Money's research study. No equivalent concern is expressed for the harm that is done to women born with congenital adrenal hyperplasia or to mothers who were treated with diethylstilbestrol during pregnancy. Both groups have been subject to genital surgery in infancy that has had long-standing effects on sexual functioning (Minto et al., 2003). Balthazart simply positions clinical accounts of such women as useful data for resolving nature/nurture debates (largely in favour of his hormonal hypothesis). On balance he seems far more concerned to flag the

harm done to children who are subjects in research supporting nurture arguments than nature arguments. Again, this choice of target for critique is not fully explained or justified.

While much of this book is about animals, it is, of course, moral arguments about *human* homosexuals that concern us the most. Scientists express values when they select theories, and they must often choose between theories that are simpler and more parsimonious, and theories that can explain a wider range of phenomena. Balthazart relies on the value of parsimony to argue for the “unity of life” thesis that animal studies provide a model for humans, such that “differences between species lie in the details” (p. 43). However, it was the evidence *against* this thesis that best communicated the author’s fascination with animals. Balthazart describes differences in the hormonal organization of sexuality between rats and mice, notes that rodent species differ radically from humans because rodents do not pair-bond, that rodents differ from rams that spontaneously have sex with each other outside the laboratory, and that animal sex differs from human sex because the former involves only fixed motor action patterns. These differences piqued my scientific curiosity about variability among animals but reduced my confidence in the author’s unity of life hypothesis in sexuality research. One ethical implication of the unity of life argument is that animals that are like humans should be treated humanely. Balthazart chose to ignore this possibility throughout this book.

It is a core scientific value that theory must be accountable to evidence, but the value of parsimony sometimes leads authors to sacrifice accuracy for simplicity. In these situations, the *choice* of which data to focus on or to overlook communicates the scientist’s values about the people and animals represented by the data. Overall, data on women and on female animals are overlooked, whilst data on men and male animals in this area of research are

made central to Balthazart's argument about endocrinology. The author seems unaware of findings about sexual *fluidity* among women (Diamond, 2008), and tends to assume that a dimorphic model of sexual orientation adequately explains all human sexual behavior.

Whilst he argues that it is an ideological bias to assert that sexuality is now tied to reproduction for humans, he also neglects the hormonal correlates of childbirth, insisting that oxytocin is irrelevant for understanding human sexual behaviour.

Finally, one's values can be expressed through choices of language. Some of Balthazart's analogies between humans and animals are jarring (e.g., "Estradiol controls the development of the oviduct in the chicken, as well as in the rat and woman" [p. 31]). Balthazart repeatedly *misgenders* transgender and intersex people by referring to them with a sex category to which they do not identify (see Ansara & Hegarty, 2012). His understanding of transsexuality as a case "when the sexual identity is at odds with the physical sex" (p. 3) is also somewhat odd.

At the end of the book, Balthazart briefly re-examines the idea that biology makes one gay-friendly. Here too he notes exceptions, arguing that in "ethically deviant societies" homophobia has multiple roots that are unrelated to thinking about biology. He also notes that a minority of gay people would disagree with his thesis and assert that they had some choice in their sexual orientation. I left this book more intrigued by animal sexuality, but unconvinced that biological models *escaped* matters of politics, ethics, or value. I welcome all attempts to undo homophobia, but the author's decisions to target women scientists, overlook harm caused to intersex women, misrepresent transsexual people, neglect women's sexuality, and describe some societies as "ethically deviant" were all choices that had no empirical basis and which contributed far more to the author's conclusion than he acknowledged or discussed.

Finally, my enthusiasm for this use of biology to counter homophobia is tempered by the evidence of social psychology. Biological models support the biological basis of homosexuality, but they also imply that gay and straight people are fundamentally different, and this latter belief is associated with prejudice (Haslam & Levy, 2006). Balthazart's book constructs a very fixed category boundary between homosexuality and heterosexuality that is the consistent across humans, rats, sheep and quail. The emphasis on this boundary may promote belief systems that engender homophobia as well as those that seem to delegitimize it. In spite of the clarity of its presentation, I am not sure that this account of biology will make society more tolerant of gay people. Instead, I left this book wondering if the increasingly common wish that homophobia would end might have played a part in making this genre of biological science more tolerable to many people.

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Biography

Peter Hegarty is the Head of the School of Psychology at the University of Surrey. He has extensively researched the social psychology of belief in the biology, psychology, and history of sexuality, and the history of the sexual politics in psychology and related fields.

Further details of his publications are available at

http://www.surrey.ac.uk/psychology/people/dr_peter_hegarty/. His first book, *Gentlemen's Disagreement: Alfred Kinsey, Lewis Terman and the Sexual Politics of Smart Men*, will be published by the University of Chicago Press in 2013.