

Helen Longino

Studying Human Behavior: How Scientists Investigate Aggression and Sexuality

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Overview

In *Studying Human Behavior: How Scientists Investigate Aggression and Sexuality*, Helen Longino examines in-depth five approaches to the science of aggression and human sexuality in terms of their epistemological framework, the kinds of knowledge they produce, and their pragmatic goals. Centrally, she tackles the monistic assumption that the knowledge produced by these disciplines can be combined or reduced into to a single, all-encompassing account. Coming from a social epistemological standpoint, Longino argues that this monistic assumption is neither conducive to the goals of behavioral research nor empirically tenable. Her analysis demonstrates how ontological and epistemological factors contribute to the incommensurability of the accounts produced by the approaches. It also shows that the restricted and inadequate dissemination of the products of these approaches has negative social and epistemic consequences. She argues that if we wish to continue to guide our policies with scientific research, we need to embrace a pluralistic stance that accepts the partiality of knowledge that any one approach can generate. Such pluralism ensures the availability of a broader range of research platforms, and also encourages a more cautious approach to how we inform policymakers and publics about scientific research. In this review, we discuss the ways in which this book contributes to Longino's own corpus and to feminist empiricist and philosophical aims more generally.

The book is divided into two parts. Part One provides a detailed synopsis of five scientific approaches to human aggression and sexuality that dominate the empirical landscape: quantitative behavioral genetics; molecular behavioral genetics; social environment-oriented developmental psychology; neurophysiology and anatomy; and a set of integrative programs that take neither an exclusively biological nor an exclusively social-environmental approach. Longino provides an in-depth, systematic description of each approach, drawing her data from "research reports, research reviews and meta-analyses, and critical appraisals" (15). Her analysis reveals the theoretical and conceptual frameworks, specific research questions, methods, scope, assumptions, and limitations of each of the approaches. She concludes that because each approach "generates its own set of questions, to which different forms of data, aided by different assumptions, provide distinctive answers," there isn't an empirical way to resolve possible conflicts among the approaches (15).

In Part Two, Longino addresses epistemological, ontological, and social theses regarding the accounts of behavior she developed in Part One. Her epistemological thesis concerns pluralism and the partiality of knowledge. Reflecting on the argumentative and empirical characteristics of these approaches, Longino argues that their various accounts of human sexuality and aggression are neither competitive nor additive, nor are they reducible to one another. Rather, she argues that each of these approaches produces partial knowledge about the subject matter. These accounts cannot be integrated or reduced to a single perspective because each approach elucidates different kinds of causes. That is, it is not just that these approaches focus on different causes (for example, environmental, genetic), but they make incompatible and sometimes conflicting assumptions about the nature and efficacy of the different causal factors understood to surround behavior. As a result they produce accounts of human aggression and sexuality that are incommensurable with one another. This, of course, deeply undermines the monistic expectation that the accounts can be reduced to or combined with one another.

Her ontological discussion demonstrates how, across these disciplines, there is no common conception or operationalization of the behaviors under investigation. Reasons for this, she says, have as much to do with our moral and political values and concerns about behavior as they do with "objective properties" of the behavioral phenomena (7–8). She argues that "unless studies target the same behavior, assessed in the same way, using the same measuring instruments and the same concepts of gene, individual, and environment, it's not clear that any can be taken to contradict or complement or replicate any other" (159–60).

Her social thesis arises out of an analysis of the uptake of information produced by the approaches she described in the synoptic chapters. This analysis looks at the patterns of citation within academia of various works produced by the five research approaches, the nature of the discussions about behavioral science in the media, and the reviews of some general-interest books written by behavioral scientists. Her analysis reveals three observations about the social and academic uptake of the literature: (1) there is insufficient interaction among the proponents of the different scientific approaches; (2) the uptake of the research by the media is skewed in favor of genetics research; (3) the characterization of the conflict between the disciplines as "nature versus nurture" indicates an intense valuing of individualism—there is a focus on how individuals become disposed to behave in some way. From her analysis she concludes that the

chain of the transmission of knowledge from the sciences to the public has a "narrowed outcome," one that acts to "legitimize and reinforce attitudes that would be challenged by a more complete and nuanced representation of the research" (16). We will discuss this further in the section on liberatory implications below.

Context

Studying Human Behavior contributes to a wide range of philosophical approaches, including accounts of the behavioral sciences in philosophy of biology, discussions of policy-relevant science, and accounts of pluralism in philosophy of science, as well as literatures in feminist and more generally liberatory and socially relevant philosophy of science.

Although *Studying Human Behavior* develops themes arising in Longino's earlier books, it stands on its own as a significant, novel contribution to Longino's corpus. In *Science as Social Knowledge* (1990), and *The Fate of Knowledge* (2002), Longino develops Critical Contextual Empiricism (CCE), according to which knowledge is objective or justified, respectively, to the degree that it is subjected to critical evaluation from multiple perspectives. Longino employs CCE in *Studying Human Behavior*. The social thesis demonstrates that scientific accounts of human behavior rarely get uptake from, and, hence, rarely engage in critical discourse with other disciplinary approaches. Therefore these accounts are not tested from as wide a range of perspectives as they might otherwise be, and the knowledge produced is not as objective, or well justified, as it might otherwise be—or thought to be by some scientists, policymakers, and publics.

In *The Fate of Knowledge*, Longino develops her views on pluralism, and on the importance of differences among the local epistemologies of various approaches to scientific research. The epistemological and ontological theses in Part Two of *Studying Human Behavior* reveal that there are differences in how the approaches individuate and articulate causes, as well as how they define and characterize the objects of their investigations. This notably advances her account of pluralism and the partiality of knowledge.

All three of Longino's books make careful and detailed use of examples from a range of sciences, though *Studying Human Behavior* stands out in this regard. The first part of the book is a rich, detailed, and systematic account of the empirical and argumentative structure of various scientific approaches to investigations of human sexuality and aggression.

Studying Human Behavior stands in an interesting and complicated relationship to feminist philosophy of science and feminist epistemology. In it Longino takes the tools that she developed in *Science as Social Knowledge* and *The Fate of Knowledge* and puts them to work in a careful analysis of scientific research that has direct bearing on contemporary social-justice challenges. She helps us understand the limits and misapplications of scientific research that supports or is complicit with ways that some aggressive behavior is racialized and some expressions of sexuality are pathologized. This book has many features that are consistent with feminist empiricism and exhibits characteristics that have, in some instances, been identified with feminist research. Roughly, these features and characteristics include Longino's use of

CCE, as well as her focus on pluralism and the partiality of knowledge. This consideration of pluralism and partiality draws attention to other characteristics that are common to feminist approaches to philosophy of science. Specifically, it draws attention to the complexity of both the phenomena and the research approaches that investigate those phenomena, as well as the disciplinary context in which this research is produced.

With all of that said, however, the relationship of *Studying Human Behavior* to feminist philosophy of science and feminist science studies is complicated in other ways. A quick look through the bibliography reveals that this book is not in explicit conversation with feminist epistemology and philosophy of science or feminist science studies, even though there is relevant literature in those areas (for example, discussions of biological determinism). Also, *Studying Human Behavior* does not use gender as an explicit analytic category. Opportunities remain for further research on the sciences of human sexuality and aggression that engages overtly with this feminist literature.

One additional way in which Longino's book exhibits a complicated relationship with feminist philosophy concerns her treatment of the partiality of knowledge. In the context of feminist epistemology and philosophy of science, partial knowledge is usually characterized as the result of the situated nature of knowledge claims. This feminist work focuses attention on the social and material location of the knowing subject. The question of "who it is that does the knowing" is centrally relevant. Conversely, *Studying Human Behavior* primarily situates scientific knowledge claims within the argumentative structure of particular disciplinary approaches. Opportunities remain for research on the situated knowers and the detailed social context in which this knowledge is produced.

Nevertheless, *Studying Human Behavior* provides an excellent resource for feminist scholars, including those who wish to realize these opportunities for developing accounts that engage with more feminist literature and to investigate the social and material context of the researchers/research within these disciplinary approaches. One way that it is a resource is that it provides a transparent, detailed, and systematic citation record of a vast body of scientific literature regarding human aggression and sexuality. This transparent record not only makes the scientific work she engages with readily accessible, but it also primes the literature for more in-depth feminist analysis as a result of the specific concerns she raises and the points she highlights.

Liberatory Implications

Longino reveals that, despite wide-ranging claims rejecting the nature–nurture dichotomy as simplistic and outdated, it is still very much alive and permeates both social and academic interest in behavior. As demonstrated by her social thesis, the nature–nurture debate largely fuels the public's and media's interest in scientific studies of behavior. And in spite of more refined ways of talking about nature and nurture in the behavioral sciences, the debate still shapes the overarching pattern of relations between the different research approaches. For instance, she says, the dichotomy often exerts a "polarizing influence" as researchers from rival disciplines accuse one another of sometimes falling onto one side or the other of the debate (10). Longino explains that this overall fixation on nature and nurture has the effect of canalizing questions

about behavior in terms of *individual* behavior and *individual* differences since the focus is so rigidly set on "how individuals become disposed one way or the other" (186). The upshot is that individuals become the locus of manipulation and control because addressing behavior automatically means addressing the behaviors of individuals. Longino expresses deep concern regarding the political implications of this individualist paradigm. With regard to aggression, for example, she tells us how the

Nature–nurture [and, hence, individualist] lens facilitates conceptualizing the commission of crime as a result of pathological genes or pathological parenting. Combined with racial disparities in incarceration and a national history of racial bias, this conceptualization facilitates a further association of African ancestry with one or the other of those pathologies. . . . By failing to incorporate population perspectives into their thought or reporting, perspectives that might suggest quite different questions than those focused on etiologies of individual difference, debaters about nature versus nurture are unwittingly complicit with a system of racial subjugation that seeks legitimacy in science. (208–09)

She advances a similarly powerful warning against the individualistic study of sexuality and its social implications for LGBTQ persons:

looking for the "causes" of homosexuality in genes or hormones, on the one hand, or problematic relations with parents, on the other, in isolation from similar questions about heterosexuality, perpetuates the notion that homosexuality is a problem rather than one dimension of variation that finds different degrees of expression in different structured social worlds. (209)

Thus, to Longino, individualism is not just an epistemically narrow way to frame research on behavior, it is a dangerous political tool that has the power to perpetuate prejudice and unethical differential legal and/or medical treatment for LGBTQ people and members of racialized minority groups.

On that very troubling note, it is heartening to consider some of the positive implications of Longino's work. These include (1) attention to the causal complexity and higher-level causes for patterns of human behavior, and (2) attending to the complexity of, and political assumptions implicitly embedded in, the definitions of some behaviors. From a feminist perspective, these shifts in focus have profound liberatory implications. For instance, and with regard to (1), shifting the focus from individual to population-level considerations when looking at sexuality allows for recognition of "different degrees of expression in differently structured social worlds" (209). This encourages research questions to admit to, and make it possible to, appreciate a range of erotic behavior.

Regarding (2), Longino points out how defining aggression as "unauthorized infliction of harm on another" has the effect of racializing aggression (209). In places where race influences who is labeled as a delinquent or incarcerated, aggression is by default associated with men who are members of racialized groups and less with white men (or social institutions like prisons). However, by drawing awareness to the politics surrounding the operationalization of behavior, it becomes clear that incarceration is not an obvious or effective response to aggression—and that aggression does not encompass mainly those behaviors committed by persons of color. This enables science to be less complicit with racial harms propagated by the justice and penal systems in the US.

Overall, we have highlighted three important features of *Studying Human Behavior* that make it worth reading for anyone interested in feminist philosophy of science, philosophy of biology, or social epistemology. Longino demonstrates an impressive and comprehensive engagement with the relevant science, a careful and thorough use of that scientific literature to advance an account of the pluralism and partiality of knowledge claims based in different scientific disciplines, and, finally, an approach to the sciences of behavior that has important feminist and liberatory implications. We hope this book makes it to your shelves and stimulates further feminist work in the scientific terrain Longino has so rigorously charted for us.

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References

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