



REVIEW: Dorothy Roberts, *Fatal Invention: How Science, Politics, and Big Business Re-Crete Race in the Twenty-First Century*

Author(s): Alka Vaid Menon

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EDITORIAL OFFICES

Institute for the History and Philosophy of Science and Technology
Room 316 Victoria College, 91 Charles Street West
Toronto, Ontario, Canada M5S 1K7
hapsat.society@utoronto.ca

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REVIEWS

Roberts, Dorothy. 2011. *Fatal Invention: How Science, Politics, and Big Business Re-Create Race in the Twenty-First Century*. 400 pp. New York: The New Press.*

Alka Vaid Menon[†]

Is race a biological category? What is the evidence, if any, for a biological basis for race? How do science and medicine conceptualize race, and how has this changed over time? Where did the idea that race can be used as a proxy for genetic difference come from? And most importantly, what is at stake in efforts to establish race as a biological phenomenon?

Discussing court cases, legislation, biomedical and genomic studies, pharmaceutical production and marketing, and the administrative surveillance state, Dorothy Roberts assembles past and present scholarship in law, history, public health, genomics, and medicine in a comprehensive exploration of how race has been variously defined. Roberts takes the position that, rather than being a biological construct, race has always been a political and social category. She further argues that the idea of race as a biological category is re-emerging and being reinforced by genomic science and biotechnologies. While the social construction of race has been well documented in sociology, what is noteworthy about this book is the comprehensive evidence that Roberts amasses to support this claim, and her careful documentation of previous attempts to ascribe a biological basis to this category.

The book is divided into four sections. In Part I, Roberts provides a historical account of racial categories and the relationship between early racial definitions and science. This section includes a discussion of the eugenics movement in the United States in the early twentieth century. In Part II, Roberts characterizes the use of race in contemporary biological science with attention to genetics, biomedical research, and clinical practice.

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[†] Alka Menon is a Ph.D. Candidate in the Department of Sociology at Northwestern University, where she is also a fellow with the Science in Human Culture program. She is interested in the intersection of race and gender with respect to medicine and science.

In Part III, Roberts discusses how technologies such as pharmaceuticals and genetic ancestry tests are racialized, linking this to a larger shifting of responsibility from the state and society to the individual in a new era of biological citizenship. Finally, in Part IV she explores the implications of a biological definition of race, describing a new racial biopolitics in which existing racial hierarchies become perpetuated and legitimated through the use of ostensibly neutral scientific practices such as DNA testing. Roberts concludes with a brief call to return to a form of racial solidarity based on “shared political values” rather than “biological essentialism” (225).

Roberts addresses several core science and technology studies (STS) concepts in accessible, clear ways, illustrating them with compelling examples. Of particular note is her discussion of the social construction of race through biological typologies and her explanation of biological citizenship. In her account, biological citizenship “entails both individual control over personal welfare and a ‘biosociality’ that links people together around their common genetic traits” (206). For Roberts, race is central to the technologies that biocitizens use to manage themselves and to gaining access to those technologies.

Roberts also highlights the monetary stakes of defining race as a biological category, with biocitizens expected to act as “bioconsumer[s]” and marketing ethics replacing scientific ethics (224). In this vein, she criticizes genetic ancestry testing, contending that it offers African Americans “a false sense of connection to a contemporary ethnic group in Africa,” insidiously preying on a desire for a clear, known ancestral lineage (253). She points to the power of genetic ancestry testing in defining racial identities, but emphasizes adverse consequences of such use in contrast to other scholars, such as Paul Rabinow (1992), who point to the positive potential of biosociality. Rabinow (1992) suggests that genetics may empower individuals to affiliate around new types of shared identities. Similarly, Alondra Nelson’s (2008) work, which Roberts cites, finds that African Americans do not simply accept results from genetic ancestry testing uncritically but incorporate them with other aspects to shape a sense of individual and collective racial identity.

Fatal Invention offers a good starting point to explore issues of race and science, with detailed endnotes to direct the interested reader to the larger academic literature on each subject. The sheer breadth of the book, however, means that Roberts leaves certain implications and consequences underexplored. Each of the sections could constitute a book in its own right, and while the theme of race as a political construct is central, it is not clear what else links the sections of the book. Moreover, while Roberts rightly emphasizes the importance and centrality of environmental and structural explanations for racial health disparities, she leaves little room for the possibility of science attentive to race to do more than elucidate the

biological effects of social structure. At the same time, she does not accuse scientists of pursuing overtly racist projects, noting that most contemporary scientists' use of race comes from a desire to eliminate racial health disparities even as such use paradoxically reinforces and essentializes racial differences. Ultimately, Roberts is pessimistic about the potential for science to displace or transform racial hierarchies.

The great strength of this book is the ways in which Roberts unpacks the assumptions behind the scientific studies discussed, evaluating the studies' use of statistics and their methodology. Roberts also does an excellent job of exposing the assumptions underlying studies that treat race as a variable, debunking the notion that race as a social category can be used as a proxy for a genetic group, and identifying slippage in definitions on the part of scientists studying race in medicine.

In her conclusion Roberts argues that "race is central to every aspect of the new science and technology that is emerging from genomic research" (287). But as her historical analysis and narrative suggests, this is not a project without precedent, just the latest iteration of a longstanding racial project. Her point that "race is a political system that will not be brought down with scientific evidence alone" is amply illustrated and abundantly supported. Indeed, as she argues, "race persists because it continues to be *politically useful*" (79). In this book, Roberts takes a strong and important stance against the latest injection of biological conceptions of race into public discourse and policy in a clear, thoughtful way that makes it well suited for a broad audience.

ALKA VAID MENON
Sociology Department
Northwestern University
1810 Chicago Ave.
Evanston, IL 60208
alka.menon@u.northwestern.edu

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