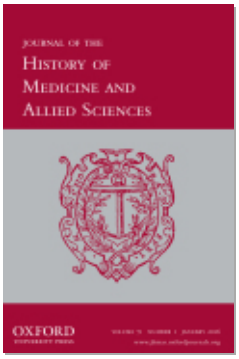
# *Race Unmasked: Biology and Race in the Twentieth Century* by Michael Yudell (review)

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critics. In part 2 of the book, Conis argues that "vaccine critiques from the time bear the unmistakable imprint of health feminist ideas" (106). These included the way President Carter's immunization initiatives, to which maternal engagement was central, could be in conflict with feminist thought. Conis highlights how this health feminism led some women's health activists to question a paternalistic medical profession and thus claims about vaccine necessity and vaccine safety, contributing to a rise of vaccine skepticism and antivaccinationism during this period.

But it is in its discussion of antivaccinationism that the book lands flat. By taking what seems to be a quasi-anthropological approach (that of a neutral observer) to the most controversial aspects of the history of vaccines, Conis seems to go out of her way to avoid being critical of late-twentieth-century antivaccinationists. For example, the Orwellian National Vaccine Information Center (NVIC) and its precursor Dissatisfied Parents Together are groups well known for their long-time antivaccine efforts. Yet, these groups and others are described as part of what Conis calls the "vaccine-safety movement," a noncritical term describing groups and individuals who demanded more information about vaccines and voiced concerns about their risks. Others in part two of the book bear the antivaccinationist moniker, including naturopaths like Eleanor McBean, author of *The Poisoned Needle*. But what is it that makes Eleanor McBean an antivaccinationist and NVIC a vaccine-safety group is ultimately unclear.

Finally, while the book deftly shows the social construction of vaccine-preventable diseases both before, during, and after vaccine development, this approach sometimes overshadows the medical utility of vaccines and the significant morbidity and mortality they prevent in all of the vaccine-preventable diseases discussed in this book.

Nonetheless, *Vaccine Nation,* highly suitable for both undergraduate and graduate classrooms, is an important contribution to the literature and should find an audience among both popular and academic readers.

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**Michael Yudell. *Race Unmasked: Biology and Race in the Twentieth Century.* New York City, New York, Columbia University Press, 2014. xvi, 304 pp., $40.00.**

**KEYWORDS:** modern synthesis, racial science, population genetics, human biodiversity

The race concept has been the most widely adopted, contested, reconfigured, and enduring idea within the history of modern biology. Michael Yudell's *Race Unmasked* tells the story of the transformation and persistence of the race concept following the "modern synthesis." Theodosius Dobzhanky's contribution to this transformation

looms large in Yudell's treatment of this history as he explains how Dobzhansky's 1937 book, *Genetics and the Origin of Species*, pushed modern biologists to abandon the typological reasoning that previously led scientists to believe races were populations with distinct and fixed units of inheritance.

Within the pages of *Race Unmasked* Yudell provides two narratives about race in twentieth-century biology. In the first narrative, *Race Unmasked* tells the story of how racial science thrived in post-World War II America. Yudell challenges Elazar Barkan's long-standing thesis in *The Retreat of Scientific Racism*, which claimed that liberal-mind scientists denounced and eliminated racial science from the field of biology and genetics in the wake of World War II. Yudell argues that "the field's shift on race was not simply the liberal triumph of science over ignorance. Instead, it was first a struggle to find meaning for the concept within taxonomic nomenclature and the evolutionary synthesis, and, second a struggle to find alternative ways to explain human genetic diversity" (6–7). Yudell goes on to explain that the scientists who followed Dobzhansky found themselves in a "contradictory space" as they "struggled to both find meaning for a race concept in science and fight against racial science and racism more generally" (7). Charting the persistence of racial thought beyond the modern synthesis, Yudell argues that scientists have been haunted by a troubling paradox: race in biology has been acknowledged as an imprecise category yet continues to be deployed as if it captures human biodiversity. Its continued use has led scientists to naturalize what Yudell argues are fundamentally social categories in the study of human biology.

This is the most compelling and fascinating of the two narratives jockeying for our attention throughout *Race Unmasked*, but it is not without its problems. The tension between scientists seeing the limits of race as a concept for ordering human diversity yet still using race as a tool for studying human life is not unique to twentieth-century biology. Had Yudell expanded his timeline to the previous century he would have also found Charles Darwin caught in the very same paradox that haunted Dobzhansky. Darwin in the *Descent of Man* came to reject the very idea that species were fixed and doubted if there were any character constant and stable enough to be considered a racial trait. Nonetheless, Darwin and the evolutionists who followed him, continued to use racial categories to talk more generally about where each race stood in relation to each other, as all races were perceived to be moving toward higher states of civilization. Given Darwin's own ambiguity on the race concept one might ask did Dobzhansky invent or inherit the "contradictory space" that Yudell believes has haunted post-synthesis racial thought?

It is possible that Yudell has avoided these connections between nineteenth- and twentieth-century racial science because of his belief that eugenicists created a fundamental break with the racial science of the past. This brings us to the second narrative embedded in *Race Unmasked*. According to Yudell, "the biological race concept, as we understand it today, originated with eugenic theories of difference and was re-created and integrated into modern biological thought by population geneticists and evolutionary biologists in the 1930s and 1940s during the evolutionary synthesis in biology" (6). Concerning the actual content of eugenic racial thinking Yudell goes on to explain that eugenicists "shifted to seeing and measuring race as a reflection of unseen differences they attributed to heredity, an area of study they would help

to create in the final decades of the nineteenth and early decades of the twentieth centuries. This shift, from the seen to the unseen, which in today's genetic parlance would be from the phenotypic to the genotypic, was the eugenicists' most significant contribution to redefining the meaning of race" (25).

Yudell believes that this eugenic understanding of hereditarianism, which was built on a typological understanding of racial ancestry, ultimately survives post-synthesis racial thought. He does not do enough to sustain this claim throughout the work, however. Yudell concedes that following the "modern synthesis" many scientists "came to reject a eugenic and typological notion of fixed genetic differences between so-called racial groups and instead understood human races as dynamic populations distinguished by variations of the frequency of genes between them" (7). Yet, what Yudell leaves unclear is whether every instance of typological reasoning on the race question after the modern synthesis can be considered eugenic. Surely, typological and hierarchal views of race predate the eugenics movement and in fact were the prized assumptions of eighteenth- and nineteenth-century natural historians who were often skilled taxonomists and zoologists. If Yudell is committed to telling us a story about the continuity of the race concept over time, then why not also consider that the very taxonomical foundation of modern biology—and not merely eugenic thought—also contributed to the confusion experienced by post-synthesis scientists on the race concept.

With *Race Unmasked* Yudell has given us a book that contributes to the new shift in the historiography on racial science that looks to unseat Barkan's decline thesis. What we learn from Yudell is that the epistemological ground established by Dobzhanksy and the modern synthesis has not insulated the race concept from being attached to typological reasoning or used to promote racism. This indeed is the current state of affairs for contemporary scientific research on race and Yudell's book is a welcomed contribution to understanding the history of the present. However, if we are to agree with Yudell's continuity argument—and we certainly should over and against Barkan's decline thesis—then we must also entertain the possibility that the source of present day problems in the race concept could be further in the past than the eugenics movement.

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**Peter Keating and Alberto Cambrosio. *Cancer on Trial: Oncology as a New Style of Practice*. Chicago, University of Chicago Press, 2012. xviii, 456 pp., illus., $45.00.**

**KEYWORDS:** clinical trials, chemotherapy, experimental therapeutics, drug testing

At the beginning of *Cancer on Trial*, the authors remark that rather than providing a global picture of clinical trials, they have "sought more modestly to describe the