Published in final edited form as:

Am Anthropol. 2017 September; 119(3): 422–434. doi:10.1111/aman.12890.

A Qualitative Analysis of How Anthropologists Interpret the Race Construct

Jayne O. Ifekwunigwe,

Center on Genomics, Race, Identity, Difference (GRID), Duke University, Durham, NC 27708; joi@duke.edu

Jennifer K. Wagner,

Center for Translational Bioethics and Health Care Policy, Geisinger Health System, Danville, PA 17822; jennifer.kristin.wagner@gmail.com

Joon-Ho Yu,

Department of Pediatrics, University of Washington, Seattle, WA 98105; joonhoyu@uw.edu

Tanya M. Harrell,

Fred Hutchinson Cancer Research Center, Seattle, WA 98109; tharrell@scharp.org

Michael J. Bamshad, and

Departments of Pediatrics and Genome Sciences, University of Washington, Seattle, WA 98105; mbamshad@uw.edu

Charmaine D. Royal

Departments of African and African American Studies, Biology and Community and Family Medicine and Center on Genomics, Race, Identity, Difference Duke University, Durham, NC 27708; charmaine.royal@duke.edu

Abstract

This article assesses anthropological thinking about the race concept and its applications. Drawn from a broader national survey of geneticists' and anthropologists' views on race, in this analysis, we provide a qualitative account of anthropologists' perspectives. We delve deeper than simply asserting that "race is a social construct." Instead, we explore the differential ways in which anthropologists describe and interpret how race is constructed. Utilizing the heuristic of constructors, shifters, and reconcilers, we also illustrate the ways in which anthropologists conceptualize their interpretations of race along a broad spectrum as well as what these differential approaches reveal about the ideological and biological consequences of socially defined races, such as racism in general and racialized health disparities in particular. [race concept, social construction, racism, health disparities]

Abstract

Este artículo evalúa el pensamiento antropológico acerca del concepto de raza y sus aplicaciones. Derivado de una encuesta nacional más amplia de las opiniones de genetistas y antropólogos sobre la raza, en este análisis proveemos un reporte cualitativo, de las perspectivas de los antropólogos.

Ahondamos más que simplemente afirmar que "la raza es un constructo social". En cambio, exploramos las formas diferenciales en que los antropólogos describen e interpretan cómo la raza es construida. Utilizando la heurística de *constructores, desplazadores*, y *reconciliadores*, también ilustramos las maneras en las que los antropólogos conceptualizan sus interpretaciones de la raza a lo largo de un amplio espectro, y lo que estas aproximaciones diferenciales revelan acerca de las consecuencias ideológicas y biológicas de las razas definidas socialmente, tales como racismo, en general, y las disparidades racializadas en salud, en particular. [*concepto de raza, construcción social, racismo, disparidades de salud*]

Part of the problem stems from a lack of clarity about what anthropologists mean when they say races aren't biologically real. Anthropologists aren't arguing that there is no biological component in US racial categories. Biology has played a role in the cultural invention of what we call race. ... And race, or rather, one's racial designations, socially, can have enormous biological consequences, including one's health status. But most of what we believe or have been taught about race as biology, as valid subdivisions of the human species, and an important part of human biological variation is a myth.

—Carol Mukhopadhyay (2014)

INTERPRETING CONCEPTUALIZATIONS OF RACE IN ANTHROPOLOGY

In the long march of human evolution (Haber et al. 2013; Henn, Cavalli-Sforza, and Feldman 2012; Hill, Barton, and Hurtado 2009; Hill et al. 2011), the race concept is a relatively recent idea (Bamshad and Olson 2003; Keita and Kittles 1997; Lieberman and Jackson 1995). From the 1960s to the present, advances in science continue to demonstrate that there is more genetic variation within a group socially designated as a race than between so-called groups socially identified as different races (Hunley, Healey, and Long 2009; Lewontin 1974; Livingstone and Dobzhansky 1962; Long, Li, and Healy 2009; Relethford 2009). Although there are small genetic differences that allow geneticists to trace the global migrations of populations, these variations should not be confused with the belief in discrete races because these variations are considered clines, which are gradients of gene frequencies from one population to another based on geography (Brown and Armelagos 2001). The "no biological race" position that was derived from the fact that race is not a scientifically reliable measure of human genetic variation led to the pervasiveness of discourses that evacuated racism from critical debates on difference (Harrison 1995). Mullings (2005) also highlighted the epistemological tension within anthropology between race as a socially and culturally defined category and racism as an ideology.

Since the European invention of race as a worldview (A. Smedley 1993), its ideological applications have had a powerful impact on the lived experiences of individuals and societies across the globe (Baker 1998, 2010; Thomas and Clarke 2013). The ideology of scientific racism provided rationales for forms of structural, epistemic, and physical violence, including transatlantic slavery, colonization, eugenics, genocide, and de jure apartheid in both South Africa and the United States (Barkan 1992; Fields and Fields 2012; Painter 2010). The contemporary North American worldview on race emerged from a particular set

of historical, economic, and political circumstances, including the subjugation of people of African descent during and after enslavement (A. Smedley 1993). This specific history explains why critical and popular US discourses on race predominantly pivot on a binary black/white axis (Drake 1991). Comparative analyses of race in other geopolitical contexts, such as Latin America (Pagano 2014; Wade et al. 2014), the Caribbean (Castor 2013; Thomas 2011), or West Africa (Pierre 2012), reveal different systems of racialization and color/caste (A. Smedley 1993), social hierarchies, and patterns of racism.

At different historical junctures, anthropologists have played pivotal roles in the conceptualization, refinement, and interpretation of the race concept and its biological underpinnings (Caspari 2003; Goodman, Heath, and Lindee 2003; Lieberman and Kirk 2008; Shanklin 1998; Visreswaran 1998). These subdisciplinary approaches have been both heterogeneous and at times contentious (Blakey 1987; Caspari 2009; Livingstone and Dobzhansky 1962; Stocking [1968] 1982, UNESCO 1969). As the first black president of the American Anthropological Association (AAA), Yolanda Moses prioritized race as a discursive theme. Her two-year term (1995–1997) functioned as an important catalyst for the proliferation of subdisciplinary and public dialogues on race (Harrison 2012). During her tenure, Moses convened a group of scholars representing the various subfields of anthropology in order to discuss how race was conceptualized within their subfields. The group discovered that:

Rather than occupying conceptually different universes, we had many points of agreement ... we came to our points of agreement from different intellectual histories and with different observations and data ... [which] highlighted diverse aspects of the complexly protean idea of race and the dynamics of racism ... we felt compelled to educate that *race is powerful, but not based in genes or biology, rather* [it is] *a cultural and changeable concept.* (Goodman, Moses, and Jones 2012, xi–xii; emphasis in original)

The executive board of the American Anthropological Association's (AAA) drafting and adoption of the 1998 "AAA Statement on Race" and the 2007 launch of the AAA's public education project and traveling exhibition, "RACE: Are We So Different?" (RACE), are two concrete examples of the fruits of these fertile deliberations (Goodman, Moses, and Jones 2012).

As a collaboration across anthropological subdisciplines, the RACE project retreated from explicit engagement with biological race concepts in favor of social and cultural interpretations that are informed by and inform biology (Goodman, Moses, and Jones 2012; Harrison 1995; Muhopadhyay and Moses 1997). In 2007, a conversation between biological anthropologist Alan Goodman (who was at the time president of the AAA and a member of the RACE project advisory group) and Robert Garfinkle (the RACE project exhibit leader at

¹⁻How people have been accepted and treated within the context of a given society or culture has a direct impact on how they perform in that society. The "racial" worldview was invented to assign some groups to perpetual low status, while others were permitted access to privilege, power, and wealth. The tragedy in the United States has been that the policies and practices stemming from this worldview succeeded all too well in constructing unequal populations among Europeans, Native Americans, and peoples of African descent. Given what we know about the capacity of normal humans to achieve and function within any culture, we conclude that present-day inequalities between "racial" groups are not consequences of their biological inheritance but products of historical and contemporary social, economic, educational, and political circumstances (AAA 1998).

its inaugural location at the Science Museum of Minnesota) outlined the RACE project's objectives

The idea was to develop a public education project about the intersections of race, racism and human biological and genetic variation. We wanted to change the public debates to get them beyond the simple dichotomy that race is either real or not real to consider in a more serious fashion the varieties of ways in which race sometimes is real and sometimes isn't. (117)

The RACE project has been a hugely successful public anthropology AAA initiative, which has been traveling for almost ten years and has already been exhibited in forty-one cities, including two permanent exhibits in St. Paul, Minnesota, and San Diego, California (www.understandingrace.org). Exemplifying this "new anthropological synthesis," the RACE project and the "AAA Statement on Race" convey the collective anthropological position on race as a dynamic, historically situated, culturally constructed folk concept that derives symbolic meaning from specific readings and rankings of phenotypic differences, such as skin color, hair texture, nose width, lip thickness, and body type (Goodman, Moses, and Jones 2012; Mukhopadhyay, Henze, and Moses 2014). Real and perceived physical differences are ranked hierarchically and provide social justifications for inequalities and injustices, such as differential access to power, privilege, and opportunities (Chase [1975] 1980; Hartigan 2013b; Mukherjee 2016). This article incorporates the qualitative analysis of survey data to discuss the broad range of individual anthropologists' conceptualizations and interpretations of race, and compares these responses to public and collective anthropological positions on the race concept as exemplified by both the AAA statement and the RACE project.

In the late twentieth and early twenty-first centuries, anthropologists have continued to debate and discuss the race concept (Allison and Piot 2013; Blakey 1999; Edgar and Hunley 2009; Harrison 1999). Across the subdisciplines within anthropology, robust critical scholarship seeks to "reconcile" different views on race's definition, conceptualization, interpretation, application, and relevance (Allison and Piot 2013; Edgar and Hunley 2009; Hartigan 2013a). An Anthrosource database keyword search for "the race concept" yielded a total of 8,318 results, with the majority appearing in *American Anthropologist* (3,099), *Anthropology News* (1,284), and *American Ethnologist* (1,183). Spanning the 1980s to 2016, of the initial one hundred articles published in anthropology journals, there was a clustering with more articles (63 percent) published from 1990 to 2010, which suggests a heightened critical engagement during this time. During the same time period, 1980 to 2016, a keyword search of the *American Journal of Physical Anthropology* yielded 128,645 articles on "the race concept." There have also been lively debates on race within archaeology (Blakey 2001; Leone, LaRoche, and Babiarz 2005; Nelson 2013) and forensic anthropology (Ousley, Jantz, and Freid 2009; Sauer 1992; Smay and Armelagos 2000).

However, as our survey data reveal, among individual anthropologists the rejection of biological determinism and race have frequently been misconstrued to suggest that biology has no significance or consequences in any interpretations of social and cultural constructions of race (Graves 2015a; Gravlee 2009; Long and Kittles 2003; Roberts 2011). Most of the confusion about race still centers on its biological relevance and application as

well as whether or not it is a reliable measure of human genetic variation (Kitchen 2015). Keita et al. (2004) argue that acknowledging the salience of racism must accompany any interrogation of the "reality" of races:

The absence of "races" does not mean the absence of racism, or the structured inequality based on operationalized prejudice used to deprive people who are deemed to be fundamentally biologically different of social and economic justice. The "no biological race" position does not exclude the idea that racism is a problem that needs to be addressed. (S18)

Current biomedicine does little to eliminate the idea of race; to the contrary, self-identified social races, phenotypic differences, and health disparities are often used to legitimize the idea of discrete genetic races (Gravlee and Non 2015). When disease prevalence is addressed in research, self-reported race is at times used as a proxy for genetic explanations, instead of environmental or social factors (Hunt, Truesdell, and Kreiner 2013; Lisabeth et al. 2011). The growing field of precision medicine highlights the pitfalls associated with using self-identified race, genetics, and social data to personalize treatment interventions: "The challenge for clinicians, however, is that self-identified race does not predict the genotype or drug response of an individual patient. Prescribing medications on the basis of race oversimplifies the complexities and interplay of ancestry, health, disease, and drug response ... the translation of genomic knowledge into clinical care is not simple" (Bonham, Callier, and Royal 2016, 2003–2004).

Epigenetics, a fairly recent development in genetics research, has demonstrated the ways in which environmental stress can actually alter the expression of particular genes: "The fact that epigenetic marks are sensitive to environmental exposures and influence phenotypic variation implies that they may be an important mechanism for understanding the process of embodiment and could inform our understanding of why racial inequalities in health are observed both within and across societies" (Thayer and Non 2015, 725). The deployment of phenotypic markers by society to differentiate socially defined races and the embodied existence of health disparities among different socially defined races are two concrete instances wherein the race concept is clearly informed by and informs biology (Hunt and Megyesi 2008; Kahn 2006). Reflecting either different or similar systems of stratification, global health disparities are influenced by embodied biological conceptualizations of race in myriad ways (Roberts 2012). For example, in societies that are stratified on the basis of race/ color/caste systems, such as the United States, the United Kingdom, Brazil, Canada, South Africa, New Zealand, and Australia, citizens who are racialized as nonwhite generally have poorer health outcomes than their white counterparts (Spigner 2007; Williams 2012). That said, as illustrated in an international and comparative study of blood pressure, populations of the African diaspora were not always at a higher risk for poor health outcomes than other populations (Cooper and Kaufman 1998; Cooper et al. 2005). Studies in Hong Kong and China found that socioeconomic status and migrant status, respectively, were associated with health outcomes for children (Ying et al. 2015; Lee et al. 2015). These global comparisons are a reminder that differences in disease prevalence and health outcomes are largely determined by various social and structural factors, and that biological dimensions of race play a more pivotal role in some geopolitical contexts than others.

In discussions of human variation and/or disease prevalence, critics of the new molecular genetics point to occasions when conceptualizations of race reproduce either genetic essentialism or biological determinism (Koenig, Lee, and Richardson 2008; Wailoo, Nelson, and Lee 2012). Duster (2015) suggests:

One should not be lulled into the false conclusion that the new human molecular genetics has been a battering ram undermining the idea of a biological basis of racial categories, or even a neutral bystander on matters of race. Indeed ... scientists from these fields have played an important (and sometimes) unwitting role in resuscitating the idea of race as biological, even genetic. (3)

With a recognition of the existence of new and important research in human genomics, precision medicine, epigenetics (Jackson, Niculescu, and Jackson 2013; Mulligan 2015; Non et al. 2016), and debates in the various subfields of anthropology as a backdrop, the purpose of this article is to assess the extent to which individual anthropologists' interpretive views on race mirror or deviate from the public and collective AAA stances on race as illustrated by both the 1998 "AAA Statement on Race" and the RACE project. That is, are anthropologists still trying to eschew the notion of biological races while at the same time acknowledging the biological consequences of the social construction of race?

As part of a larger comparative survey involving genetics professionals, our interdisciplinary research team comprised medical anthropologists, biological anthropologists, and geneticists. We were interested in how *individual* anthropologists understood, interpreted, and applied the race concept. The quantitative results of this survey are published separately (Wagner et al. 2017). This article discusses our qualitative findings and provides a snapshot of the ways in which anthropologists interpret, conceptualize, and apply the race concept. What we discovered was that both interpretations of how race is socially constructed and conceptualizations of race exist across a broad spectrum. We devised a heuristic to describe the range of positions.² At one end are the *constructors*, for whom race is a social construct and a historical artifact. In the middle of the spectrum are the shifters, who also describe race as a social construct but acknowledge the practices of race (M'Charek 2013) and posit that race is a political tool, a lived social reality, a self-ascribed identity marker, and an ideology that has an impact as institutional, structural, and cultural racism. At the other end of the spectrum are the reconcilers, who concur that race is a social and cultural construct that, when applied, acts as a self-ascribed badge of affiliation while also having lived and ideological consequences as different forms of racism. In addition, reconcilers assert that race is informed by and informs biology, such as in the phenotypic marking and classification by society of physical differences or the embodied existence of health disparities among different socially defined races.

²·This framework is a revised iteration of an earlier schematic (*squatters*, *shifters*, and *straddlers*), which is discussed in Wagner et al. (2017). We responded to feedback from the editor-in-chief and anonymous reviewers. This new heuristic provides a more nuanced interpretation of the data.

SURVEYING ANTHROPOLOGISTS ON THE RACE CONCEPT

Prior to completion of the draft human genome sequencing in 2001, quantitative studies surveyed physical anthropologists to assess their varied positions on the race concept (Cartmill 1998; Cartmill and Brown 2003; Lieberman and Reynolds 1978; Littlefield, Lieberman, Reynolds 1982). Subsequently, Morning's (2011) qualitative research, which included social scientists, identified significant differences in popular and scientific conceptualizations of race:

Scientists have not come to a consensus on the constructed nature of race, and consequently, they have not transmitted that perspective coherently or comprehensively to the public. Although constructivism is perhaps more strongly associated with anti-racism, it has not "taken" as a lens through which everyday people can make sense of racial stratification. (235)

Her study also highlighted that while the consensus view among sociologists was that race is culturally constructed, no such consensus existed among biological and cultural anthropologists. To assess similar and different individual anthropological perspectives on race, in October 2012, we generated a database of 41,231 anthropologists. The database was compiled using the software Outwit Hub to digitally capture e-mail addresses from the member and meeting-attendee pages of the AAA website between October 5 and October 12. On March 5, 2013, we sent an e-mail invitation to those in the database asking them to participate in an electronic survey. A total of 3,286 respondents completed the survey. From that sample, 2,807 also provided free-text written comments. Within the total sample of free-text respondents, which also included students and trainees, 1,154 were professional respondents, comprising both academics as well as applied anthropologists. This article's emphasis on anthropology professionals mirrors the focus of the recently published quantitative analysis of survey data (Wagner et al. 2017).³

The survey comprised forty-nine statements divided into five sections: science (two sections), medicine, society, and common statements about race. The survey objectives are indicated in the preamble (Table 1).

The survey included six free-text boxes: one at the end of each of the five survey sections and one at the very end of the survey. In the boxes, respondents were encouraged to clarify and elaborate on their responses to the statements as well as to submit more general survey feedback. The survey also collected demographic information and experience with genetic-ancestry testing both personally and in a research context. The survey was designed to enable both quantitative and qualitative analyses. As part of our survey, we collected demographic data on the gender, age, ethnicity, self-identified race, and profession of the respondents. The demographic characteristics of the free-text professional respondents appear in Tables 2, 3, and 4. The total number of some of the tables does not correspond to the total number of free-text professional respondents (1,154) because some people did not respond to all of the requested demographic questions.

³·In Wagner et al. (2017), please note that the initial number of 888 free-text professional respondents was based on provisional analysis. The final statistical analysis yielded 1,154 free-text professional respondents.

There were sampling limitations to the survey, which is why we suggest that our findings provide a window into a range of possible conceptualizations of the race concept rather than purport that these views represent consensus views within the discipline or subdisciplines of anthropology. Given the methods we utilized to generate the database, it is clear that those who responded may have a vested interest in race research and therefore may have artificially skewed the results in a particular direction, such as in favor of a social constructivist perspective. For examples, in the subsample of professionals, cultural anthropologists (53 percent), women (65 percent), and whites (76 percent) are the numerical majority. We do not characterize this as a survey of anthropologists in the United States since 20 percent of the respondents reside outside of the country. We also do not generalize about the global relevance of our findings as we are mindful of the ways in which dynamic conceptions of race vary across time and geographical spaces. During the various phases of coding of free-text responses, there were views that did not fit neatly into any of the three positions, and their significance will be discussed in future publications.

What follows is our discussion of the interpretive categories generated by the coding and analysis of the free-text responses to the following six common statements (Table 5) found in section five of the survey.

We relied on a combination of coding strategies: in vivo (to situate the data in the respondents' language), descriptive (to document and categorize the breadth and depth of conceptualizations provided by multiple respondents), and values (to catalogue the range of subjective perspectives). NVivo 10 software was utilized to facilitate the qualitative analysis of 1,154 free-text responses (Bazeley and Jackson 2013). After identifying emergent thematic categories, our first-level analysis entailed generating incrementally more in-depth and nuanced coding of "parent" nodes and "descent" nodes, which could be subsumed under three main nodes (Saldaña 2013). The first main node concentrated on the conceptual distinction between race as a biological entity and race as a dynamic social and cultural construct. The second main node emphasized the structural and functional role of race as a mode of hierarchical categorization and as a political signifier. The third cluster of responses chose to disavow race all together and argued for alternative frames. Given its predominance, the second level of coding analysis concentrated on the first main node and sought to assess three main dynamics: (1) race is a social construct and a historical artifact; (2) applications of race serve a dual function as an identity marker as well as an ideology that has an impact as different forms of racism; and (3) conceptions and practices of race are both of the previous statements and also are informed by and inform biology. To illustrate the spectrum of responses that emerged from our analysis, we devised the following heuristic (Table 6).

Our findings reflect and reproduce similar structural and conceptual problems as those uncovered in previous studies (Morning 2011). In both deleterious and empowering ways, the race concept is a potent social reality that has lived implications and impacts almost every facet of everyday life, particularly health outcomes (Abraham 1993; Azoulay 2006; Epstein 2007; Graves 2015b; M'Charek 2013). While there appears to be general agreement in the social sciences that race is socially constructed, and a commonly held folk belief is that race has no biological basis, anthropologists represent a broad spectrum in how they

interpret the relevance and consequences of genes, biology, and culture in their views on the race concept, particularly in relation to health (Campbell et al. 2014; Foster and Sharp 2002).

INTERPRETATIONS OF RACE: CONSTRUCTORS/SHIFTERS/RECONCILERS

Racism and how people are raced needs examination ... race [is] a verb, an act.

-Reference #73D

There are different ways to describe how anthropologists conceptualize race. In their analysis and critique of how the race concept is applied in forensic anthropology, Smay and Armelagos (2000) propose a continuum:

These categories can be placed on a continuum ranging from complete and uncritical acceptance of race as biological reality to a wholesale rejection of the concept's validity and utility. The two positions falling between the extremes both question the use of race, but accept it with some qualification as a useful (or vital) component of the forensic anthropologist's toolkit. (20)

More than two decades earlier, in 1978, Lieberman and Reynolds conducted an empirical investigation into physical anthropologists' views on race. They designed their own heuristic that differentiated between "splitters" from elite backgrounds, who believed that races existed, and "lumpers" from marginalized backgrounds, who asserted that races did not exist (Lieberman and Reynolds 1978). In our quantitative analysis, we revisited this 1978 framework; in doing so, we uncovered similarities between white males and females in relation to privilege. Both groups were more likely to be categorized as splitters than nonwhite males and females (Wagner et al. 2017). Our schematic (Table 6) differs in three ways from the original 1978 study. First, our sample comprises anthropologists from all subdisciplines. Second, we have not used social status as a primary mode of comparative analysis. Third, by deeply immersing ourselves in the qualitative data, we were able to identify a broader range of interpretations of social constructivist perspectives on race among anthropologists.

The Constructors

That "race is not biology" really means "the race concept does not fit what we know about the structure of human variation."

—Clarence Gravlee (2013)

In our analysis of free-text perspectives, the "no biological race" position, which neither addresses the social consequences of racial thinking nor the ways in which these applications of the race concept are informed by and inform biology, is a minority one. Constructors chose to engage with race's dynamic, situational, and historical characteristics:

⁴·Our focus was on the extent to which *individual* anthropologists' responses either mirrored or deviated from the *collective* position on race as evidenced by the 1998 "AAA Statement on Race" and the RACE project. For a future publication, we are considering a comparison of subdisciplinary perspectives.

Clearly there are sociocultural categories, which differ widely across time and space, but have been labeled as race. And are thought to be timeless, universal and biologically based ... but they aren't. They are pretty meaningless in the context of identifying people outside of those sociocultural contexts because they are so changeable. (Reference #67C)

I think race is [a] natural and unproblematic descriptive categorization that simply exists prior to socially, historically, and politically contingent worlds. Of course, race exists—because it gets to exist in our contemporary configurations, not because it always existed. (Reference #74D)

The social/cultural concept of race has been a driving factor in most of human history. (Reference #157A)

Other constructors reproduced the assertion that race is not a scientifically reliable measure of human genetic variation:

Again, I am answering these as race as a socially constructed category. Of course "races" exist since they have been historically and socially created. Given this social construction and mating within racial categories, of course some differences will come to be shared, but these kinds of differences are mostly totally meaningless since there is far greater variation across "races" than within. (Reference #194A)

Race as a socially constructed way of sorting humans does exist. But it has very little to do with genetics or biology. (Reference #69C)

Races do exist because people have been historically categorized by them socially and politically, but they don't exist as biogenetic categories. (Reference #8C)

By concentrating on the conceptualizations of race, the constructors echoed the public message of the 1998 "AAA Statement on Race," but did not expand their responses to consider either the *practices* of racial thinking or find ways to simultaneously accommodate biological, genetic, and cultural frames of analysis. The shifters extended their approaches to incorporate political applications, social consequences, and symbolic functions of race concepts but still did not address how conceptualizations of race are informed by and inform biology.

The Shifters

Race *itself* is an invented political grouping. ... It is a political category that has been disguised as a biological one. ... The very first step of creating race, dividing human beings into these categories, is a political practice.

—Dorothy Roberts (2011)

The shifters shared the "race is not biology" stance of the constructors but also recognized that simply asserting that "race is a social construct" was insufficient in explaining the existence of social inequalities. By emphasizing the ways in which the concept of race is applied, shifters engaged with the myriad ways in which the race concept is operationalized as ideology, as everyday lived experience, and as a self-ascribed identity marker. "Real,"

"reality," "lived social reality," and "social fact" were repeated in the shifters' comments to describe the social consequences of racial thinking:

Race exists as a social and cultural category (that lacks biological integrity). It has reality in terms of how lives are lived and experienced—I cannot tell Oprah or Nelson Mandela or my black neighbor that race doesn't exist. Each of their lives tells narratives of its true force, and it is that force (of this human-made concept) that we can change. (Reference #160A)

While the biological basis of the concept of race is meaningless, the social reality of race is very real and affects people greatly. (Reference #24B)

Races exist as a social construction with consequential differing social realities. (Reference #33A)

Shifters frequently used derivatives of the word "power" to highlight the deployment of race as a political tool in everyday life in the United States and globally:

Race as a social construct has powerful predictive force. (Reference #82A)

Race and races "exist" as potent discursive constructs. (Reference #93A)

The concept of "race" definitely exists, and it has shaped countless decision, interactions, and social movements. It supposedly is based in genetic ancestry, but in actuality, it is built on social constructions and negotiations of power. (Reference #72A)

Other shifters pointed to the Janus-faced nature of race as both a cultural category and a self-ascribed badge of identity:

"Race" as a cultural construct rather than a biological fact, given the plasticity in how it is ascribed to individuals and in how they choose among racial categories to express their own identity. (Reference #142A)

Races don't exist biologically, but socially they are often very real, and for those who see it as a marker of identity, it also very real. (Reference #5E)

Among the strongest proponents of racial categories are black people who idealized their "race" (e.g., "Black is beautiful") to gain the strength to stand up to discrimination and marginalization. (Reference #378C)

Shifters sought to reposition their framing of the race concept to extend beyond lived experiences to also encompass systemic, epistemic, and structural forms of racism as ideology, which have a deleterious and multigenerational impact:

Race is a socially constructed concept that has profound implications for marginalized communities. (Reference #80A)

You cannot deny the reality of the last hundred years of history that have so effectively produced Western ideas about race ... and produced races. Those ideas continue to affect material conditions and interactions between people. ... As long as people are measured, quantified, and reproduced as races we NEED to

acknowledge the power of the cultural category of race. Race-blindness is as dangerous as belief in the biological concept of race. (Reference #26D)

Shifters responded to earlier recommendations in the "AAA Statement on Race" for an assessment of the lived realities and systemic effects of racial ideologies. However, there were shifters who could also be characterized as reconcilers:

Race when under social conditions of "structural violence" places limits on people's access to resources to fulfill basic needs, access to basic services and lack of ethical/emotional valuation needed for self-esteem. Constant conditions, for example food insecurity, stress and poverty have tremendous influence on both physical and mental health, and when the cycles are not broken generationally, challenges get compounded. (Reference #2D)

In general, shifters have yet to acknowledge the ways in which conceptualizations of race are informed by and inform biology. It is the reconcilers who are venturing in more expansive directions with their approaches.

The Reconcilers

Race ... is the product of an arranged marriage between the social and biologic worlds. Although it often seems to travel back and forth between these parallel universes, it maintains a home in both.

—Richard Cooper, Jay Kaufman, and Ryk Ward (2003)

The reconcilers in our study recognized the ways in which social and cultural constructions of race are informed by and inform biology, particularly as these constructions pertain to phenotypic markers to differentiate socially defined races and the embodied existence of health disparities. In health outcomes, phenotypic marking by society as a mode of classifying socially defined races and the role of endogamy, epigenetics, and self-identified race as a proxy for genetic ancestry/precision medicine, respectively, were among the examples provided to illustrate how race is informed by and informs biology. Echoing Graves's (2015a) argument, the following reconciler was aware of the ways in which socially identified race becomes biologically meaningful at the interstices of the genotypic and the phenotypic, such as the phenotypic marking, ranking, and classification of physical differences, which in turn can influence health outcomes such as HIV risk among lowincome African American women (Davis 2014):

Race has a biological basis in so far as it leverages phenotype into social categories, and to that extent it also not biologically meaningless, since it is a way of making biology meaningful. I couldn't say it has not biological influence on health, since race as social and political fact influences health, which means it works on and through biology. (Reference #33C)

Mirroring research findings on the prevalence of breast cancer (Krieger, Jahn, and Waterman 2017), this particular reconciler recognized the impact of Jim Crow segregation not only on endogamous patterns of mating (Edgar 2009; Fryer 2007) but also on access to health care and on health outcomes:

Emic categorizations of people into "races" do, however, hold powerful currency in many societies, often resulting in very real forms of discrimination, including disparities in access to health care ... while many diseases have a genetic basis, these genetics should be understood as the workings of heredity. Some genes are strongly associated with particular ethnic groups, but these have been established through historically and culturally informed patterns of procreation-and not through "race." (Reference #65C)

Like Guthman (2012), who addresses the obesity epidemic as it is informed by somatic epigenetic processes, this reconciler highlighted the health impacts of environmental stress on genetic expression:

Race exists as a social construct that has tremendous impacts on people's lives and health. While there is little genetic basis for race, the health disparities brought about by the existence of this social construct and its utilization to oppress and harm certain populations has made race a biological reality. It is therefore meaningless biologically in the sense that it has not real genetic or biological basis, but it has significant biological implications in that it does affect health. Race may exert a biological influence on health in cases where people of a given race experience discrimination, which leads to physiologic stress reaction, which when chronic can lead to poor health outcomes. (Reference #31D)

As previously mentioned, health disparities vary across geographical regions and within national contexts. A published study commissioned by the Institute of Medicine entitled *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (B. Smedley, Stith, and Nelson 2003) reported that racial and ethnic disparities in American health delivery were attributable, in part, to physician bias. As this reconciler observed, part of the challenge is that physicians commonly rely on race as a stand-in for genetic ancestry rather than self-identified race, which is a social construct, and recommend the eventual implementation of precision or personalized medicine based on a patient's actual genomic profile:

Race is an admittedly crude proxy for genetic ancestry; personalized medicine should eventually rely upon sequencing the genome of each patient. For medical purposes, it is probably more useful to note when individuals self-identify with a specific race and use the prevalence of certain diseases in the racial category as a method of assessing risk in the patient. Racial categories have major cultural and economic components, many of which (dietary choices, prevalence of poverty, rates of smoking or alcohol use) have medical implications. Self-identifying with a racial category may be a better proxy for behavior than biology. (Reference #4E)

Reconcilers pointed to the significance of biomedicine, particularly health disparities, as an important interpretive domain in our understanding of the interconnectedness of biology, culture, and genetics (Abraham 1993; Epstein 2007). For examples, three reconcilers concurred:

Race, as commonly used, as a social category has some historical basis but is a poor tool in a complex society. Race, if used carefully in biological analysis is not

meaningless. If race means social category, its biological relevance is weak, but not absent (e.g., sickle cell again). Race has obvious influences on health. Some of these are caused by socioeconomic conditions, but some by inherited cultural preferences, but some by biological inheritance. (Reference #35C)

If race is lived because people ascribe "blackness," "whiteness" or "yellowness" to certain groups, then race does have a biological meaning and a big influence on health (because society divides wealth along these artificial categories), but if we take biology, genetics and race to be something outside of culture, there might be different answers to your questions. (Reference #15E)

Groups who are racialized shared similar experiences that come to be embodied. (Reference #7D)

Reconcilers, including scholars within medical anthropology, the anthropology of science, biological anthropology, anthropological genetics, forensic anthropology, bioarchaeology, and biohistorical anthropology, are already leading the way toward a synthesized twenty-first-century anthropology of race that maintains a social and constructivist stance while also demonstrating the ways in which conceptions of race are informed by and also inform biology. Reconcilers are helping to elucidate the root causes of racial disparities in health delivery and outcomes, wherein a radical makeover of medical education is long overdue: "The experience of race does impact health, but race does not cause health disparities in isolation of [sic] other social, political, educational and economic factors" (Reference #16D). Advocates of medical-education reform also argue:

Socioeconomics, education, housing, employment and one's lived environment, all of which are forcibly shaped by societal and structural facts, determine 90 percent of health outcomes while only 10 percent are determined by biomedical health care ... the determinants of health are best conceptualized as biosocial phenomena, in which health and disease emerge through the interaction between biology and the social environment. (Westerhaus et al. 2015, 565)

Reconciler perspectives are essential when addressing the health-care needs and outcomes of socially designated and self-identified black communities in the United States (Tweedy 2015), where we see stark evidence of the ways in which "race not only becomes biology" (Gravlee 2009) but also determines health: "Prejudice and discrimination against people assumed/perceived to 'belong' to a racial group has a strong influence on health" (Reference #68D). A twenty-first century reconciled approach to the study of race that engages with social and cultural constructivism but also incorporates the social consequences and applications of biologically informed and informing racial thinking equips professionals and practitioners with the necessary conceptual and clinical tools to advance a more equitable research and health-care system, and moves us closer as a society to righting many of the social injustices that continue to plague our nation.

TOWARD A SYNTHETIC AND INCLUSIVE TWENTY-FIRST-CENTURY ANTHROPOLOGY OF RACE

Continuing to endorse the nonexistence of race (and concomitant inconsequentiality of racism) makes us bedfellows with those who espouse the antiegalitarian trends we oppose.

—Eugenia Shanklin (1998)

By illustrating the differential and multiple ways in which anthropologists interpret the race construct as well as what these differential positions reveal about the ideological and biological consequences of socially defined races, such as racism in general and racialized health disparities in particular, this article provides a qualitative account of how individual anthropologists interpret and apply the race concept. We have delved deeper than simply asserting the position that race is a social construct. Utilizing the tripartite heuristic (Table 6) of *constructors, shifters,* and *reconcilers,* we have also illustrated how conceptualizations and interpretations of race exist across a wide spectrum. We close our discussion with the recommendation that anthropology as a discipline and anthropologists as researchers and educators continue to take a more complex and nuanced approach to the study of race so that, to paraphrase Shanklin, "American anthropology [does not win] the battle and [lose] the war" (1998, 670).

In the twentieth century, anthropologists played important roles in academic and public debates about race. In the twenty-first century, anthropologists continue to contribute to public and intellectual dialogues about the enduring significance of race, such as the ongoing RACE traveling exhibit. However, as "white public space" (Brodkin, Morgen, and Hutchinson 2011, 545), anthropology still has a long road to travel before the demographic composition of the discipline reflects the diversity of its constituents "at home" (Hsu 1973). In our sample (Table 3), 735 of the 967 professional respondents who answered the question about race and ethnicity were white. As recently as 2015, Yelvington et al. implored: "We add our voices to the growing call that we confront the disparities within our discipline, just as we seek to address them in the world" (390). In the United States, at a time when incidences of police brutality are on the rise, institutionalized racism persists on college campuses, and nativism and xenophobia have invaded the American body politic, the public and vocal presence of a critical, engaged, and integrated antiracist anthropology is imperative. Building on our existing strengths as a holistic discipline will move us one step closer to a twenty-first-century anthropology of race. Through public anthropology, we can exploit technological resources at our disposal, such as social media, which are useful mechanisms for community engagement (Raff 2015). Being able to quickly, succinctly, and efficiently communicate to millennials about the enduring significance of both the biological and sociocultural dimensions of the race concept is more important now than it ever was (Cohen 2011). We would then be in a much stronger position to confront another institutional challenge, which is creating a twenty-first-century discipline that is inclusive and truly representative of the multiple and varied narratives comprising both global stories and American stories. The decolonizing anthropology enterprise is still an unfinished project (Allen and Jobson 2016; Harrison 1997).

Acknowledgments.

Many thanks to the editor-in-chief and the four anonymous reviewers for their engagement with an earlier draft of this manuscript and for their extremely insightful and constructive comments. Thanks also to Irma McClaurin for her razor-sharp editing and input as well as to both Simon Outram and Joseph Graves for their critical feedback. A special thank you to Leslie Walker, the project manager for the American Anthropological Association's Public Education Initiatives, for his assistance with resources and data on the RACE Project. Finally, thank you to the survey participants. Funding was provided in part by the Greenwall Foundation.

REFERENCES

- AAA (American Anthropological Association). 1998 "AAA Statement on Race." 5 17 http://www.americananthro.org/ConnectWithAAA/Content.aspx?ItemNumber=2583
- Abraham Laurie Kaye . 1993 Mama Might Be Better Off Dead: The Failure of Health Care in Urban America. Chicago: University of Chicago Press.
- Allen Jafari Sinclaire, and Jobson Ryan Cecil. 2016 "The Decolonizing Generation: (Race and) Theory in Anthropology Since the Eighties." Current Anthropology 57 (2): 129–48.
- Allison Anne, and Piot Charles D. . 2013 "Editor's Note." Cultural Anthropology 28 (3): 369-71.
- Azoulay Katya . 2006 "Reflections on 'Race' and the Biologization of Difference." Patterns of Prejudice 40 (4/5): 353-79.
- Baker Lee D. 1998 From Savage to Negro: Anthropology and the Construction of Race, 1896—1954.
 Berkeley: University of California Press.
- Baker Lee D. 2010 Anthropology and the Racial Politics of Culture. Durham, NC: Duke University Press.
- Bamshad Michael J., and Olson Steve E. . 2003 "Does Race Exist?" Scientific American 289 (6): 78–85.
- Barkan Elazar . 1992 The Retreat of Scientific Racism: Changing Concepts of Race in Britain and the United States between the World Wars. Cambridge: Cambridge University Press.
- Bazeley Pat , and Jackson Kristi . 2013 Qualitative Data Analysis with NV1VO. Los Angeles: SAGE Publications.
- Blakey Michael L. 1987 "Skull Doctors: Intrinsic Social and Political Bias in the History of American Physical Anthropology." Critique of Anthropology 7 (2): 7–35.
- Blakey Michael L. 1999 "Scientific Racism and the Biological Concept of Race." Literature and Psychology 45 (1/2): 29–42.
- Blakey Michael L. 2001 "Bioarchaeology of the African Diaspora in the Americas: Its Origin and Scope." Annual Review of Anthropology 30:387–422.
- Bonham Vence L., Callier Shawneequa, and Royal Charmaine D.. 2016 "Will Precision Medicine Move Beyond Race?" New England Journal of Medicine 374 (21): 2003–05.27223144
- Brodkin Karen , Morgen Sandra , and Hutchinson Janis . 2011 "Anthropology as White Public Space?" American Anthropologist 113 (4): 545–56.
- Brown Ryan A., and Armelagos George J. . 2001 "Apportionment of Racial Diversity: A Review." Evolutionary Anthropology 10: 34–40.
- Campbell Michael C. , Hirbro Jibril B. , Townsend Jeffrey P. , and Tishkoff Sarah A. . 2014 "The Peopling of the African Continent and the Diaspora into the New World." Current Opinion in Genetics and Development 29:120-32.25461616
- Cartmill Matt . 1998 "The Status of the Race Concept in Physical Anthropology." American Anthropologist 100 (3): 651–60.
- Cartmill Matt, and Brown Kaye. 2003 "Surveying the Race Concept: A Reply to Lieberman, Kirk and Littlefield." American Anthropologist 105 (10): 113–15.
- Caspari Rachel . 2003 "From Types to Populations: A Century of Race, Physical Anthropology, and the American Anthropological Association." American Anthropologist 105 (1): 65–76.
- Caspari Rachel . 2009 "1918: Three Perspectives on Race and Human Variation." American Journal of Physical Anthropology 139 (1): 5–15.19226644

Castor N. Fadeke . 2013 "Shifting Multicultural Citizenship: Trinidad Orisha Opens the Road." Cultural Anthropology 28 (3): 475–89.

- Chase Allan . (1975) 1980 The Legacy of Malthus: The Social Costs of the New Scientific Racism. Urbana: University of Illinois Press.
- Cohen Cathy J. 2011 "Millennials and the Myth of the Post-Racial Society: Black Youth, Intra-Generational Divisions and the Continuing Racial Divide in American Politics." Daedalus 140 (2): 197–205.
- Cooper Richard S., and Kaufman Jay. 1998 "Race and Hypertension: Science and Nescience." Hypertension 32 (5): 813–16.9822436
- Cooper Richard S., Kaufman Jay, and Ward Ryk. 2003 "Race and Genomics." New England Journal of Medicine 348 (72): 1166–70.12646675
- Cooper Richard S., Wolf-Maier Katharina, Luke Amy, Adeyemo Adebowale, Banegas Jose R., Forrester Terrence, Giampaoli Simona, Joffres Michel, Kastsarinen Mika, Primatesta Paola, Stegmayr Birgitta, and Thamm Michael. 2005 "An International and Comparative Study of Blood Pressure in Populations of European vs. African Descent." BMC Medicine 3 (1): 1–8.15627402
- Davis Sarita . 2014 "The Sojourner Syndrome: An Interpretive Framework for Understanding Poor Black Women's HIV Risk." Transforming Anthropology 22 (2): 121–34.
- Duster Troy . 2015 "APost-Genomic Surprise: The Molecular Reinscription of Race in Science, Law and Medicine." The British Journal of Sociology 66 (1): 1–27.25789799
- Drake St. Clair . 1991 Black Folk Here and There: An Essay in History and Anthropology. Los Angeles: University of California Center for Afro-American Studies.
- Edgar Heather J. H. 2009 "Biohistorical Approaches to 'Race' in the United States: Biological Distances Among African Americans, European Americans, and Their Ancestors." American Journal of Physical Anthropology 139 (1): 58–67.19226643
- Edgar Heather J. H., and Hunley Keith L.. 2009 "Race Reconciled? How Biological Anthropologists View Human Variation." American Journal of Physical Anthropology 139 (1): 1–4.19226646
- Epstein Steven . 2007 Inclusion: The Politics of Difference in Medical Research. Chicago: University of Chicago Press.
- Fields Karen E., and Fields Barbara J.. 2012 Racecrft: The Soul of Inequality in American Life. New York: Verso.
- Foster Morris W., and Sharp Richard R.. 2002 "Race, Ethnicity, and Genomics: Social Classifications as Proxies of Biological Heterogeneity." Genome Research 12:844–50.12045138
- Fryer Roland . 2007 "Guess Who's Been Coming to Dinner? Trends in Interracial Marriage Over the 20th Century." Journal of Economic Perspectives 21 (2): 71–90.
- Goodman Alan H., and Garfinkle Robert. 2007 "RACE: Are We So Different?: A Conversation." Museums and Social Issues 2 (1): 117–31.
- Goodman Alan H., Heath Deborah, and Lindee Susan M., eds. 2003 Genetic Nature/Culture: Anthropology and Science beyond the Two-Culture Divide. Berkeley: University of California Press.
- Goodman Alan H., Moses Yolanda T., and Jones Joseph L. 2012 *RACE: Are We So Different?* Malden, MA: Wiley-Blackwell/American Anthropological Association.
- Graves Joseph 2015a "Why the Nonexistence of Biological Races Does Not Mean the Nonexistence of Racism." American Behavioral Scientist 59 (11): 1474–95.
- Graves Joseph . 2015b "Great Is Their Sin: Biological Determinism in the Age of Genomics." Annals of the American Academy of Political and Social Science 661:24–50.
- Gravlee Clarence C. 2009 "How Race Becomes Biology: Embodiment of Social Inequality." American Journal of Physical Anthropology 139 (1): 47–57.19226645
- Gravlee Clarence C. 2013 "Race, Biology, Culture: Rethinking the Connections" In Anthropology of Race: Genes, Biology, Culture, edited by Hartigan John , 21–41. Santa Fe, NM: School for Advanced Research Press.
- Gravlee Clarence C., and Non Amy L. 2015 "Biology and Culture beyond the Genome: Race, Racism and Health." American Anthropologist 117 (4): 737–38.

Guthman Julie . 2012 "Doing Justice to Bodies? Reflections on Food, Justice, Race and Biology." Antipode 46 (5): 1153–71.

- Haber Marc , Gauguier Dominique , Youhanna Sonia , Patterson Nick , Moorjani Priya , Botigue Laura R. , Platt Daniel E. , Matisoo-Smith Elizabeth , Soria-Hernanz David F. , Wells Spencer , Bertranpetit Jaume R. , Tyler-Smith Chris , Comas David , and Zalloua Pierre A. . 2013 "Genome-Wide Diversity in the Levant Reveals Recent Structuring by Culture." PLOS Genetics 9 (2): 1–8.
- Harrison Faye V. 1995 "The Persistent Power of 'Race' in the Cultural and Political Economy of Racism." Annual Review of Anthropology 24:47–74.
- Harrison Faye V., ed. 1997 Decolonizing Anthropology: Moving Further Toward an Anthropology for Liberation. Second edition Arlington, VA: American Anthropological Association.
- Harrison Faye V. 1999 "Introduction: Expanding the Discourse on 'Race.'" American Anthropologist 100(3): 609–31.
- Harrison Faye V. 2012 "Racism in the Academy: Towards a Multi-Methodological Agenda for Anthropological Engagement" In Racism in the Academy: The New Millennium, edited by Smedley Audrey and Hutchison Janis Faye, 12–32. Washington, DC: American Anthropological Association.
- Hartigan John , ed. 2013a The Anthropology of Race: Genes, Biology, Culture. Santa Fe, NM: School for Advanced Research Press.
- Hartigan John . 2013b "Knowing Race" In The Anthropology of Race: Genes, Biology, Culture, edited by Hartigan John , 3–19. Santa Fe, NM: School for Advanced Research Press.
- Henn Brenna M. , Cavalli-Sforza LL , and Feldman Marcus W. . 2012 "The Great Human Expansion." PNAS 109 (44): 117758–64.
- Hill Kim , Barton Michael , and Hurtado A. Magdelena . 2009 "The Emergence of Human Uniqueness: Characters Underlying Behavioral Modernity." Evolutionary Anthropology 18:187–200
- Hill Kim R., Walker Robert S., Bozicevic Miran, Headland James Thomas, Hewlett Barry, Hurtado A. Magdalena, Marlowe Frank, Wiessner Polly, and Wood Brian. 2011 "Co-Residence Patterns in Hunter-Gatherer Societies Show Unique Human Social Structure." Science 331 (6022): 1286– 89.21393537
- Hsu Francis L. 1973 "Prejudice and Its Intellectual Effect in American Anthropology: An Ethnographic Report." American Anthropologist 75 (1): 1–19.
- Hunley Keith L., Healey Meghan E., and Long Jeffrey C.. 2009 "The Global Pattern of Gene Identity Variation Reveals a History of Long-Range Migrations, Bottlenecks, and Local Mate Exchange: Implications for Biological Race." American Journal of Physical Anthropology 139 (1): 35– 46.19226641
- Hunt Linda M., Truesdell Nicole D., and Kreiner Meta J.. 2013 "Genes, Race and Culture in Clinical Care." Medical Anthropology Quarterly 27 (2): 253–71.23804331
- Hunt Linda M., and Megyesi Mary S.. 2008 "The Ambiguous Meanings of the Racial/Ethnic Categories Routinely Used in Human Genetics Research." Social Science and Medicine 66 (2): 349–61.17959289
- Jackson Fatimah L., Niculescu Mihai D., and Jackson Robert T.. 2013 "Conceptual Shifts Needed to Understand the Dynamic Interaction of Genes, Environment, Epigenetics, Social Processes, and Behavioral Choices." American Journal of Public Health Supplement 103 (S1): S33–42.
- Kahn Jonathan . 2006 "Genes, Race, and Population: Avoiding a Collision of Categories." American Journal of Public Health 96 (11): 1965–70.17018831
- Keita SOY, and Kittles Rick A. . 1997 "The Persistence of Racial Thinking and the Myth of Racial Divergence." American Anthropologist 99 (3): 534–44.
- Keita SOY , Kittles Rick A. , Royal Charmaine D. , Bonney George E. , Furbert-Harris Paulette , Dunston Georgia M. , and Rotimi Charles N. . 2004 "Conceptualizing Human Variation." Nature Genetics Supplement $36\ (11)$: S17–20.
- Kitchen Andrew . 2015 "Introduction: The Expanding Role of Genetic Inquiry in Anthropology." American Anthropologist 117 (4): 736–37.
- Koenig Barbara A., Lee Barbara Soon-Jin, and Richardson Sarah S., eds. 2008 Revisiting Race in a Genomic Age. New Brunswick, NJ: Rutgers University Press.

Krieger Nancy, Jahn Jaquelyn L., and Waterman Pamela D.. 2017 "Jim Crow and Estrogen-Receptor Negative Breast Cancer: US-Born Black and White Non-Hispanic Women, 1992–2012." Cancer Causes and Control 28 (1): 49–59.27988896

- Lee Albert , Chua Hoi-Wai , Leung Patrick W. L. , Wong Jasmine W. S. , and Chuh Antonio A. T. . 2015 "Health Disparity Still Exists in an Economically Well-Developed Society in Asia." PLoS One 10 (6): 1–16.
- Leone Mark P., LaRoche Cheryl Janifer, and Babiarz Jennifer J. . 2005 "The Archaeology of Black Americans in Recent Times." Annual Review of Anthropology 34:575–98.
- Lewontin Richard C. 1974 The Genetic Basis of Evolutionary Change. New York: Columbia University Press.
- Lieberman Leonard, and Kirk Rodney. 2008 "Exploring the Decline and Revival of Anti-Racism." Histories of Anthropology Annual 4:58–76.
- Lieberman Leonard, and Jackson Fatimah. 1995 "Race and Three Models of Human Origin." American Anthropologist 97 (2): 231–42.
- Lieberman Leonard, and Reynolds Larry T. . 1978 "The Debate over Race Revisited: An Empirical Investigation." Phylon 39 (4): 333–43.
- Lisabeth Lynda D., Morgenstern Lewis B., Burke David T., Yan V. Sun, and Long Jeffrey C. . 2011 "Ancestral Heterogeneity in a Bioethnic Stroke Population." Annals of Human Genetics 75: 508–15.21668907
- Littlefield Alice, Lieberman Leonard, and Reynolds Larry T. . 1982 "Redefining Race: The Potential Demise of a Concept in Physical Anthropology." Current Anthropology 23 (6): 641–55.
- Livingstone Frank B., and Dobzhansky Theodosius. 1962 "On the Non-Existence of Human Races." Current Anthropology 3 (3): 279–81.
- Long Jeffrey C., and Kittles Rick A. 2003 "Human Genetic Diversity and the Nonexistence of Biological Races." Human Biology 75 (4): 449–71.14655871
- $Long\ Jeffrey\ , Li\ Jie\ , and\ Healy\ Meghan\ E.\ .\ 2009\ "Human\ DNA\ Sequences:\ More\ Variation\ and\ Less\ Race."\ American\ Journal\ of\ Physical\ Anthropology\ 139\ (1):\ 23-34.19226648$
- M'Charek Amade . 2013 "Beyond Fact or Fiction: On the Materiality of Race in Practice." Cultural Anthropology 28 (3): 420–42.
- Morning Ann . 2011 The Nature of Race: How Scientists Think and Teach About Human Difference. Berkeley: University of California Press.
- Mukherjee Roopali . 2016 "Antiracism Limited: A Pre-History of Post-Race." Cultural Studies 30 (1): 47–77.
- Mukhopadhyay Carol . 2014 "The Fallacy of Race as Biology" In How Real Is Race?: A Sourcebook on Race, Culture and Biology, edited by Carol Chapnick Mukhopadhyay Rosemary Henze, and Moses Yolanda T., 1–4. Second Edition Lanham, MD: Rowman and Littlefield.
- $\label{lem:mukhopadhyay Carol} Mukhopadhyay \ Carol\ , \ Henze \ Rosemary\ , \ and \ Moses\ Yolanda\ T.\ .\ 2014\ How\ Real\ Is\ Race?: A Sourcebook\ on\ Race,\ Culture\ and\ Biology.\ Second\ Edition\ Lanham,\ MD:\ Rowman\ and\ Littlefield.$
- Mukhopadhyay Carol, and Moses Yolanda T. 1997 "Reestablishing 'Race' in Anthropological Discourse." American Anthropologist 99 (3): 517–33.
- Mulligan Connie J. 2015 "Social and Behavioral Epigenetics." American Anthropologist 117 (4): 738–39.
- Mullings Leith . 2005 "Interrogating Racism: Toward an Antiracist Anthropology." Annual Review of Anthropology 34:667–93.
- Nelson Alondra . 2013 "DNA Ethnicity as Black Social Action?" Cultural Anthropology 28 (3): 527–36.
- Non Amy L., Hollister Brittany M., Humphreys Kathryn L., Childebayeva Ainash, Esteves Kyle, Zeanah Charles H., Fox Nathan A., Nelson Charles A., and Drury Stacy S.. 2016 "DNA Methylation at Stress-Related Genes Is Associated with Exposure to Early Life Institutionalization." American Journal of Physical Anthropology 161 (1): 84–83.27218411
- Ousley Stephen , Jantz Richard , and Freid Donna . 2009 "Understanding Race and Human Variation: Why Forensic Anthropologists Are Good at Identifying Race." American Journal of Physical Anthropology 139 (1): 68–76.19226647

Pagano Anna . 2014 "Everyday Narratives on Race and Health in Brazil." Medical Anthropology Quarterly 28 (2): 221–41.24719036

- Painter Nell Irvin . 2010 The History of White People. New York: W. W. Norton and Company.
- Pierre Jemima . 2012 The Predicament of Blackness: Postcolonial Ghana and the Politics of Race. Chicago: University of Chicago Press.
- Raff Jennifer . 2015 "Anthropological Genomics and Social Media." American Anthropologist 117 (4): 744–49.
- Relethford John H. 2009 "Race and Global Patterns of Phenotypic Variation." American. Journal of Physical Anthropology 139 (1): 16–22.19226639
- Roberts Dorothy . 2011 Fatal Invention: How Science, Politics, and Big Business Re-Create Race in the Twenty-First Century. New York: New Press.
- Roberts Dorothy . 2012 "Debating the Cause of Health Disparities." Cambridge Quarterly of Healthcare Ethics 21:332-41.22624536
- Saldaña Johnny . 2013 The Coding Manual for Qualitative Researchers. Second Edition Los Angeles: SAGE Publications.
- Sauer Norman . 1992 "Forensic Anthropology and the Concept of Race: If Races Don't Exist, Why Are Forensic Anthropologists So Good at Identifying Them?" Social Science and Medicine 34 (2): 107–11.1738862
- Shanklin Eugenia . 1998 "The Profession of the Color Blind: Sociocultural Anthropology and Racism in the 21st Century." American Anthropologist 100 (3): 669–79.
- Smay Diana, and Armelagos George. 2000 "Galileo Wept: A Critical Assessment of the Use of Race in Forensic Anthropology." Transforming Anthropology 9 (2): 19–29.
- Smedley Audrey . 1993 Race in North America: Origin and Evolution of a Worldview. Boulder, CO: Westview Press.
- Smedley Brian D., Stith Adrienne Y., and Nelson Alan R., eds. 2003 Unequal Treatment: Confronting Racial and Ethnic Disparities. Washington, DC: National Academy Press.
- Spigner Clarence . 2007 "Race, Health and the African Diaspora." International Quarterly of Community Health Education 27 (2): 161–76.
- Stocking George W. (1968) 1982 Race, Culture and Evolution. Chicago: University of Chicago Press.
- Thayer Zaneta M., and Non Amy L.. 2015 "Anthropology Meets Epigenetics: Current and Future Directions." American Anthropologist 117 (4): 722–35.
- Thomas Deborah A. 2011 Exceptional Violence: Embodied Citizenship in Transnational Jamaica. Durham, NC: Duke University Press.
- Thomas Deborah A., and Clarke M. Kamari. 2013 "Globalization and Race: Structures of Inequality, New Sovereignties, and Citizenship in a Neoliberal Era." Annual Review of Anthropology 42:305–25.
- Tweedy Damon . 2015 Black Man in a White Coat: A Doctor's Reflections on Race and Medicine. New York: Picador.
- UNESCO (United Nations Educational, Scientific and Cultural Organization). 1969 Four Statements on the Race Question. Paris: UNESCO.
- Visweswaran Kamala . 1998 "Race and the Culture of Anthropology." American Anthropologist 100 (1): 70–83.
- Wade Peter , Beltrán Carlos López , Restrepo Eduardo , and Santos Ricardo Ventura , eds. 2014 Mestizo Genomics: Race Mixture, Nation, and Science in Latin America. Durham, NC: Duke University Press.
- Wagner Jennifer, Yu Joon-Ho, Ifekwunigwe Jayne O., Harrell Tanya M., Bamshad Michael J., and Royal Charmaine D. . 2017 "Anthropologists' Views on Race, Ancestry and Genetics."

 American Journal of Physical Anthropology 162 (2): 318–27.27874171
- Wailoo Keith , Nelson Alondra , and Lee Catherine , eds. 2012 Genetics and the Unsettled Past: The Collision of DNA, Race, and History. New Brunswick, NJ: Rutgers University Press.
- Westerhaus Michael , Finnegan Amy C. , Haidar Mona , Kleinman Arthur , Mukherjee Joia , and Farmer Paul . 2015 "The Necessity of Social Medicine in Medical Education." Academic Medicine 90 (5): 565–68.25406609

Williams David . 2012 "Miles to Go Before We Sleep: Racial Inequalities in Health." Journal of Health and Social Behavior 53 (3): 279–95.22940811

- Yelvington Kevin , Winn Alisha R. , Wells E. Christian , Stuesse Angela , Romero-Daza Nancy , Johnson Lauren C. , Jackson Antoinette T. , Curry Emelda , and Castañeda Heidie . 2015 "Diversity Dilemmas and Opportunities: Training the Next Generation of Anthropologists." American Anthropologist 117 (2): 387–90.
- Ying Ji, Wang Yangling, Sun Lei, Zhang Yan, and Chang Chun. 2015 "The Migrant Paradox in Children and the Role of Schools in Reducing Health Disparities: A Cross-Sectional Study of Migrant and Native Children in Beijing, China." PLoS One 11 (7): 1–12.

TABLE 1. Extract from Preamble for Race, Ancestry, and Genetics Survey

Relationships between race, ancestry, and genetics in humans have received much attention within and outside of the anthropology community, more recently with the undertaking of the AAA RACE project. The purpose of this survey is to learn what anthropologists know and think about this topic. We are also interested in what definition(s) or conception(s) of race are used by anthropologists. ... For the purposes of this survey, unless otherwise stated, we have used the U.S. Office of Management and Budget (OMB) racial and ethnic categories; this usage may differ from popular referents. The OMB categories will allow us to compare results to existing empirical data. These categories are the basis of many popular perceptions of race.

Ifekwunigwe et al.

TABLE 2.

Subdiscipline and Country of Residence of Free-Text Respondents: Professionals Only

Page 23

	Number of respondents (N)	Percent (%)
Anthropology subdisciplines		
Cultural anthropologist	616	53.38
Archaeological anthropologist	187	16.2
Medical anthropologist	154	13.34
Physical/biological anthropologist	128	11.09
Linguistic anthropologist	69	5.98
Country of residence		
Within the United States	916	80.14
Outside the United States	227	19.86

TABLE 3. Race and Ethnicity of Survey Participants: Professionals Only

	Number of respondents (N)	Percent (%)
Race (US Census categories)		
White	735	76
Other	170	17.58
Black, African American	26	2.69
American Indian or Alaska Native	18	1.86
Asian	18	1.86
Native Hawaiian or other Pacific Islander	0	0
Ethnicity (US Census Categories)		
Non-Hispanic/Latino	867	91.36
Hispanic/Latino	82	8.64

TABLE 4.
Sex and Mean Age of Survey Participants: Professionals Only

Sex	Number of respondents (N)	Percent (%)	
Female	748	65.33	
Male	397	34.67	
Age (yea	ars)		
Mean	47.5	SD	14.5
Range	22–100	IQR	23

TABLE 5.

Six Common Statements

Races don't exist.

No races exist now or ever did.

Race has no biological basis.

Race is biologically meaningless.

Race has no genetic basis.

Race has no biological influence on health.

TABLE 6.
The Broad Spectrum Illustrating How Anthropologists Interpret the Race Construct

The Constructors	The Shifters	The Reconcilers
a historical artifact, which artifact, which when conceptualized,	Race is a social construct and a historical artifact, which when conceptualized, is not a scientifically reliable measure of human genetic variation.	Race is a social construct and a historical artifact, when conceptualized, is not a scientifically reliable measure of human genetic variation.
	Race is also a political tool, a lived social reality, a self-ascribed identity marker, and a dynamic ideology that has an impact as institutional, structural, and cultural racism.	Race is also a political tool, a lived social reality, a self-ascribed identity marker, and a dynamic ideology that has an impact as institutional, structural and cultural racism.
		Conceptions of race are informed by and inform biology, such as the deployment by society of phenotypic markers to differentiate and classify socially defined races or the embodied existence of health disparities among socially defined races.