

Toward a Sociology of Racial Conceptualization for the 21st Century

Ann Morning, *New York University*

Despite their longstanding interest in race, American sociologists have conducted little empirical research on sociodemographic patterns or longitudinal trends in “racial conceptualization”—that is, notions of what race is, how races differ, and the origins of race. This article outlines key empirical, methodological and theoretical considerations for a research agenda on racial conceptualization. Drawing on in-depth interviews with more than 50 college students, I describe the variety of race concepts among respondents, illustrate the importance of using multiple measures of conceptualization, and demonstrate the malleability of conceptualization, linking it to demographic context and thereby raising the question of its future evolution in the changing United States of the 21st century.

The color line, “problem of the twentieth century” as Du Bois (1986[1903]) famously put it, has long been a prominent concern of American sociologists (Calhoun 2007). The ways in which they have engaged the topic of race, however, reflect the preoccupations of their times. Early work on “race relations” (Park 1949) gave way to theories of “racism” in the civil-rights era, drawing new attention to institutional structures of racial oppression (Winant 2000). Large-scale surveys began to track attitudes—toward groups and policies—that might pose obstacles to achieving racial equality (Schuman, Steeh, Bobo and Krysan 1997). And in the wake of diversifying immigration inflows and rising intermarriage rates, scholars have revisited longstanding assumptions about racial identity and classification, launching new research on the categorization of mixed-race people and immigrant groups (Lee and Bean 2004). By the end of the 20th century, American sociology had acquired a significant body of knowledge on race relations, attitudes, stratification and classification.

I thank Elizabeth M. Armstrong, Troy Duster, Michèle Lamont, François Nielsen, Marta Tienda, Robert Wuthnow and an anonymous reviewer for thoughtful comments on earlier versions of this work. I am grateful to the National Science Foundation’s Societal Dimensions of Engineering, Science and Technology program for funding this research through Dissertation Improvement Grant SES-0135507, and to Princeton University’s Program in African American Studies for a Dissertation Research Grant. Direct correspondence to Ann Morning, Assistant Professor, Department of Sociology, New York University, 295 Lafayette St., Room 4118, New York, NY 10012. Tel: (212) 992-9569. Fax: (212) 995-4140. E-mail: ann.morning@nyu.edu.

What the discipline has overlooked, however, are the fundamental *understandings* of race that underpin all these dimensions of racial ideology and practice. What is a race? What distinguishes one race from another? How many races are there? Why are there races—where do they come from? Our answers to these questions and others form a complex of beliefs that can be called “racial conceptualization.” Much more than a simple matter of definition, racial conceptualization is effectively a working model of race, one that helps us make sense of race-coded social worlds. How to determine a person’s race; which races exist in the world; what it means to belong to a certain race—these are issues that life in a racialized society raises, and to address them we draw on our personal, yet deeply social, beliefs about the nature of race.

The objective of this article is to make a case for the importance of racial conceptualization as a field of sociological inquiry in its own right. After a brief discussion of its significance and existing literature, I offer the outlines of a research agenda on conceptualization. Drawing on in-depth interviews with more than 50 American college students, this article contributes empirical findings, methodological observations and theoretical insights to future scholarship in this area. Specifically, I report the variety of race concepts found among respondents, illustrate the importance of using multiple measures of conceptualization, and stress the malleability of conceptualization and its relationship to demographic context.

Significance of Racial Conceptualization

Race concepts figure most often in social scientific literature when they are linked to racial attitudes—that is, to “favorable or unfavorable evaluation[s]” (Schuman et al. 1997:1) of “racial and ethnic groups and their attributes, aspects of relations between groups, public policies relevant to race, contact between those groups, and assessments of the character of intergroup relations.” (Bobo 2001:267) Biological or “essentialist” understandings of race in particular are routinely linked to prejudice; note for example Marks’ definition of “racism” as a folk theory of heredity that “confers innate properties upon people based on group membership.” (Marks 2001:62; 2002)

The importance of racial conceptualization also lies, however, in the influence it exercises on practices and policies, not just attitudes. Consider for example the forensic convention of identifying human remains or crime specimens by race; such efforts would be nonsensical were they not supported by the belief that racial identity is embedded in the human body (Sauer 1992). Conversely, the claim that race is *not* biological has been deployed to undercut support for state data collection on race and by extension, for affirmative action policies. In general, essentialism has

been associated with policy conservatism, and constructionism—that is, the perspective that race groupings are cultural creations, not biological entities—has been tied to liberalism. While the former suggests that racial differentials are fixed and cannot be ameliorated through social policy, the latter views racial categories and their consequences as malleable (Velody and Williams 1998). It should be noted, however, that there is no simple mapping of political leaning to racial model: Afrocentric scholars like Leonard Jeffries and Ivan Van Sertima, whose sociopolitical agenda could hardly be termed conservative, produce highly essentialized depictions of racial difference (Morrow 2001; Van Sertima 1986).

Racial conceptualization has a special timeliness today, as Americans are increasingly exposed to conflicting expert claims about the nature of race. On one hand, the academic idea of race as socially constructed has circulated widely enough to have gained a popular, if unfaithful, translation as “race is not real.” On the other, the claim that races are genetically distinct groups is not only enjoying a scientific renaissance (Duster 2001), but is also being conveyed through new products and services such as genetic genealogy tests that claim to identify individuals’ racial ancestry (Wade 2002), race-targeted pharmaceuticals (Kahn 2003) and even vitamins (Payne 2006).

The controversy surrounding racial conceptualization at the start of the 21st century is reminiscent of the struggles about race to which Du Bois alluded at the beginning of the 20th century. One hundred years later, our society has largely come to the agreement that racial discrimination is morally wrong (at least in the abstract—see Sears, Sidanius and Bobo 2000). But changing notions of what race is and what it entails may turn this consensus on its head. According to some writers, contemporary research on group biological differences has—or can be construed as having—serious implications for the political life of the nation (Murray 2005; Pinker 2006; Sarich and Miele 2004; Venter 2006). As commentator Andrew Sullivan (2005) puts it, “the moral equality of human beings and the political equality of citizens” are challenged by what he deems “increasingly accurate scientific discoveries of aspects of human life that reflect our innate, biological inequality.” If race is reinscribed as a matter of significant, fixed differences with behavioral outcomes, another century of battles over the color line may lie ahead.

Previous Research on Racial Conceptualization

Sociologists’ exploration of the ideology of race has focused largely on racial attitudes and classification. Little empirical research has explored the range of American race concepts, their sociodemographic correlates or their evolution over time. To be sure, sociology today actively

promotes the view that race is socially constructed, but this position has not entailed sustained inquiry into racial conceptualization as either *explanans* or *explanandum*. Instead, research on race concepts has largely been an offshoot of social scientists' investigation of racial attitudes, as psychologists, sociologists and others have developed measures of conceptualization in order to evaluate its relationship to prejudice. Williams and Eberhardt (2008) created a scale spanning social to biological concepts of race, finding that individuals scoring near the latter end were more likely to endorse racial stereotypes, have less diverse friendship networks, and express more pessimism about the possibility of redressing racial inequality. In a test of "symbolic racism" theory, Brown et al. (2005) also found evidence that belief in genetic racial difference is positively related to measures of prejudice.

Existing empirical knowledge about race concepts is also grounded in attitudinal research because the latter's large-scale survey data have been used to infer underlying notions of racial difference. Since 1977, the National Opinion Research Center has asked General Social Survey respondents to choose from among four explanations for why blacks on average "have worse jobs, income, and housing than white people." (Schuman et al. 1997) One response option is that blacks have "less in-born ability to learn" than whites; selection of this item has been interpreted as a signal of racial essentialism (see e.g. Bobo, Kluegel and Smith 1997). Apostle, Glock, Piazza and Suelzle (1983) also used this "outcome explanation" approach to gauge racial conceptualization when they asked more than 500 whites in the San Francisco bay area in 1973 to evaluate possible reasons why "white people get more of the good things in life in America than black people," why whites have higher IQ test scores than blacks, why a hypothetical black John Smith had achieved career success, and why "the average black person is less well off than the average white person." More recently, Jayaratne (2002) asked questions such as, "Some people think whites tend to differ from blacks in intelligence. Do you think their genes have anything to do with this difference?" This question was also varied to cover topics such as athleticism, the "drive to succeed," math performance, and tendency toward violence (Jayaratne et al. 2006).

These studies yield varied estimates of the degree to which racial essentialism obtains in the general public. On the 2004 GSS, only 7 percent of white respondents claimed that in-born differences accounted for black/white differentials, but Jayaratne (2002) found that roughly a third of whites believed that genetics were behind racial differences—and this figure jumped to 70 percent when the question turned to differences in athletic ability. Different questions, dates and interviewee characteristics between surveys make it difficult to come to any firm conclusion about Americans' racial conceptualizations. Bobo and Smith (1998) show that

question format can have a large impact on how people characterize racial differences. Whites' likelihood of claiming significant differences between themselves and blacks rise noticeably when they are asked to address specifically the areas that have been the mainstays of American belief in racial biology: athletic ability, sexual drive and intelligence (Apostle et al. 1983). Condit, Parrott and Harris (2002) argue, moreover, that social context shapes individuals' definitions of race; Brückner, Morning and Nelson (2005) find significant social-desirability effects on the expression of biological explanations of race.

More fundamentally, the "outcome explanation" (or "explanatory mode"—see Apostle et al. 1983) approach was not designed to measure racial conceptualization, and is a flawed indicator of everyday notions of race. By asking whether genetic difference accounts for socioeconomic race differentials, these questions confound opinions about the existence of genetic race differences with beliefs about whether such differences contribute to racial wage gaps. Simply put, these items do not ask directly how respondents define race, and they disregard many facets of racial conceptualization (for example, which groups are races and what the principal differences between races are). Attitudinal surveys also reduce racial conceptualization to a matter of white perceptions of blacks. As a result, they overlook the possibility that whites' definitions of race might vary if prompted to consider other racial groups besides blacks, and they ignore the understandings of race that non-whites hold. This is a serious omission: consider, for example, how the equation of biological essentialism with racism is complicated by 2004 GSS data showing blacks to be more likely than whites to subscribe to the "less in-born ability" theory of racial inequality (13 percent of blacks compared to 7 percent of whites agreed). Finally, quantitative "explanatory mode" survey items are ill-equipped to detect the possibility that individuals hold multiple concepts of race simultaneously. The "individualist" account for racial inequality, whereby blacks lack the "motivation or willpower to pull themselves up out of poverty," makes no reference to biology. Yet as Apostle et al. (1983) acknowledged, the individualist belief that blacks have failed to exercise the options open to them often contains a genetic rationale at its core, as revealed by further probing of respondents.

The advantage of large-scale survey research, of course, lies in the broadly generalizable results it offers to the study of variation in racial conceptualization over time, across place and by sociodemographic grouping. Most existing research on racial concepts, while thought-provoking, suffers from such sampling limitations. Lieberman and Littlefield (Lieberman, Hampton, Littlefield and Hallead 1992; Littlefield, Lieberman and Reynolds 1982), for example, have authored several reports on scientists' views of race, and Hirschfeld (1996) conducted a powerful

set of experiments to discern children's concepts of race. In this context, the research conducted by Apostle et al. is a notable attempt to trace socio-demographic patterns in racial conceptualization. They found that older, less educated and more religious Americans, at lower occupational levels, were most likely to subscribe to what they called the "traditional" explanatory modes for racial differentials: the supernatural ("God made the races different"), genetic ("races are different by nature"), and individualistic modes ("blacks have failed to use their free will to better themselves"). Accordingly, the "modern" environmentalist and radical modes, which hold, respectively, that impersonal social forces or "whites in power" are responsible for racial inequality, were more prevalent among college students than any other adult occupational group: 42 percent of college students used these explanations, compared to 36 percent of professionals and 21 percent of blue-collar workers. Gender, marital and family status were less relevant to explanatory mode. This 1973 Bay Area survey, however, is now badly outdated and warrants replication on a national scale.

What is missing today from the literature on racial conceptualization is scholarship that is explicitly dedicated to the description and analysis of our varied understandings of race, and which aims to develop suitable methodological tools and theoretical propositions to structure and implement such inquiry. In the pages that follow, this article illustrates some of the empirical, methodological and theoretical issues with which a sociology of racial conceptualization must contend, using the ideas expressed by a sample of American college students in in-depth interviews on the nature of race.

Research Data and Method

The data analyzed here consist of 52 open-ended interviews conducted with undergraduate students at four northeastern universities during the 2001-02 academic year. "Ivy" and "Pilot" are private, highly selective colleges with undergraduate admissions rates around 10 percent, while "State" and "City" are public institutions that admitted more than 60 percent of their undergraduate applicants for the 2001-02 school year. City University was the least racially diverse and Ivy was the most: at City, 84 percent of the undergraduate student body was white (or not identified by race), compared to only 60 percent at Ivy. In comparison, 62 and 66 percent of students were white at State and Pilot, respectively. The interview sample was stratified so that roughly a third of the students were randomly selected from the pool of anthropology majors, another third was selected randomly from biology majors, and the remaining third was chosen at random regardless of major. The sample was structured this way to investigate the understandings of race that are transmitted

through formal education in the social and biological sciences that have the longest history of defining the nature of race. Although this research design purposely yields a group of respondents that is far from a random sample of the American population (even within its age group and region), it provides ample evidence of the heterogeneity and complexity of contemporary racial conceptualization. As a result, it serves here as an empirical point of departure for considering the challenges that face the scholar of racial conceptualization.

To gauge interviewees' concepts of what race is, I relied primarily on three types of question. (The full interview schedule is available upon request.) First, I asked for their open-ended definitions of "race" ("If you had to explain what it is, what would you say?") Next, I asked whether they thought the following statement was true or false: "There are biological races in the species *Homo sapiens*" (taken from Lieberman 1997). Finally, I asked students for possible explanations of two real-life racial differentials: first, in median infant birth weights; and second, in numerical representation among National Football League players. Methodologically, then, the interview instrument proceeded from an open-ended characterization of race, providing respondents with the freedom to take any line of discussion they chose, to a closed yes/no question that permitted (mostly) simple classification and comparison of concepts, to two open-ended yet constrained or prompted discussions of how race works and what differences it entails. For the last two, I deliberately began with an outcome unfamiliar to most people other than doctors and demographers, then moved to one that regularly provokes highly-publicized controversies over the comparative traits of black versus white athletes. The infant birth weight question also differed in that it referred to Asians as well as whites and blacks, thus widening the scope that respondents' models of race would have to accommodate.

Research Findings

Defining Race: A Range of Concepts

When asked how they defined "race," students offered a variety of ideas, sometimes seemingly in conflict. The most frequent approach, taken by 69 percent of the interviewees, was to equate race with culture (Table 1). As a psychology major at City University put it:

"I think it kind of has a lot to do with like what culture you're coming from and like you're different, I mean everything from like how you eat, what you eat, to what you wear to like, I mean, the language, everything. So it's like this entire package of pretty much who you are..."

In such definitions, students might mention “culture” explicitly; refer to elements associated with culture, such as beliefs, values and practices (Griswold 1994); or bring up heritage and geographical origins. An accounting major at State explained:

“So it definitely has to do with your family background, both parents combined, their parents, whatever the mix is. Like people say I’m half Italian.”

By combining culture with ancestry, interviewees effectively cast race as ethnicity: a group identity that depends on a sense of common origins or history, coupled with shared values and behaviors (Weber 1978[1956]). In so doing, students desensitized the notion of group difference, shifting it from the problematic realm of racial difference to the less charged topic of ethnic identity.

This shift to ethnicity defuses the discussion of race in several ways. First, the emphasis on culture circumvents the linkage of race to biology that is emblematic of the “old” racism that respondents might wish to avoid. Second, it evades engagement with the history of oppression that has been part and parcel of racial stratification. Instead, ethnicity discourse emphasizes markers—such as “what you eat,” “what you wear” or “values that your parents teach you”—that are unlikely to entail the same discriminatory consequences, particularly for this largely white sample of respondents. In this way, it avoids questions of power and inequality (Frankenberg 1993) and minimizes recognition of contemporary racism (Bonilla-Silva 2003). Discussion of the coercive nature of external racial categorization is also sidestepped by suggesting that racial classifications, like ethnic ones today, are largely a matter of volition, the product of freely-made individual choices to engage in particular behaviors. It depends on whether you have “maintained old values” or on which place “you most identify with” as some students put it; and as Waters (1990) has shown, among white Americans the choice of peoples and places with which to identify—as well as to what extent to do so—is largely optional. Equating the experience of racial membership with that of ethnic identification (“Like people say I’m half Italian”) is an example of what Roman (1993:194) described as whites’ “deduction that to be a subject of racism was merely to volunteer for it.”

The equation of race with ethnicity also meant that while race took on the volitional and inconsequential aspects of “optional” ethnicity, students’ understandings of (ethnic) cultural difference acquired something of the permanence, breadth and depth that usually characterizes portrayals of racial difference. In the interviewees’ accounts lies a constant presupposition that large and meaningful cultural differences exist

between races, even when they have little evidence or experience to support the hunch. As one woman at City contended:

"...there's a lot of African Americans that have never lived in Africa, you know. So a lot of them grew up here and act a lot like most white people act, you know, but there are still different things like—I don't know, I'm not, like I've never lived in an African-American family or anything like that. But I'm sure there are some different things that they value that we don't. Like I mean I know that women are much more assertive, and much more, I don't want to say aggressive, but, you know, I mean, if you look at the factor of eating disorders, I mean eating disorders are like predominantly white, middle-class American things."

It is striking that this student—a psychology major—is convinced there are significant cultural differences between blacks and whites ("I'm sure there are some different things that they value that we don't"), despite both the fact that "a lot of [African Americans] grew up here and act a lot like most white people act" and the limited evidence and personal experience she has of such major differences (eating disorders being limited by gender, class and age to a small subset of the American population). The conviction that different races—and in particular, blacks and whites—inhabit very different cultural worlds, despite common nationality, residence, language and political and economic values (Hochschild 1995), is firmly rooted among the undergraduate students interviewed here. Recalling Balibar's (1991:23) description of cultural "racism without races," the students emphasize "the insurmountability of cultural differences" and "the incompatibility of life-styles and traditions."

Students' conflation of race and ethnicity went only so far, however. Its limits emerged when students were asked whether groupings like the Irish, Slovaks or Vietnamese—the kinds of groups they referred to when illustrating the differences in cultural practice that animated their definitions of race—should in fact be considered "races." When asked directly which groups they considered to be races, students usually listed the same groups as those on the U.S. Census—white, black, Asian, etc. Thus a disjuncture appeared between their invoking ethnic differences when asked to define race, and their implicit acknowledgment that ethnic groups were in fact not really racial groups when asked to catalogue the latter.

For all the discussion of race as stemming from cultural difference, human biology remained an indispensable tool for making sense of race. The interviewees were almost as likely to refer to physical characteristics as

**Table 1: Variation in Student Racial Conceptualization
by Question Methodology**

Closed Choice	%			N
	Disagree	Agree	Contingent	
"Do you agree or disagree with the statement, There are biological races in the species <i>Homo sapiens</i> ?"	43	47	10	49
Open-ended Definition	Culture	Biology	Construct	N
	69	65	17	52
Scenario Explanation	Culture	Biology	Socio-econ	N
	27	70	57	37
Race differentials in infant birth weight	48	74	50	46
Disproportionate race makeup of NFL				

Notes:

1. "Contingent" responses are those where interviewees said they would agree with the statement if specific terms in it were defined or amended. "Socio-economic" responses are based on references to inequality (income, access to health care, etc.).
2. Percentages do not add to 100 for the open-ended definition and scenario items because interviewees frequently offered more than one explanation.
3. Numbers of respondents fall below the full sample size (n = 52) for questions that were omitted from longer interviews.

cultural ones when defining race: 65 percent did so, usually by mentioning skin color and other phenotypical features. How did cultural and biological understandings of race coexist so frequently? One possibility is that talk of culture served as a more socially acceptable rendering of racial difference than biology could alone. But we must also take seriously the extent to which students genuinely felt that race "has something to do with" both biology and culture. An anthropology major at Ivy reasoned:

"I think that the way people usually define race has to do with like the way people look, but I think that the way people understand race when you think about it more has to do with the way people act."

The "skin color plus culture" understanding of race (as a State interviewee put it), helped students reconcile their everyday experiences of difference in speech, dress, music, etc. among the roommates and classmates they associated with distinct races, or their numerous observations of people who "were" one race but "acted" like another.

Much less familiar—or less useful—to the undergraduate interviewees was the concept of race as a social construct. Only 17 percent took this approach when asked to define race, and it was confined almost entirely to anthropology majors from the relatively diverse Ivy, State or Pilot campuses. One described race as “a system of classification that uses outside markings...to place people in different categories of sort of belonging or otherness.” Another continued, “It’s a very politically-charged word that doesn’t reflect any reality but reflects our reality.” From these data, it is impossible to determine whether the infrequency of constructivist definitions of race stemmed from a lack of exposure to this perspective or its lack of appeal for college students. They suggest nonetheless that the constructionist concept of race—which academics often refer to as the intellectual consensus (e.g. Nobles 2000; Stevens 2003)—is neither widely nor effectively conveyed in American higher education today.

Using Multiple Measures of Racial Conceptualization

Given the complexity of individuals’ notions of race, how sensitive are these ideas to the design of the questions used to elicit them? To compare to the open-ended definitions described above, I report below the results of three other measures of racial conceptualization: (1. closed-ended evaluation of a statement on “biological races” and accounts for race differentials in (2. health and (3. sports. However, not all respondents were asked all three follow-up items; these questions, alone or in combination, were omitted in particularly long interviews. As a result, 49 students (94 percent of the full sample) were asked to evaluate the “biological races” statement, 46 (or 89 percent) the sports question, and 37 (71 percent) answered the health item.

In order to compare across measures, I report not only the results of each question for the full complement of interviewees who answered it, but also the response outcomes when only the subset of 37 students who answered all questions is included. As it turns out, sample reduction had little impact on responses to the closed-choice “biological races” item or accounts for sports differentials: comparing the full complement of student responses to the restricted subset of 37 reveals that the response proportions are virtually unchanged, deviating in most cases by only one percentage point and at most, two. The exception is the open-ended definition item. As reported previously, in the full sample of 52 students, 69 percent referenced culture, 65 percent biology, and 10 percent social construction when defining race; when analysis is restricted to the 37 students whose conceptualization was also measured by all three items to be described below, these shares fluctuate to 76 percent for culture, 89 percent on biology, and 11 percent for social construction. However, these

results strengthen the argument that individuals' expressed race concepts are highly sensitive to the question format used to elicit them.

Statement on Biological Race

Borrowing an item from Lieberman's (1997) survey of academics, 49 students were asked whether they agreed or not with the following statement: "There are biological races within the species *Homo sapiens*." As Table 1 shows, the sample was split almost evenly between those who agreed (47 percent) and those who disagreed (43 percent). This question prompted students to delve more deeply into detailed arguments about biology than they had in their open-ended definitions:

"I think there really are [races] because like there are different genes that can lead to different expressions, or can lead to different, like how, behaviors in people. And I think that will define a race." —*Anthropology major, City*

"I disagree because I know some small facts about this type of thing...and, although I don't remember numbers specifically, I recall hearing somewhere that races, quote, unquote, make up something like two percent, or point one percent, of the genomic makeup of a person, whereas similarities between cultures are 99 percent. Genetically. Biologically." —*Economics major, Ivy*

Consistent with these quotations, students at the less-selective City and State universities were much more likely to agree that biological races exist than were those at the elite Ivy and Pilot campuses.

The remaining 10 percent of interviewee responses could be labeled "contingent agreement": these students said they would agree with the statement if it were defined or amended to their liking. This ambivalence was also reflected in how often interviewees hesitated, vacillated, or openly expressed ethical concerns about the motivation for, or impact of, such a statement. "Honestly, it does make me uneasy," one admitted; another said, "It's a very shifty statement." Even students who agreed with it had reservations, including this biology major at Pilot University: "I mean, I would say to the person, why do we need to say there are biological races? I mean, I guess I'd say, OK, I grant you that there are biological races. So what?"

Explaining Race Differentials in Birth Weight

Instead of relying solely on interviewees' responses to abstract questions or statements, I also explored how their concepts of race worked "in action" by investigating how their understandings of racial difference

actually helped them explain a given outcome. Two outcomes were chosen for discussion—one related to sports and the other to health—with each being amenable to a wide range of potential explanations (biological, environmental, cultural, etc.). This strategy borrows from the attitudinal surveys that record respondents' "explanatory mode," but with an open-ended structure and probes to elucidate conceptual frameworks.

For the first of the two scenario or "real-life" questions posed, I purposely chose an outcome with which I did not expect students to have much familiarity: demographers' finding that infants associated with different races have different median birth weights in the United States (National Center for Health Statistics 2001). The question was:

"Researchers have discovered that at birth, babies of different racial groups tend to have different weights. For example, white babies have among the highest median weight, black babies among the lowest, and Asian babies' weights tend to be in the middle. In your opinion, what are some possible explanations for this finding?"

By asking students for more than one potential cause, I wanted to gauge the range of mechanisms that seemed plausible to them, rather than force them to stand by one choice only. In this way I hoped to obtain a more accurate reflection of how they thought race mattered, even in areas where they might not feel knowledgeable enough to offer a definitive answer.

Students' grappling with observed racial differentials evoked very different frameworks than the ones they espoused in their open-ended definitions. This disjuncture is best illustrated by their references to cultural difference. Recall that when asked earlier to define race in the abstract, the modal approach (taken by 69 percent of students) was to emphasize culture (e.g. "everything from like how you eat, what you eat, to what you wear"). This figure rises even higher—to 76 percent espousing a cultural definition of race—when analysis is limited to the subset of 37 students who were later asked about birth weight. Yet "culture" was the *least* frequent of the major explanatory approaches they used when it came to explaining "real life." Only 27 percent of the students explicitly drew a picture of culturally-specific values, beliefs or practices contributing to racial differences in birth weight (Table 1). In these instances, students mostly portrayed culture as influencing maternal nutrition: "if you're Chinese or Japanese, you eat a lot of non-fattening foods like sushi or something like that;" "It might be something like having a large child is not as important to other cultures, like in the United States it is to, like, a white culture."

In contrast to the limited recourse to culture to explain birth weight differentials, students were most likely to offer genetic explanations: 70 percent suggested this possibility. These explanations were generally comprised of two arguments: either that infant birth weights reflected disparities in adult sizes, which varied by race, or that birth weight was a function of evolutionary adaptation. Examples included: "Asians are shorter than most people;" "Maybe, in terms of evolution, maybe it's better for the white people to have bigger babies than the other countries. I don't know." As in the case of cultural explanations, however, the scenario respondents were less likely to apply biology in explaining this real-life health outcome than they were to reference it in their open-ended definitions of race. Only 70 percent of the interviewees asked to account for birth weight differentials drew on biology to do so, although 89 percent of them had referenced biology in their open-ended definitions of race.

Interviewees' concepts of how race works clearly depended a great deal on which race they had in mind. In this connection, it is important to note that they invariably interpreted the question as requiring explanation of non-whites' deviation from whites' outcomes, so their responses are implicit comparisons of blacks and Asians to whites, but never to each other. As a result, they did not look for factors that might influence all three groups' outcomes simultaneously (such as household income per capita, for example). Instead, students focused on accounting for either the Asian/white differential or the black/white disparity, and they arrived at very different explanations depending on which pairing they had in mind. As the quotes above suggest, the inclusion of Asians in the scenario seemed to automatically project it to an international matter rather than a domestic one, where respondents repeatedly juxtaposed Asians with "Americans," understood as white people. This globalization in turn may have set the stage for the emphasis on cultural differences in food preferences that came up only vis-à-vis white/Asian differences in birth weight. The other line of argument reserved for Asian/white comparison was that birth weight simply reflected adult size.

Interviewees who puzzled over the black/white weight differential entertained a very different set of possible explanations. Maternal drug abuse came up only when students considered black birth weights:

"It might just generally be that Asian babies are smaller. Maybe American babies are bigger. I don't know how that ties with the black babies. I know, you know, if the mom uses drugs or anything like that, the babies can have a lower birth weight." —*Biology major, City*

Similarly, the socioeconomic roots of low birth weights, such as low incomes, limited access to health care, inadequate food and poor education, figured only in white/black comparison.

"I guess for blacks, they're typically always found like in lower-income housing, lower socioeconomic status, so they may not have been educated and have, like, the resources. They may have been, you know, pregnant in a bad situation, so maybe they don't know the proper pre-natal care. They may not have access to the proper pre-natal care. And so as a result they may be like drinking or doing these drugs or smoking or something. That could be a reason for low birth weight." –*Meteorology major, State*

The impersonal passive voice this student uses to depict blacks' socioeconomic conditions—they're "found" in lower-income housing, "they may not have been educated"—removes the possibility that discrimination plays a role in birth weight differences. His emphasis instead is on illicit behaviors that he attributes to blacks: getting pregnant "in a bad situation," drinking, "doing these drugs" or smoking. For most respondents, discrimination was a non-factor—a phenomenon of the past, when "black people weren't given the opportunity to prosper and therefore couldn't get good jobs and therefore couldn't make money" in the words of a Pilot biology major. Similarly, an Ivy biology student speculated:

"African-Americans might be more stressed. I mean, now they have all these minority programs, but when these mothers or something were growing up like 20 years ago, maybe they worried about finding jobs, whereas white people are already settled here, they don't have to worry, or something."

In this area, the students' explanations for racial birth weight differentials are not so different from their definitions of race, even if the former do not emphasize the role of culture to the same extent as the latter. In both realms, questions of race can be dissected in a vacuum where discrimination does not exist, and pervasive social stratification is an unremarkable—and unremarked-upon—given. Instead, genetic factors and freely-made choices are the most plausible explanations for racial cleavages.

Explaining Race Differentials in Sports Representation

The second "real-life" question, concerning race and sports, was posed to

46 students. Using data from Lapchick and Matthews (2001) and the U.S. Census Bureau (2001), the question was worded as follows:

"The second scenario I'll describe has to do with sports, and the overrepresentation or underrepresentation of certain racial groups in certain sports, compared to their share of the total population of the country. To give you an example from football: in the NFL, blacks make up 67 percent of the players and white athletes are in the minority. But in the total population of the United States as a whole, whites make up the majority and blacks count for only 12 percent of the population. In your opinion, what could be some plausible explanations for why the racial composition of the National Football League is so different from the racial makeup of the country as a whole?"

In response, students were again most likely to turn to biological accounts (74 percent did), followed by socioeconomic explanations (50 percent). In contrast to their hypothesized solutions to the birth weight dilemma, however, culture figured more prominently in the football scenario, evoked by 48 percent of the students (Table 1). Finally, discrimination also came into play in some sense, in that a fifth of the students thought that sports recruiters might favor black athletes. In other words, "reverse discrimination" that put whites at a disadvantage came up more readily than had the possibility of anti-black discrimination in the birth weight example.

In marked contrast to students' hesitation about the Lieberman statement's claim of biological racial differences, nearly three-quarters of them suggested the possibility that differences in sports representation were due to blacks' natural physical superiority vis-à-vis whites. As a City anthropology major explained, "black people are physically superior to white people. They can run faster, jump higher." Similarly, a State biology major thought that "black people have like a difference in their cardiovascular system that enables, you know, their muscle structure to develop differently."

How did such physical differences come about? Students offered two possible explanations, both drawing on ideas about human evolutionary processes. One explanation was that slavery in the United States had exercised a selection effect on the black population, either because the harsh conditions had weeded out all but the strongest, or because slave owners had purposely bred slaves for strength:

"I think part of that might have to do with slavery because they would take the best fit man and the best fit woman

and they would, you know, they would have children and those children would be—so they were sort of like bred to be fit and muscular, like work horses. So just coming from that, like they've been bred for that. And I hate that about whatever, that past, people's history, but I think that might be part of it." —*Biology major, City*

"If Africans were slaves, there might have been some mutations in their DNA that might have allowed their bodies to keep up with this, and then eventually it gets passed down, and then football players can cope with all the stress." —*Biology major, Ivy*

The second explanation that students gave for blacks' physical superiority was similarly grounded in an evolutionary framework, but stretched further back in history to blacks' African ancestors and their adaptation to the exigencies of their environment.

"Well, obviously—I mean, not obviously—I think the easiest explanation is that there's some—that there's some biological reason that because African Americans [*sic*] had to run and catch their game in Africa, that made them fast and fleet-footed and able to nimbly tackle the prey or something." —*Biology major, Pilot*

As students explored the sources of black physical superiority, two striking asymmetries emerged. First, it became clear that although evolutionary processes had forced Africans to develop physical ability, other races' evolutionary survival had required them to adapt in different, more cerebral ways.

"...[blacks] tend to be more athletic, maybe because where they were living, they had to be—it required them to be more athletic to get food or something. When I think of Caucasians, where they originated, the first thing I think of is medieval times where they're all kind of domesticated, they're wearing clothes and they're just not being, not really running around, and riding horses or something." —*Biology major, Pilot*

"It could also be just that we came to depend in Europe, because of climatic situations and everything that we had to concentrate on, not consciously, but you

know, our adaptation was less in terms of physical adaptation as technological. So, in order to survive in a harsher climate like rough winters, we came to depend more on technology than just on physical superiority." –*Anthropology major, City*

The second type of asymmetry that characterized students' thinking about race and sports participation emerged when I asked why, if blacks were such superior athletes, there were so few in some sports, such as professional hockey. I expected similar, evolution-framed answers as before, explaining that whites were naturally physically adapted for hockey. But this was not the case; instead, students felt that for the most part, cultural traditions explain white predominance in hockey, as well as the presence of other groups in various sports such as Caribbean baseball players, Hispanic boxers or Brazilian soccer players. For example, reasons that Canadians and eastern Europeans dominate ice hockey included: "it's just what they've learned,... like how they grew up;" "that I think might be a cultural thing... It's always been associated with hockey, cold climates, cold European climates... just like more white kids will probably be introduced to it when they're younger." As it turned out, only *blacks'* presence in a sport could be explained by biological characteristics, and even their *absence* from certain sports could be attributed to their ostensible physical capacities: e.g., lack of body fat to swim. When whites or other groups were at issue, however, culture replaced biology entirely as causal mechanism.

Discussion

Summary of Empirical Findings

The interview results described here begin to sketch the range and nuance of contemporary American racial concepts that researchers are likely to encounter. Students' open-ended definitions of race touched on three primary modes of defining race: as cultural grouping, biological entity or social construct (see Dubriwny, Bates and Bevan 2004 for a similar typology). These approaches were not necessarily mutually exclusive; in particular, interviewees often combined arguments about culture and biology when describing their understandings of race. Despite this fluidity, disagreement did surface: when asked directly whether biological races exist, students were almost evenly divided.

The least useful perspectives for thinking about race appeared to be the constructionist lens and the related discrimination-cognizant frame. In defining race, less than a fifth of the respondents developed a constructionist line of argument, and even fewer inserted one when grappling with

real-life outcomes. Although theoretically persuasive to some, racial constructionism seemed hard to put into practice. Discrimination, which could be considered an applied explanation for how socially-constructed categories become “real” or salient, was also largely off the radar for this mostly white sample (as Bonilla-Silva 2003 found as well).

Due to the small size and particular construction of this sample, the findings of this study, though suggestive, cannot simply be generalized to the U.S. population at large. The sample analyzed here was originally designed to enable targeted comparisons between college students in anthropology and in biology, and between students at universities with differing levels of selectivity and of racial diversity. As a result, it focuses on an age- (and region-) restricted as well as relatively privileged segment of the American population. The particularity of the sample, however, does not impede it from substantiating one of the central claims made here: that measurement of individuals’ racial concepts is extremely sensitive to the technique used to do so.

Methodological Observations

Asking about race in different ways led to different estimates of how prevalent each conceptual frame was. For example, reactions to the statement on biological races yielded the lowest estimate of the frequency of biological race thinking: only 47 percent of the respondents agreed with it directly, and even adding the 10 percent of “contingent agreement,” the resulting tally still falls below the proportion of interviewees referencing biology in their open-ended definitions of race (65 percent) or explanations of the NFL’s composition (74 percent). Question type made an even larger difference when it came to measuring the prevalence of cultural definitions of race. Whereas culture figured prominently in respondents’ open-ended definitions of race, it mattered much less when they had to explain specific outcomes.

Interpreting these apparent inconsistencies is no simple matter. Although some question formats may be more likely than others to provoke socially-desirable responses, we cannot chalk up all the disparities in racial conceptualization to the explanation that certain approaches elicit more truthful responses than others. It might be more accurate to conclude that racial concepts are extremely situational or context-driven. In other words, a question about birth weight primes interviewees to draw on different racial explanations than one on sports, or one on wages. An abstract question may prompt different considerations than an applied scenario. And the mention of one group rather than another entails a particular model of how race matters. As a result, empirical study of racial conceptualization requires careful attention to such design issues, and

warrants future methodological research on question types to identify more systematically the effects of different approaches.

This research offers some preliminary suggestions about the advantages and disadvantages of particular items. Asking interviewees directly for their definitions of race allows for an open-ended range of ideas, unconstrained by researchers' expectations. However, it may be difficult to assess the weight that respondents assign to each frame; is one more salient than the other(s)? Soliciting opinions about the statement on the existence of biological races, on the other hand, yields a (usually) straightforward calculation of interviewees' adherence to a particular concept of race. Its baldness, however, seems to make respondents uneasy; it "puts them on the spot" compared to other, open-ended questions. Finally, "real-life" or "outcome explanation" items permit interviewees to draw on multiple frames, yet can discern the most salient, especially if a follow-up question is used such as, "Which of these possible explanations do you think is most likely?" They provide an important sense of which conceptual tools people actually apply. Moreover, the detail that comes from respondents' assessment of particular scenarios offers ample opportunity for follow-up probes that trace the mechanisms of racial difference. In the case of the National Football League's racial composition, students' ruminations about the role of human evolution led to exceptionally vivid imagery of how race works.

Theoretical Implications

Perhaps the clearest theoretical proposition to emerge from this research is that we cannot assume that individuals hold a single definition of race. Instead, they may carry around a "tool kit" (Swidler and Ardit 1994) of race concepts from which to draw depending on their reading of the situation to be deciphered. This means there is no all-purpose definition of race, and no single type or degree of difference that consistently delineates every race from every other. Race is not a uniform metric.

This research also suggests that in the United States, "black biological exceptionalism" is a major guideline to which racial concepts enter into play. More than any other group, blacks—whether invoked as African Americans or as Africans—cue respondents to biological accounts for race differentials. This suggests in turn that contemporary race concepts are deeply grounded in historical social and political configurations. The insistence that blacks are fundamentally and thoroughly distinct from others (especially whites) is likely the ideological legacy of a slave-owning society that relied heavily on Africans' labor, but did not wish to incorporate them as equals. Black biological exceptionalism reconciles physical inclusion with social exclusion. In contrast, the ostensible racial

inferiority of American Indians, Asians and Mexicans entailed their physical exclusion from the republic at different times, managed through the law of immigration, nationality or sovereignty (DeGenova 2006; Kim 1999).

The racial asymmetry of conceptualization also raises the question of the relationship between concepts and stereotypes. After all, the ideas that blacks are physically superior to whites, who are in turn more intelligent, are of course no new discoveries; they have been examined before in the literature on prejudice. This does not however lessen the importance or distinctiveness of conceptualization as an analytical category; instead, it casts stereotypes in a new light. Rather than simply treating stereotypes as symptoms of individual prejudice and societal racism, we can think of them as limited conceptual frames, models for explaining how race works in particular contexts. The stereotype that whites are more intelligent than blacks, for example, contains the presumption that race is associated with hardwired, innate intellectual capacity. Thus stereotypes need to be recognized not just as attitudinal bellwethers, but conceptual set pieces as well.

Finally, the asymmetry of racial conceptualization means that demography matters. In historical terms, the problems of a majority-white society with an oppressed black minority gave rise to a particular cosmology of racial difference that endures to this day. It is still salient in a nation where blacks and whites remain the main protagonists of our racial imagination. But of course, blacks are no longer the country's largest minority group, and they are unlikely to regain that position in the foreseeable future. Whites' numerical strength is also being eroded; they are projected to lose their majority status before 2050 (U.S. Census Bureau 2008). If Americans no longer perceive our society in black and white one day (as Bonilla-Silva 2004 and Gans 1999 among others predict), how tenacious will black biological exceptionalism prove? How will the growing demographic presence of Hispanic and Asian Americans rework our notions of what race is and how it functions?

To be sure, concepts of race shape the way that we classify and count it in the first place; "Hispanic" and "Asian" are categories that reflect underlying beliefs about what races (and ethnic groups) are. In other words, racial conceptualization determines which groups we perceive as making up the nation's population. Once established, however, the resultant groupings become characterized in different ways; we come to think of each race as having certain properties or tendencies. These characterizations in turn feed our fundamental concepts of race; our views of what specific races are like have the potential to influence our thinking about the nature of race in general. So a future society in which our largest "races" are Hispanic and white may well be one where biological interpretations of racial difference hold less sway. Together, race conceptualization, demographic

classification and group characterization form a loop of racial thinking that will merit close examination in the 21st century.

References

- Apostle, Richard A., Charles Y. Glock, Thomas Piazza and Marijean Suelzle. 1983. *The Anatomy of Racial Attitudes*. University of California Press.
- Balibar, Etienne. 1991. "Is There a 'Neo-Racism'?" Pp. 17-28. *Race, Nation, Class: Ambiguous Identities*. E. Balibar and I. Wallerstein, editors. Verso.
- Bobo, Lawrence D. 2001. "Racial Attitudes and Relations at the Close of the Twentieth Century." Pp. 264-301. *America Becoming: Racial Trends and Their Consequences, Volume I*. N.J. Smelser, W.J. Wilson and F. Mitchell, editors. National Academy Press.
- Bobo, Lawrence D., and Ryan A. Smith. 1998. "From Jim Crow Racism to Laissez-Faire Racism: The Transformation of Racial Attitudes." Pp. 182-220. *Beyond Pluralism: The Conception of Groups and Group Identities in America*. W.F. Katkin, N. Landsman and A. Tyree, editors. University of Illinois Press.
- Bobo, Lawrence, James R. Kluegel and Ryan A. Smith. 1997. "Laissez-Faire Racism: The Crystallization of a Kinder, Gentler, Antiblack Ideology." Pp. 15-42. *Racial Attitudes in the 1990s: Continuity and Change*. S.A. Tuch and J.K. Martin, editors. Praeger.
- Bonilla-Silva, Eduardo. 2003. *Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States*. Rowman and Littlefield.
- _____. 2004. "From Bi-Racial to Tri-Racial: Towards a New System of Racial Stratification in the USA." *Ethnic and Racial Studies* 27(6):931-50.
- Brown, Tony N., Mark K. Akiyama, Ismail K. White, Toby Epstein Jayaratne and Elizabeth S. Anderson. 2005. "Examining the Validity of Symbolic Prejudice." Unpublished manuscript. Department of Sociology, Vanderbilt University, Nashville, TN.
- Brückner, Hannah, Ann Morning and Alondra Nelson. 2005. "The Expression of Biological Concepts of Race." Presented at the annual meetings of the American Sociological Association, Philadelphia, PA, August 14.
- Calhoun, Craig. 2007. *Sociology in America: A History*. University of Chicago Press.
- Condit, Celeste Michelle, Roxanne Parrott and Tina M. Harris. 2002. "Lay Understandings of the Relationship Between Race and Genetics: Development of a Collectivized Knowledge through Shared Discourse." *Public Understanding of Science* 11(4):373-87.

- DeGenova, Nicholas. 2006. "Introduction: Latino and Asian Racial Formations at the Frontier of U.S. Nationalism." Pp. 1-20. *Racial Transformations: Latinos and Asians Remaking the United States*. Nicholas DeGenova, editor. Duke University Press.
- Du Bois, William Edward Burghardt. 1986 [1903]. "The Souls of Black Folk." Pp. 357-547. *W.E.B. Du Bois: Writings*. N. Huggins, editor. New York: The Library of America.
- Dubriwny, Tasha N., Benjamin R. Bates and Jennifer L. Bevan. 2004. "Lay Understandings of Race: Cultural and Genetic Definitions." *Community Genetics* 7(4):185-95.
- Duster, Troy 2001. "Buried Alive: The Concept of Race in Science." *The Chronicle of Higher Education* 48(3):B11-12.
- Frankenberg, Ruth. 1993. *White Women, Race Matters: The Social Construction of Whiteness*. University of Minnesota Press.
- Gans, Herbert J. 1999. "The Possibility of a New Racial Hierarchy in the 21st Century United States." Pp. 371-90. *The Cultural Territories of Race: Black and White Boundaries*. M. Lamont, editor. University of Chicago Press and the Russell Sage Foundation.
- Griswold, Wendy. 1994. *Cultures and Societies in a Changing World*. Pine Forge Press.
- Hirschfeld, Lawrence A. 1996. *Race in the Making: Cognition, Culture and the Child's Construction of Human Kinds*. MIT Press.
- Hochschild, Jennifer L. 1995. *Facing Up to the American Dream: Race, Class, and the Soul of the Nation*. Princeton University Press.
- Jayaratne, Toby E. 2002. "White and Black Americans' Genetic Explanations for Perceived Gender, Class and Race Differences: The Psychology of Genetic Beliefs." Invited lecture at the 2002 Human Genome Lecture Series, National Human Genome Research Institute, June, Bethesda, MD.
- Jayaratne, Toby E., Oscar Ybarra, Jane P. Sheldon, Tony N. Brown, Merle Feldbaum, Carla A. Pfeffer and Elizabeth M. Petty. 2006. "White Americans' Genetic Lay Theories of Race Differences and Sexual Orientation: Their Relationship with Prejudice toward Blacks, and Gay Men and Lesbians." *Group Processes and Intergroup Relations* 9(1):77-94.
- Kahn, Jonathan. 2003. "Getting the Numbers Right: Statistical Mischief and Racial Profiling in Heart Failure Research." *Perspectives in Biology and Medicine* 46(4):473-83.
- Kim, Claire Jean. 1999. "The Racial Triangulation of Asian Americans." *Politics and Society* 27(1):105-38.

- Lapchick, Richard E., and Kevin J. Matthews. 2001. "Racial and Gender Report Card." Center for the Study of Sport in Society, Northeastern University, Boston, MA. Available at: <http://www.sportinsociety.org/diversityInSport.php>.
- Lee, Jennifer, and Frank D. Bean. 2004. "America's Changing Color Lines: Immigration, Race/Ethnicity, and Multiracial Identification." *Annual Review of Sociology* 30:221-42.
- Lieberman, Leonard. 1997. "Gender and the Deconstruction of the Race Concept." *American Anthropologist* 99(3):545-58.
- Lieberman, Leonard, Raymond E. Hampton, Alice Littlefield and Glen Hallead. 1992. "Race in Biology and Anthropology: A Study of College Texts and Professors." *Journal of Research in Science Teaching* 29(3):301-21.
- Littlefield, Alice, Leonard Lieberman and Larry T. Reynolds. 1982. "Redefining Race: The Potential Demise of a Concept in Physical Anthropology." *Current Anthropology* 23(6):641-55.
- Marks, Jonathan M. 2001. "Scientific and Folk Ideas about Heredity." Pp. 53-66. *The Human Genome Project and Minority Communities: Ethical, Social, and Political Dilemmas*. Raymond A. Zilinskas and Peter J. Balint, editors. Praeger.
- Marks, Jonathan. 2002. "Folk Heredity." Pp. 95-112. *Race and Intelligence: Separating Science From Myth*. Jefferson M. Fish, editor. Lawrence Erlbaum Associates.
- Morrow, Lance. 2001. "Controversies: The Provocative Professor." Available at: <http://www.time.com/time/magazine/article/0,9171,157721,00.html>.
- Murray, Charles. 2005. "The Inequality Taboo." *Commentary* 120(2):13-22.
- National Center for Health Statistics. 2001. "Vital Statistics of the United States, 1997." Available at: <http://www.cdc.gov/nchs/datawh/statab/unpubd/natality/natab97.htm>.
- Nobles, Melissa. 2000. *Shades of Citizenship: Race and the Census in Modern Politics*. Stanford University Press.
- Park, Robert E. 1949. *Race and Culture*. Free Press.
- Payne, January W. 2006. "Science or Sizzle? The Maker of Race-Based Vitamins Says They Target Real Biological Differences. Some Say It's a Marketing Gimmick – and Plain Wrong." *The Washington Post*. April 11. Page F01.
- Pinker, Steven. 2006. "Groups of People May Differ Genetically in Their Average Talents and Temperaments." Available at: http://www.edge.org/q2006/q06_3.html#pinker.

- Roman, Leslie G. 1993. "'On the Ground' with Antiracist Pedagogy and Raymond William's Unfinished Project to Articulate a Socially Transformative Critical Realism." Pp. 158-214. *Views Beyond the Border Country*. D.L. Dworkin and L.G. Roman, editors. Routledge.
- Sarich, Vincent, and Frank Miele. 2004. *Race: The Reality of Human Differences*. Westview Press.
- Sauer, Norman J. 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.
- Schuman, Howard, Charlotte Steeh, Lawrence Bobo and Maria Krysan. 1997. *Racial Attitudes in America: Trends and Interpretations*. Harvard University Press.
- Sears, David O., Jim Sidanius and Lawrence Bobo. Editors. 2000. *Racialized Politics: The Debate About Racism in America*. University of Chicago Press.
- Stevens, Jacqueline. 2003. "Racial Meanings and Scientific Methods: Changing Policies for NIH-Sponsored Publications Reporting Human Variation." *Journal of Health Politics, Policy and Law* 28(6):1033-87.
- Sullivan, Andrew. 2005. "Daily Express: Provocations." *The New Republic Online*. Available at: <http://www.tnr.com/doc.mhtml?i=express&s=sullivan011905>.
- Swidler, Ann, and Jorge Ardití. 1994. "The New Sociology of Knowledge." *Annual Review of Sociology* 20:305-29.
- U.S. Census Bureau. 2001. "Population by Race and Hispanic or Latino Origin for the United States: 1990 and 2000." Census Report PHC-T-1. Washington, DC. Available at: <http://www.census.gov/population/www/cen2000/phc-t1.htm>.
- _____. 2008. "Press Release: An Older and More Diverse Nation by Midcentury." August 14. Available at: <http://www.census.gov/Press-Release/www/releases/archives/population/012496.html>.
- Van Sertima, Ivan. Editor. 1986. *African Presence in Early Europe*. Transaction Books.
- Velody, Irving, and Robin Williams. 1998. "Introduction." Pp. 1-12. *The Politics of Constructionism*. I. Velody and R. Williams, editors. Sage.
- Venter, J. Craig. 2006. "Revealing the Genetic Basis of Personality and Behavior Will Create Societal Conflicts." *What Is Your Dangerous Idea?* Available at: http://www.edge.org/q2006/q06_12.html#venter.
- Wade, Nicholas. 2002. "For Sale: A DNA Test to Measure Racial Mix." *The New York Times*. October 1. P F4.
- Waters, Mary C. 1990. *Ethnic Options: Choosing Identities in America*. University of California Press.

Weber, Max. 1978[1956]. *Economy and Society: An Outline of Interpretive Sociology, Volume 1*. University of California Press.

Williams, Melissa J., and Jennifer L. Eberhardt. 2008. "Biological Conceptions of Race and the Motivation to Cross Racial Boundaries." *Journal of Personality and Social Psychology* 94(6):1033-47.

Winant, Howard. 2000. "Race and Race Theory." *Annual Review of Sociology* 26:169-85.