DEFINING RACE AND DEFINING RACES: CULTURE, BIOLOGY AND GROUP DIFFERENCE

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INTRODUCTION

A striking feature of American demography today is the prevalence of racial categorization combined with the scarcity of clear definitions of what race is or how racial membership can accurately be ascertained. Sociologists routinely depict race as a "social construct" (American Sociological Association 2002), yet at times race figures in anthropological, biological, criminological, medical, and demographic research in ways that suggest it marks innate biological difference.

Curiously, the lively debate over the nature of racial difference that has taken place in the pages of anthropological and biomedical journals over the last few years has yet to materialize among demographers. Its absence is all the more notable given the unique position of demography at the disciplinary crossroads of the social and the biological sciences. Yet the provenance and meaning of race should be of interest to demographers for at least three reasons. First, given current debate about whether racial groups correspond to genetically distinct populations, we might revisit our reliance on race as a variable in analyses of mortality, fertility, and morbidity, and ask whether it is meant to capture social or physical factors. Second, in the absence of clear definitions of race or the prerequisites for racial group membership, how can demographers design survey questions and responses pertaining to race? On what basis should item validity be assessed? Finally, changing ideas about what constitutes racial difference are likely to affect our ideas of which groups constitute races. It is this possibility—and its potential impact on the way we parse the nation's racial makeup—that is the focus of this paper.

Below I draw on findings from a qualitative study of American notions of racial difference in order to argue that any examination of changing racial classification practices should be accompanied by investigation of racial conceptualization as well. Moreover, I consider how the relationship between racial concepts and categories may evolve in the future, shaping our understandings of 21st-century U.S. demography.

¹ For exceptions, see Frank (2001) and Zuberi (2001).

BACKGROUND

By permitting Americans to identify with two or more races for the first time, the 2000 U.S. census brought widespread public and media attention to the issue of racial classification. But the topic had previously received a great deal of attention from social scientists, who had documented the remarkable variability in time and space in systems of categorizing races (e.g. Davis 1991; Haney López 1996; Jacobson 1998; Lee 1993). In such accounts, change in classification practices is often traced to underlying political and economic forces and motivations. The relationship, if any, between the categories used to measure race and prevailing beliefs about the nature of race has received less attention.

Similarly, the contemporary research literature on American race concepts—i.e. definitions of race and understandings of what constitutes and distinguishes a race—does not tie conceptualization to classification. Focused instead on how race notions may fuel prejudice, this body of sociological and psychological research takes race categories as given (e.g. Apostle *et al.* 1983; Jayaratne 2002; Williams and Eberhardt Forthcoming). In particular, this work centers on beliefs about difference between blacks and whites, and on resultant anti-black sentiment among whites (e.g. Schuman *et al.* 1997).

Despite the insulation of each of these research areas from each other, racial conceptualization and classification can and should be understood as two mutually constitutive bodies of knowledge. Attention to racial categories sheds light on patterns of racial conceptualization or imagery, and changing understandings of race are likely to reshape classification schemes.

The idea that our concepts of what race is influence the way we divide humankind into racial groups is not hard to grasp. If we think that races are physically distinct groups, we use what we believe are biological markers to differentiate races; if we believed that races resulted from astrological characteristics, we might group individuals by birth date.

The impact of racial conceptualization on categorization is also evident in the historical record. For example, the traditional asymmetry in the census classification of mixed-race Americans with American Indian ancestry as opposed to those with African ancestry speaks to fundamental differences in historical understandings of the properties of "Indian blood" and "black blood." In the 19th century, the former was believed by many to be compatible with white physiology, thus favoring the Indian/white intermixture then called "amalgamation." As early

anthropologist Lewis Henry Morgan put it in the 1860s, "Indian blood can be taken up without physical or intellectual detriment" (cited in Bieder 1986: 231). Moreover, the belief that American Indians would become progressively more fit to join American society as they merged with whites led scientists and census enumerators to keep track of their "blood quanta" into the 20th century. Black blood, on the other hand, did not share the same alchemical properties, and its mixture with white blood led only to debilitating "miscegenation." As a result, census officials showed little interest in blood quantum measurement among blacks after a period of experimentation with "mulatto" and "quadroon" categories around the turn of the 20th century (Nobles 2000). In short, different conceptions of the properties of different races informed the classificatory regimes applied to them. These beliefs persist to the present day in the form of the "one-drop rule": as F. James Davis (1991) points out, an American can be considered white with any kind of ancestry other than African in his or her background; only black ancestry is sufficient to singlehandedly determine one's racial identity. This asymmetry speaks to a special kind of belief about the nature of racial differences.

The claim that classification regimes in turn exercise an influence on our conceptualization of the nature of race is perhaps less intuitive. Group categories provide structures that human beings then imbue with meaning, thus re-interpreting the racial content within. As classification becomes institutionalized, it provides a framework for comparison and elaboration of racial properties that in turn alter the original understandings of race.

Evidence for the proposition that classification imprints conceptualization arose in the course of interviews I conducted with college students concerning their definitions of race. It quickly became clear that the students juggled multiple concepts of race, but they were more likely to elaborate one conceptual approach than another depending on the context. Most important for this paper, the respondents' depictions of the nature of racial difference varied systematically according to which racial group(s) they had in mind. For this reason, I argue that the groups that are created by classificatory action come to be associated with properties that in turn affect what we think a race is in the first place. In other words, race categories are not just the product of underlying concepts of human difference, but they contribute to such beliefs as well.

RESEARCH

The broader project from which the present paper is drawn seeks to characterize contemporary American definitions of race among both academics and the public, as well as the interchange between them. Its data consist in part of my in-depth interviews with over 40 social and biological scientists and more than 50 undergraduate students. Here I limit discussion to students, however, both because they are more representative than academics of the broader (albeit college-educated) public, and because the questions put to them differ from those posed to faculty and are more relevant to this inquiry. While the larger research project set out to trace the spread—or lack thereof—of social constructionist thinking about race, this paper focuses on the questions of how the student interviewees defined race and how the evocation of particular groups colored their conceptualization of race.

The interviews took place between November 2001 and April 2002 at four northeastern research universities, which I have labeled "City," "State," "Ivy," and "Pilot" universities. Table 1 shows some characteristics of these institutions.

Table 1. University Undergraduate Data, AY 2001-02									
University	Undergraduates Enrolled	% White*	Acceptance Rate	University Status	Tuition (In- State)				
State	> 25,000	62	> 60%	Public	> \$5,000				
City	> 15,000	84	> 60%	Public	> \$5,000				
lvy	> 5,000	60	> 10%	Private	> \$25,000				
Pilot	< 5,000	66	> 10%	Private	> \$25,000				

^{*} Including "Race Unknown" responses.

Note: Figures compared to the nearest multiple of 5,000 (or 5 in the case of acceptance rate). Source: National Center for Education Statistics, Integrated Postsecondary Education Data System (College Opportunities On-Line).

Roughly equal thirds of the students were sampled from lists of: (1) anthropology majors; (2) biology majors; (3) other juniors and seniors. The goal was to target the transmission of ideas about race in two disciplines from the social and biological sciences that have traditionally engaged questions of racial difference. (Other students were included for comparison purposes.) The interviews were taped, transcribed, and coded using the software program *Atlas.ti*; the resulting data were analyzed both qualitatively and quantitatively, using

descriptive statistics.² Some basic characteristics of the student interviewee sample are shown in Table 2.

Table 2. Selected Sample Characteristics by University								
Percent of Students in Sample:	CITY	STATE	IVY	PILOT	ALL			
Major in Natural Sciences	38	58	29	63	44			
Female	71	31	82	63	63			
White	78	69	71	75	73			
Politically Left of Center	57	54	88	75	69			
No Religious Affiliation	36	31	47	38	38			
From Northeast U.S.	86	69	29	50	58			
Foreign-Born	0	23	12	13	12			
Father in Professional Occupation*	57	54	71	100	67			
Mother in Professional Occupation*	38	38	71	75	55			
Number of Students Interviewed	14	13	17	8	52			

^{*} Parental occupations classified according to 1990 U.S. Census occupational codes for both professional and managerial categories.

FINDINGS

I describe and compare students' responses to four questions designed to elicit information about their conceptualizations of race. In particular, the questions requested interviewees': (A) definition of race; (B) opinion of a statement affirming the existence of biological races; (C) possible explanations for observed race differentials in birth weights; and (D) possible explanations for disproportionate racial composition of a professional football league. As I will show, students took different conceptual approaches to race depending on the question, and in particular, on the racial group(s) they had in mind when responding. As a result, I argue that race is not a monolithic classification scheme that delineates groups

² Given the non-random nature of the campus (and to some degree, interviewee) selection, inferential statistics are not used. One department refused to release its list of majors for use as a sampling frame, instead sending out an email to its students soliciting volunteer interviewees. Departmental policies also affected response rates; overall, however, the student response rate was 44 percent.

according to a single, fixed set of criteria; rather, different groups are marked by different kinds of distinctions. In a sense, different types of race are possible. Consequently, the classificatory structures we have in place shape how we come to understand racial difference, if only by bringing to the fore groups to which we ascribe certain properties, and removing from consideration other potential racial groups that would evoke other sources of racial difference.

A. OPEN-ENDED DEFINITIONS OF RACE

During the interview (see protocol in Appendix), students were asked, "How would you define race or explain what it is to another person?" The most common response—offered by 69 percent of the students—was one that recast racial difference as cultural difference. 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..." An accounting major at State University 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. It's just your family background, where they're from, what their culture is. I guess. What their beliefs are.

By combining culture with ancestry, the student interviewees effectively transformed race into 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 discussion of ethnic identity.

This shift to ethnicity defuses the topic of race in several ways. First, the emphasis on culture circumvents the linkage of race to biology that some 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" 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). Equating the experience of ethnic identification with that of racial membership ("Like people say I'm half Italian") also depicts group identities as voluntary to some extent, 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"; 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. By suggesting that racial classifications are a matter of volition, students circumvented discussion of the coercive nature of external racial categorization.

At the same time, however, students' equation of race with ethnicity also likely reflected their generation's exposure to multiculturalist discourse. Moreover, culture helped students explain complexities of racial identity that could not be chalked up to phenotype alone; they spoke for example of people who "look black" but "act white."

For all the discussion of race as stemming from cultural difference, student interviewees were almost equally likely to define race with reference to physical characteristics: 65 percent sounded this theme.³ Perhaps the most common way of invoking physical difference as the basis for race was through students' references to skin color and other phenotypical features:

Yeah, so I guess race in a sentence is, people—the way people perceive one another on the basis of their appearance, specifically their skin color, hair texture, you know, maybe facial features, and, you know, national origin in some cases. — *History major, Ivy Univ.*

I'd say I understand it [race] just by the person's skin color. - Biology major, City Univ.

Some students defined races as the product of more extensive biological difference, alluding either to genetic difference, other non-phenotypical differences, or—like their professors—to evolutionary processes that resulted in racial differences:

Like I personally think it's just a matter of, you know, physiological differences that occur simply because of environment. — *Biology major, State Univ.*

I guess it relates to the human origin. Where people are from, what skin color they have. Just like what background... – *Biology major, Pilot Univ.*

For many students, however, it was not sufficient to define race solely as a biological characteristic. Instead, they sought to relate this type of difference in some way to behavioral or cultural differences. Many students suggested that races should be defined as stemming from both cultural and biological differences:

³ The proportions of students evoking each theme (e.g. culture, biology) when defining race adds up to more than 100 percent because students often alluded to more than one source of racial difference.

Like I think race has to do with like the – like what skin color you are and if you like identify with like a particular sort of – if there's something about like people who wear that skin color that you particularly identify with. Like if something else goes along with that skin color, like culture. I'd say like skin color plus culture is maybe race, or something like that. – *Anthropology major, State Univ.*

In general, cultural and biological understandings of race coexisted harmoniously in student definitions of race, rather than being seen as mutually exclusive bases for distinction.

A minority of student interviewees (17 percent) took a constructivist approach to race. When asked how she would define race, an anthropology major at Ivy University answered, "I guess I would say that I agree that it's socially constructed and that it is a way that over time people have been organized into groups." Many of the students who adopted a constructivist definition of race went on to portray it as a concept that is not only historically or geographically anchored, but which also arises to serve social and political ends.

So for me race is a concept that has been used to do more harm than good to other people. It's a very politically-charged word that doesn't reflect any reality but reflects our reality. Race is a way of classifying other people and attributing them certain characteristics that make them in one way or the other; usually if you're classifying like you're not giving the person the chance to classify himself or herself. So you're already doing something there that is about power. I mean, you're saying something about some person and the person is being quiet. And then I feel like race is – I just can't detach it from the concept of racism because racism is not only saying you're of that one race but it's also a violent concept when it's put into practice. – *Anthropology major, Ivy Univ.*

In summary, the constructivist definition of race, while clearly articulated by a few students, was only a minority viewpoint relative to the more widespread cultural and biological conceptualizations of racial difference.

B. ON THE EXISTENCE OF BIOLOGICAL RACES

I also asked students whether they agreed or disagreed with the statement that "There are biological races in the species *Homo sapiens*." 57 percent agreed that the statement was true, similar to the 65 percent who had drawn on biology in developing their open-ended definitions of race.

⁴ This statement is taken from a survey fielded by Leonard Lieberman (see Lieberman 1997).

Among the students who agreed on the existence of biological races, some based their opinions simply on their observation that human beings vary:

I guess Caucasian, Asian characteristics and African, you can see in the balance that there are different shapes more common—I mean even though there's a lot of overlap, most of the time you can sort of make distinctions... - Anthropology major, City Univ.

Most of the students in this group, however, tied their rationales more closely to discussions of human evolution, genetic variation, or both. When students were asked why they agreed that biological races exist among human beings, their answers included:

I think there really are 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 Univ.*

Well, I mean it's a fact that humans, like we're not all the same. I mean, we all have the same or similar genes but there are differences between people that—we've all evolved in a somewhat similar way but I think that different groups of people are different. — *Biology major, Pilot Univ.*

Although the modal response among students was to agree with the statement on biological races, a large share—43 percent—of the students disagreed with it. In explaining their opinions, interviewees often pointed to evidence of biological commonality among human beings, whether in terms of their genetic makeup, disease susceptibility, or physical structure:

Maybe it could be possible if you think about people being isolated, but the fact that close enough everything that we learn in terms of medicine, it seems to apply to everyone, so even if there are any differences, I don't think it's enough to really categorize them as a different race biologically. – *Biology major*, *Pilot Univ*.

Like *Homo sapiens* is referring to human beings, like we're all human, and I think it just comes down to that. You know, I think there are like cultural differences within the species *Homo sapiens*, but there's not that much – we all have the same number of genes. There's, you know, the variation in the genes, you know, is just random. Like what Darwin says or whatever. – *Anthropology major, State Univ.*

As these examples show, students invoked genetics both to support and to refute the statement on the existence of biological races. Moreover, it was in response to this direct question that students were least likely to espouse a biological concept of race; when asked next to account for observed racial differentials in health and occupation, essentialist understandings again came to the fore.

C. EXPLAINING RACE DIFFERENTIALS IN BIRTH WEIGHT

Rather than rely entirely on students' responses to abstract questions or statements about racial definition, I also asked interviewees how they would explain two real-life situations in which differences between races have been observed. I sought in this way to learn something of how their concepts of race worked "in action," by exploring the ways in which their versions of racial difference would actually help explain a given outcome. This approach proved rewarding because it demonstrated that the abstract statements that students settled on in earlier parts of the interview did not necessarily correspond to their cognitive uses of race, or the concepts of racial difference that truly helped students make sense of the world.

It must be noted, however, that I did not put these "scenario" questions to all 52 students in the sample. Because these questions were the last ones on my questionnaire, I opted to omit one or both when interviews had run particularly long. I asked the first question of 37 (71 percent) and the second question of 46 (or 89 percent) of the students.⁵

For the first "real-life" question, 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 (National Center for Health Statistics 2001). I also deliberately provided students with the relevant statistics for white, Asian, and black babies rather than force them to make a potentially more sensitive black/white comparison. The question I posed 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 might matter, even in areas where they might not feel knowledgeable enough to offer a definitive answer.

⁵ Most of the omissions of these questions took place in interviews with Ivy University students, since they tended to be longer. Of the 15 interviews in which I skipped one or both of the "scenario" questions, eight were with Ivy respondents.

Students' grappling with observed racial differentials evoked a very different approach to race than the culture-based one they espoused in their open-ended definitions. Recall that when asked earlier to define race, 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"). When confronted with race differentials in infant birth weight, however, "culture" was the least frequently mentioned among the four major explanation approaches I recorded; only 27 percent of the students explicitly drew a picture of culturally-specific values, beliefs or practices contributing to birth weight differentials. In these instances, students portrayed culture as influencing choice of foods ("if you're Chinese or Japanese, you eat a lot of non-fattening foods like sushi or something like that") or the quantity of food pregnant women eat ("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 of the former included: "Asians are shorter than most people"; "there are some groups of people that are known for being, you know, smaller and some known for being bigger." The latter, evolutionary approach inspired explanations such as:

Maybe like low birth weight may be – the races that have low birth rates are races that were – like way back when they were very nomadic, did a lot of moving. Maybe it was beneficial to have a child that was – that weighed less… – *Anthropology major, Ivy Univ.*

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. – *Biology major, State Univ.*

I mean, obviously African Americans, that could have been an adaptation that they had over time, where – that the baby was born smaller and, I don't know, they'll be slender, more slender to go in the fields or – I don't know. I don't know how the cultures are. – *Meteorology major, State Univ.*

As the last quote suggests, particular racial groups evoked particular explanations from students. For example, the possibility of birth weights simply reflecting adult size was invoked almost uniquely to account for white/Asian infant weight differentials, even though students were told that the greatest variation in median birth weights was between whites and blacks. Such asymmetries were even more apparent in students' speculations about the roles of maternal

diet and health (mentioned by 51 percent) and of socioeconomic inequality (raised by 57 percent). When students mentioned diet specifically, it was usually to distinguish white from Asian eating patterns, often comparing the latter favorably with the former. When discussion turned to maternal health independent of nutrition, however, students illustrated this potential factor with unfavorable images of blacks. In particular, drug abuse came up as a factor only when students considered African-American birth weights.

D. EXPLAINING RACE DIFFERENTIALS IN SPORTS REPRESENTATION

Like the previous example, the second real-life outcome I described to students was chosen to lend itself to a wide range of potential explanations (e.g. biological, environmental, cultural, etc.). However, in selecting the numerical overrepresentation of blacks and underrepresentation of whites in football as the second case, I deliberately targeted an outcome that I expected to be (a) familiar to students, both in terms of their exposure to televised sports and more particularly to the occasional debates that flare up in the media about the role of race in professional sports; and (b) a more sensitive topic, both because it narrowed down to a black/white contrast, and because in so doing it focused on blacks—my own racial group—thus exacerbating any interviewer effects. With this deliberate strategy, however, I sought to investigate whether the ways in which students understood the nature of racial difference might vary according to their familiarity with the topic and the particular racial groups at issue. The question ran 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. Finally, discrimination also came into play in

⁶ Sources: Lapchick and Matthews (2001); U.S. Census Bureau (2001).

some sense, in that one fifth of the students thought that sports recruiters might favor black athletes.

Nearly three-quarters of the interviewees suggested the possibility that differences in sports representation were due to blacks' natural physical superiority vis-à-vis whites. As a City University anthropology major explained, "black people are physically superior to white people. They can run faster, jump higher." Similarly, a State University biology major thought that "black people have like a difference in their cardio-vascular system that enables, you know, their muscle structure to develop differently." Students were for the most part quite matter-of-fact about such racial differences; they presented them as patently obvious, as did this Urban Studies major at Ivy University:

You see like the Williams sisters come on and start just killing everyone. It makes you think like, what happens if more black people are given the ability to play tennis? ... Does it ever end? I feel like it just goes on forever.

In some cases, students had previously discussed racial athletic differences with friends, family members, and authorities like teachers or coaches; in others, students reported having personally observed such differences, particularly among their peers. A varsity swimmer at Pilot University commented, "Just from what I've noticed, like in people that I know that are black, they just seem to have such like awesome muscle tone. Like really – you know, I don't know, how or why it is, but they seem to have just like more muscle mass than white people."

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 African-American population, either because the harsh conditions had weeded out all but the strongest, or because slave owners had purposely bred slaves for strength. The second explanation was similarly grounded in an evolutionary framework, but it 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 Univ.

...if they were different way back when, you could probably associate it to circumstances as to why someone needed to be bigger and stronger, if they were like a hunter as

opposed to like a – probably hunters everywhere though. But maybe they're hunting smaller animals or bigger animals, or there's like a certain heat, there was a certain cold, there were different reasons for why... - History major, Ivy Univ.

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 their physical abilities, 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 Univ.*

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 Univ.*

I asked one student, who was born in India but raised in the United States, how her reasoning about blacks' physical ability (she had guessed that "their ancestors in Africa, they had to always run") would apply to Asian Americans' relative underrepresentation in professional sports. Her response:

Yes, maybe they're more education-oriented so that they spend all their time reading books or something; that was more conducive to their environment, and they were farmers or something, so that generally it's not necessarily like brute physical strength to go hunt something, it's more tending to their fields. It is also physical development, but a lot of them had labor forces, in their terms of different castes and everything, so the upper class would sit there reading books or something, so they're not going to be developing their physical abilities as much.

In short, only blacks were characterized as a racial group whose distinctiveness was manifested in physical makeup.

The second type of asymmetry that characterized students' thinking about race and sports participation ran along similar lines. When I asked many of the interviewees 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 they named in various sports, like Caribbean baseball players, Hispanics in boxing, or Brazilians in soccer. 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 sport is more expressed, is more important there in those cultures that train more"; "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"; "maybe certain groups are just not interested culturally in anything to do with ice hockey." As it turned out, only *blacks*' predominance in a sport could be explained by biological characteristics; when whites or other groups were at issue, culture replaced biology entirely as a plausible factor.

This total reliance on cultural explanations to account for non-blacks' sports representation was all the more striking given that fewer than half of the students thought cultural tradition could be an explanation for blacks' football participation. Moreover, it became apparent that the term "culture" took on different meanings depending on whether students spoke about blacks or non-blacks. For example, to explain why hockey was a predominantly white sport, they invoked culture in the sense of traditional custom or habitual practice. When discussing black predominance in football, however, students used "culture" to describe a broader, more diffuse value system that prized physical activity in general over intellectual occupations.

I mean, it could be a social or cultural thing, where different races, you know, or the cultures, stress physical, you know, participation in physical sports, you know, more than others. — *Biology major, State Univ.*

In promoting a physical vs. mental dichotomy, students' cultural explanations for race differentials in sports representation closely mirrored their biological accounts. As one student put it, blacks had come to value "body knowledge" vs. whites' prizing "book knowledge," and he elaborated:

For a racial explanation, you could say you know if you want to look at it socioeconomically, there's more of a stress on, you know, blacks – I guess more as a culture then – to perform well athletically as a means of bettering themselves, versus whites being you know – there's a big emphasis on education and studying. Staying in the library as you're growing up and reading books. Not as much on being outside and running around. - *Biology major*, *Pilot Univ*.

So even though students' "cultural" explanations present differential sports representation as a matter of choice or preferences, they arrive at the same scenario as the evolutionary biology accounts that suggest that differential tendencies toward these activities are hardwired.

E. DISCUSSION

The students interviewed appear to maintain varied concepts of race simultaneously. In particular, cultural definitions of race do not necessarily crowd out biological ones, but can work hand in hand. Both culture and biology function to remove race differentials from the realm of imposed stratification or oppression, explaining them either by the unavoidable laws of human evolution, or the freely-chosen paths taken by the members of different racial groups. The relationship between cultural and biological notions of race is underscored by the positive correlation coefficient found between students' cultural definitions of race and their biological definitions (r = 0.39). In contrast, constructionist definitions of race were negatively correlated not only with biological definitions (r = -0.63) but also with cultural definitions (-0.47).

An important distinction remains, however, in students' use of cultural and biological race imagery: the mention of different racial groups heightens the salience of one concept relative to the other. As the sports example showed, racial difference between blacks and whites was likely to be interpreted as physical difference, whereas different outcomes between whites and other races were not attributed to biology but to cultural preferences. As suggested by the interviewees' open-ended definitions of race, "culture" can be a diplomatic way of referencing racial distinction because it acts as a neutral descriptor of unproblematic differences. As such, students applied the cultural frame to variation between non-black groups, designating blacks as an anomaly marked by physical difference. This "black biological exceptionalism" is all the more striking given African Americans' mixed ancestry as well as the common African origins of our entire species. It also calls into question the usual focus on white/black comparison as a research tool for gauging Americans' understandings of racial difference; perhaps this framing cannot be generalized beyond this particular pairing.

Asymmetric treatment of blacks in terms of their ascribed racial properties suggests that notions of racial difference respond to the taxonomy of groups that racial classification entrenches. A system that contrasted only American Indians versus others, for example, or that highlighted Hispanics, would likely elicit still other accounts of the nature of race. In this

connection, it is worth noting that current claims made by geneticists to have discovered the DNA markers for racial membership rarely take Latinos into consideration.

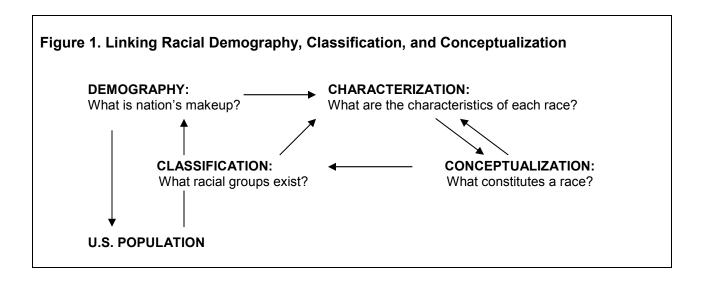
CONCLUSION

Ultimately, the importance of elucidating the relationship between race conceptualization and classification lies in its implications for study of the nation's demographic composition. The United States' racial makeup cannot be understood solely as the end result of demographic forces like fertility and mortality. As the historical record shows—and the 2000 census reminded us—changing racial composition is also a product of changing categories. How then do the links between racial classification and conceptualization inform predictions about future analyses of American demography?

To address this question, I first outline the relationships between demography, classification, and conceptualization posited in this paper. Figure 1 situates racial classification as a process that translates the underlying population into a demographic measure of the nation's racial composition. Where the population can be thought of as some number N of individuals, classification is the process that assigns those individuals to K races such that:

$$N = \sum_{k=1}^{K} N_k$$

In other words, classification mediates the translation of "real" population to perceived demography. However, the demographic assessment of the nation's racial makeup that results then acts on the underlying population by influencing processes like immigration and fertility. For example, the perception that there are too many members of a given race (N_k is too great) can give rise to restrictive immigration policies or measures to curb that group's fertility.



The demographic perception of the nation's racial composition can also influence beliefs about the properties of particular races; this is labeled in Figure 1 as "characterization." The feeling that a certain group is "taking over" numerically may fuel resentment and disparagement. (Consider survey findings that show whites to routinely overestimate the share of blacks in the U.S. population.)

I suggest that such beliefs about the characteristics of specific groups are central to the relationship between racial conceptualization and classification. Whereas concepts about the fundamental nature of race give rise directly to classification systems based on the source of variation that is believed to be operative, classification systems influence conceptualization indirectly through the medium of race-specific imagery. Classification provides the framework that identifies particular groups as races, and beliefs about the properties of those races then evolve from those suggested directly by the conceptual basis for racial delimitation, developing in ways that in turn reshape basic concepts of what race is.

Applying this schema to prediction for 21st-century demographic analyses of the nation's racial makeup, I consider first the potential evolution in Americans' conceptualization of race, and second the possibility of changing classification practices. With respect to notions of what race is, we are faced with the question of whether they will demonstrate the bifurcated culture/biology grounding suggested by the student interviews described here. If so, we might expect our current racial categories—roughly, the federal categories of white, black, American

Indian / Alaska Native, Asian and Pacific Islander—to endure unchanged, or even be expanded to accommodate perceived cultural distinctions between relatively new immigrant groups (e.g. South Asians, Middle Easterners). If on the other hand the biological interpretation of race gains (or some would say, remains in) the ascendancy, racial classification may metamorphosis into a simple black / non-black dichotomy (as suggested in Glazer 2002). This possibility is raised by the interviewees' depiction of blacks alone as a biologically distinct people, and by other researchers' emphasis on evidence (e.g. in marriage trends) of assimilation between non-black racial groups (Lind 1998; Yancey 2003). Furthermore, essentialist readings of race may gain momentum from new advances in genetics (see for example Risch *et al.* 2002; Sarich and Miele 2004; Wade 2001).

The argument that we are moving to a black / non-black system of racial classification has also been grounded in the prediction that under current categorization practices, whites will lose their numerical majority in the United States in the middle of the 21st century. As a result, differences between whites, Asians, Hispanics, and American Indians will become less salient in order to shore up the white population with new recruits (Gans 1999; Warren and Twine 1997). As historians have shown, this would not be the first time that the boundaries of the white population have expanded (Brodkin 1998; Ignatiev 1995; Jacobson 1998). This prediction exemplifies the way in which the perceived racial demography of the nation might act on concepts and classifications via the imagined characteristics of particular groups.

Another possible effect of demographic perception is to recognize a growing Hispanic population (seen as large in part because it combines many national-origin groups together) and consequently characterize it as threatening and distinctive (consider for example Huntington 2004). The salience of the Latino population might bolster the cultural conceptualization of race that is apparently applied to them today (note for example that they are officially an ethnic group, not a race). But it could also result in a hardening of others' attitudes that could recast them as a more distinct biological race, as blacks seem to be designated today. The racial classification of the Hispanic population—if indeed we retain such a broad, monolithic category to encompass a heterogeneous population—is now ambiguous, but its resolution will mark an important development in our history of racial stratification.

It is perhaps even more difficult to foresee how the new official classification scheme recognizing mixed-race people might affect underlying conceptions of racial difference. Some believe that multiple-race reporting demonstrates the fluidity of racial boundaries, undermining

essentialist definitions of race. But other observers point out that the calculus of multiracial heritage, like the longstanding measure of American Indian blood quanta, is firmly grounded in traditional notions of biologically distinct races. (In this light, the rejected proposal for a new omnibus "multiracial" category—regardless of particular racial ancestry—in the federal classification standards may have embodied a more constructionist understanding of race.) Lind (1998) and Gans (1999) suggest that mixed-race people will come to be understood as part of the non-black collective that Lind dubs "the beige majority"; Daniel (2002) argues instead that multiracial people can lead the country in transcending our long-standing racial labels. Perhaps the relative newness of the recognition (albeit not the existence) of an American multiracial population makes it particularly difficult speculate about whether and how this group will leave its mark on our notions of racial difference. The second most recent major statistical creation—that is, the Hispanic population—still occupies an ambiguous place along our racial spectrum. And there is no guarantee that multiple-race categories will become a permanent facet of the national approach to racial classification.

APPENDIX: STUDENT INTERVIEW PROTOCOL

A. BACKGROUND

- A1 I know I checked that you are 18 or older, but please remind me how old you are?
- A2 So you are a senior or a junior here at the university?
- A3 What part of the country are you from originally?
- A4 Is that where you spent most of your childhood?
- A5 What are your parents' occupations?

Father:

- A6 Do you know how much education your parents have completed?

 Father:

 Mother:
- A lot of the questions I'll ask you today will have to do with how race might come up in the classroom here. But before we get to that, I'm curious to know a little about the racial makeup of the community where you grew up—how would you characterize it?

Mother:

- A8 Are ethnic or religious identities important to people in your home community?
- Did your elementary and secondary schools tend to have the same racial and ethnic makeup as your home community?
- A10 How do you usually describe yourself in terms of race?
- A11 Would you say you have any religious affiliation? If so, what is it?
- A12 How would you describe your political leanings—for example, in terms of political party affiliation or a liberal-to-conservative spectrum?

B. EDUCATION

- S1 You are majoring in (name major)—do you have a second major as well?
- S2 How would you characterize your academic experience here at *(name university)*: positive, negative, or somewhere in between?
- S3 Why do you characterize it that way?
- S4 Here I have a list of all the undergraduate majors here at the university. Would you please check off all the areas in which you can recall having completed at least one class so far?

As I mentioned, I'm interested in exploring with you today the ways in which the topic of race may come up in the classroom setting.

S5 Would you say that the topic of race has come up much in the classes you have taken here?

S6 Is race more likely to be a topic of discussion in certain subject areas than others? To answer, you might want to look back at the list of departments in which you've taken classes.

S7 What kinds of issues is race usually connected to in each of these subject areas?

A13 Now let's turn to your department—name department field—in particular. In the undergraduate courses offered by your department, does the topic of race (or race-related issues) come up much?

A14 When race is discussed in (*name department*) classes, what kinds of issues is it usually connected to?

In addition to your academic work, I'm also interested in discussions about race that students might have <u>outside</u> the classroom.

A15 In general, would you say the topic of race comes up often at this university?

A16 In connection with what kinds of topics is race usually brought up?

C. CONCEPTUALIZATIONS OF RACE

So far I've asked you several questions related to race and how people talk about it, but I haven't asked you how you define the meaning of the word "race." This might seem like a strange question, since race is such an everyday idea in the United States that we generally don't think very often about how it is defined. But research has shown that different people have different ideas about things like what determines a person's race, or which groups should be considered races.

A17 First of all, if you had to give a definition of the word "race," or explain what it was, what would you say?

A18 What kind of information or facts would you use to support that definition?

A19 What are the main kinds of differences that exist between racial groups; that is, what kinds of things make racial groups different from each other?

A20 Do you think there are biological differences between different races? Why or why not?

A21 How would you say racial differences come about—what causes them?

At this point, I'd like to ask you how you think some other groups of people would define the concept of race. I'll do this by showing you a printed statement, and then asking you first for your opinion about it, and then I'll ask you how you think some other people would react to it.

First I'm going to give you a card with a short statement printed on it; this sentence is taken from a survey that was conducted in the 1980s. After you've read the statement, I'd like to know whether you agree or disagree with it. (Hand over card, which reads: "There are biological races within the species Homo sapiens.") Now, how would you describe your reaction to this statement: do you agree or disagree?

A23 Why do you [agree]/[disagree]?

Let's stick with this statement for a minute. How do you think that most of your peers—other students here at *(university name)*—would react to it? In general, do you think other students would agree or disagree? Why?

A25 What about Americans in general, the public—do you think most Americans would agree or disagree with the statement I showed you? Why?

Now I'm going to describe to you two scenarios—taken from real life—where racial groups differ in terms of some outcome or phenomenon. In each case, I'll describe the facts of the situation to you, and then ask you to give me a couple of possible explanations for the differences in the experiences of different racial groups. That is, I'd like you to give a couple of plausible reasons that might explain the situations I'll describe to you.

The first scenario I'll describe refers to a biomedical outcome, namely, the weight of babies at birth. Researchers have discovered that at birth, babies of different racial groups tend to have different weights.⁸ 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?

S9 Which do you think is the most likely explanation? Why?

⁷ Results of the 1984-5 study reported in Lieberman (1997). Lieberman and colleagues found that 74 percent of biologists, 49 percent of biological anthropologists, and 31 percent of cultural anthropologists agreed with this statement.

⁸ In 1997, babies identified as white had a median weight of 7 lbs. 7 oz. (3,390 grams), while Asian babies had a median weight of 7 lbs. 2 oz. (3,250 g), and black newborns' median weight was 6 lbs. 15 oz. (3,180 g) (National Center for Health Statistics 2001: Table 1-27).

S10 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?

S11 Which explanation do you think is the most likely one? Why?

* * *

A26 Those are all the questions I have for you. Is there anything else that you'd like to add—maybe a comment on a related topic I didn't think to ask you about?

A27 And are there any questions that you'd like to ask me?

NOTES

⁹ Sources: (1) Lapchick and Matthews (2001); (2) U.S. Census Bureau (2001).

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