Race as Biology Is Fiction, Racism as a Social Problem Is Real

Anthropological and Historical Perspectives on the Social Construction of Race

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Racialized science seeks to explain human population differences in health, intelligence, education, and wealth as the consequence of immutable, biologically based differences between "racial" groups. Recent advances in the sequencing of the human genome and in an understanding of biological correlates of behavior have fueled racialized science, despite evidence that racial groups are not genetically discrete, reliably measured, or scientifically meaningful. Yet even these counterarguments often fail to take into account the origin and history of the idea of race. This article reviews the origins of the concept of race, placing the contemporary discussion of racial differences in an anthropological and historical context.

Psychological science has a long and controversial history of involvement in efforts to measure and explain human variation and population differences. Psychologists such as Jensen (1974), Herrnstein (Herrnstein & Murray, 1996), and more recently, Rushton (1995) and Rowe (Rowe, 2002; Rowe & Cleveland, 1996) have advanced the argument that racial group variation on measures such as intelligence tests reflects genetically determined differences in group ability that cannot be explained by differences in environmental living conditions or socioeconomic differences. These psychologists have generally concluded that Africans and African descendants are intellectually inferior to Europeans and European descendants, who in turn are assigned (in more recent work) to a lower intellectual status than Asian populations and their descendants (Rushton, 1995). Although these arguments have been vigorously debated and the influence of "racial" science has been stronger at some times than at others, some scholars interested in racial distinctions have found new grist for the racial differences mill, as geneticists have made important advances in sequencing the human genome (Crow, 2002).

Less prominent in this debate has been a discussion of what is meant by racial groups and whether such groups are, in fact, discrete, measurable, and scientifically meaningful. The consensus among most scholars in fields such as evolutionary biology, anthropology, and other disciplines is that racial distinctions fail on all three counts—that is, they are not genetically discrete, are not reliably measured, and are not scientifically meaningful.[1] Yet even these counterarguments often fail to take into account the origin and history of the idea of "race." This history is significant because it demonstrates that race is a fairly recent construct, one that emerged well after population groups from different continents came into contact with one another. In this article we examine the origins of the concept of race, placing the contemporary discussion of racial differences in an anthropological and historical context. Our aim is not to review the psychological literature regarding the construction of race but to bring anthropological and historical perspectives to the study of race.

In many multiracial nations such as the United States, there are profound and stubbornly persistent racial and ethnic differences in socioeconomic status, educational and occupational status, wealth, political power, and the like. Whether and how governments respond to these disparities should rest on the best available interdisciplinary scientific information. Racialized science—with its conclusion that immutable differences between racial groups underlie social and economic racial hegemony—requires a very different response from government than scientific perspec-

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[1] See the statements of the American Anthropological Association (1998) and the American Association of Physical Anthropologists (1996). Among the many anthropologists who have written on this topic, see Brace, 2003; Cartmill, 1998; Cavalli-Sforza, 1995; Graves, 2001, 2004; Harrison, 1995; Lewontin, 1995; Littlefield et al., 1982; Marks, 1995; Shanklin, 1994; A. Smedley, 1999b, 2002b; and Templeton, 2002.

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tives that place race in a social and historical context. We therefore conclude this article with a discussion of the public policy implications of racialized science.

Anthropological and Historical Perspectives on Ethnicity, Culture, and Race

Ethnicity and Culture

Anthropologists have an understanding of the term *culture* that differs from popular and other scholarly usage of the term (see Harris, 1968; Rapport & Overing, 2000). Every introductory textbook today contains the definition of culture first proposed by E. B. Tylor in 1871 or some variation of it. "Culture," he wrote, "is that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capability and habits acquired by man as a member of society" (Tylor, 1871/1958, p. 1). Today, authors substitute *humankind* for *man* and often add a significant phrase, "and based upon the human ability to symbol," that is, the human ability to invent meanings and to act as if they are real or true (Carneiro, 2003; Harris, 1979; White, 1949; White & Dillingham, 1973). Anthropologists concur with cognitive psychologists that "symbolic representation is the principal cognitive signature of humans" (Donald, 1997, p. 737) that makes possible the enormous creativity of cultural phenomena (for exploration of the culture concept, see Harris, 1968, 1999; Stocking, 1968).

What is common to most anthropological conceptions of culture is the contention that culture is external, acquired, and transmissible to others.[2] They do not treat culture as a part of the innate biological equipment of humans (Harris, 1999). It is studied as extrasomatic, socially acquired traditions of thought and behavior and includes patterned, repetitive ways of thinking, acting, and feeling, as well as all arenas of creativity and invention (Harris, 1999). Humans, as individuals or groups, are not born with propensities for any particular culture, culture traits, or language, only with the *capacity* to acquire and to create culture (Harris, 1999; Marks, 1995). It is largely the human capacity for language that enables individuals to transmit culture traits from one person or group to another (see, e.g., Boas, 1940; Harris, 1999; Lewontin, 1995). But as both psychologists and anthropologist understand, language is not the only way by which an individual acquires or achieves cultural information.[3]

Thus, for heuristic purposes, anthropologists do not operate with the assumption of innate biological causes for any social (or economic, religious, political, etc.) behavior. They argue that culture traits—that is, human behavior—can best be understood in terms of other culture phenomena, not as products of some variable biogenetic reality as yet unproved (for a contemporary view of culture, see Harris, 1999, Pt. 2, or Peoples & Garrick, 2000). The evidence from history and the study of thousands of diverse cultures around the world are testament to the overwhelming and coercive power of culture to mold who we are and what we believe (Harris, 1999; Kaplan & Manners, 1972; Rapport & Overing, 2000).

Ethnicity and culture are related phenomena and bear no intrinsic connection to human biological variations or race. Ethnicity refers to clusters of people who have common culture traits that they distinguish from those of other people. People who share a common language, geographic locale or place of origin, religion, sense of history, traditions, values, beliefs, food habits, and so forth, are perceived, and view themselves as constituting, an ethnic group (see, e.g., Jones, 1997; Parrillo, 1997; A. Smedley, 1999b; Steinberg, 1989; Takaki, 1993). But ethnic groups and ethnicity are not fixed, bounded entities; they are open, flexible, and subject to change, and they are usually self-defined (Barth, 1998). Because culture traits are learned, ethnicity or ethnic traits are transmissible to other people—sometimes easily so, such as the widespread adoption of western dress (jeans and tee shirts) found all over the world, and the contemporary manifestation of industrial

[2] The anthropologist most associated with the theory of culture as separate from human biology, occupying a realm of its own, and capable of being studied independently of human physical characteristics was Leslie White (White, 1949). A large body of literature today deals with one of the major issues of cultural studies, the evolution of cultures, and the mechanisms by which cultures change (see Carneiro, 2003; Harris, 1999).

[3] This perspective appears to contradict the work of those in developmental psychology who argue for a complex process by which a child construes cultural meanings, so that culture is not totally identified as a learned phenomenon (Harkness, Raeff, & Super, 2000). A perspective that looks at individuals and cognitive processes may well see considerable variation. Social and cultural anthropologists are concerned with continuity and the replication of cultural features, values, beliefs, institutions, and so forth, over time. Such different approaches may not be as incompatible as they appear at first.

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culture globally. History shows that people can and do learn another language and/or move into another ethnic group and become participants in that ethnicity (A. Smedley, 1999a; Takaki, 1993).

Ethnic differences also constitute an arena of diverse interests that can lead to conflict, but this should not be confused with what in contemporary times is referred to as "racial" conflict. Ethnocentrism (belief in the superiority of one's own culture and lifestyle) and ethnic conflict are widespread and often have deep historical roots, but this is not to say that they are universal or inevitable. Ethnocentric beliefs and attitudes, because they are cultural phenomena, can and do change, sometimes rapidly (Omi & Winant, 1994; A. Smedley, 1999a). Some of the ethnocentrism seen today is mild, such as the enmity between the French and the English, or Canadians and the United States, or even sports teams from different nations.[4] However, the kind of ethnocentrism that most attracts attention, and which scholars have long studied, has often been vehement and malignant, leading to enduring conflicts. In circumstances of extreme conflict, such as warfare, ethnic groups have demonized one another, creating hate-filled images of "the Other," even to the point of posing the argument that the other ethnic group is less than human (Fredrickson, 2002; Jones, 1997; Omi & Winant, 1994; A. Smedley 1999a, 1999b).

The most significant thing about interethnic conflict is that the vast majority of such conflicts have been, and still are, with neighboring groups—people who inhabit the same general environment and who virtually always share physical similarities, as, for example, the English and the Irish, Serbians and Croatians, Indians and Pakistanis, Armenians and Turks, Japanese and Koreans. Until recently such conflict has not been perceived as being racial. Numerous wars, historical and contemporary, around the globe, including both world wars, attest to the reality of ethnic conflict as primarily a local phenomenon (Barth, 1998; A. Smedley, 1999b). Thus, most human conflicts have not been racial, and there is no reason for antagonism to exist or persist simply because protagonists are identified as racially different.

Historical Perspectives on Human Variation

With the rise of empires, language and other cultural features were expanded territorially to encompass populations in more remote geographical areas. With the addition of distance, conquering armies encountered peoples who were physically as well as culturally different. Ancient empires tended to incorporate these peoples into their polities, regardless of their physical variations.[5] The empires of the ancient world—the Egyptian, Greek, and Roman empires, and later the Muslim empire, with its center at Baghdad—encompassed peoples whose skin colors, hair textures, and facial features were highly varied, representing the same range of physical diversity that is seen in the "Old World" today—Africans, Europeans, Middle Easterners, and Asians (see Blakely, 1993; Boardman, Griffin, & Murray, 1986; Cavalli-Sforza, 1995; Fryer, 1984; Godolphin, 1942; Hitti, 1953; Hourani, 1991; Snowden, 1983). History shows that Africans in Europe were assimilated into those societies wherever they were found, and no significant social meanings were attached to their physical differences.[6] Throughout the Middle Ages and up until the 17th century, religion and language were the most important criteria of identity (Hannaford, 1996).

It follows from this brief account of historical facts that physical characteristics should never be included in a *definition* of ethnic identity. It is inaccurate to associate physical features with any specific cultural identity. This is particularly true in modern times, when individuals may have physical traits associated with one region of the world but may manifest very different cultures or ethnic identities. Immigration, intermating, intermarriage, and reproduction have led to increasing physical heterogeneity of peoples in many areas of the world. Africans and East Indians in England learn the English of the British Broadcasing Company and participate fully in English culture. Five hundred years ago, Africans, natives of South and Central America, and Spanish or Portuguese people in the New World began to merge or assimilate (both biologically

[4] International soccer and baseball come to mind. More recently, the rivalries of Olympic teams are good examples of the milder forms of ethnocentrism.

[5] Geneticists have pointed out that continual intermating among human groups has been a primary reason why all humans today are members of a common species (Cavalli-Sforza, 1995).

[6] See Blakey, 1993; Fryer, 1984; A. Smedley 1999a; Snowden, 1983. Among many well-known Europeans of African ancestry, Alessandro de Medici, appointed by his father as the first duke of Florence, Italy, was the son of the man who became Pope Clement VII and his African mistress (see http://members.aol.com/eurostamm/medici.html)

and culturally) and create new ethnic identities. Their descendants today, whether they are called Latinos or Hispanics, represent intricate and complex new mixtures of biogenetic or physical features, but they also have many cultural similarities in language and religion (Degler, 1971; Morner, 1967). As we discuss later, the concept of race that characterizes North American society carries with it the notion that each race has its own forms of social or cultural behavior. This is not borne out by anthropological and historical studies but is part of the myths connected to the ideology of race (see below).

Many historians and sociologists have recognized that race and racism are not "mere ethnocentric dislike and distrust of the Other" (Fredrickson, 2002, p. 5). Steinberg (1989) made a clear distinction between racism and ethnocentrism. In speaking of the differences in America between European immigrant minorities early in the 20th century and racial groups, he pointed out that immigrants were "disparaged for their cultural peculiarities," and they were discriminated against, but the message conveyed by the nation to them was, "You will become like us whether you want to or not." Assimilation was necessary and expected. With the low-status racial groups, the message was, "No matter how much like us you are, you will remain apart" (Steinberg, 1989, p. 42). Ethnicity was recognized as plastic and transmissible, but race conveyed the notion of differences that could not be transcended.

Scientific Conceptions of Race

From the 19th century on, races have been seen in science as subdivisions of the human species that differ from one another phenotypically, on the basis of ancestral geographic origins, or that differ in the frequency of certain genes (Lewontin, 1995; Marks, 1995; A. Smedley, 1999b). The genetic conception of race appeared in the mid-20th century and remains today as a definition or working hypothesis for many scholars (A. Smedley, 1999b; Spencer, 1982). However, other scholars have recognized that there are no neutral conceptualizations of race in science, nor have any of the definitions ever satisfactorily fully explained the phenomenon of race (Brace, 1969; A. Smedley, 1999a, 1999b). When geneticists appeared who emphasized the similarities among races (humans are 99.9% alike), the small amount of real genetic differences among them (0.01%), and the difficulties of recognizing the racial identity of individuals through their genes, doubts about the biological reality of race appeared (see Littlefield, Lieberman, & Reynolds, 1982).

Thus, in the 20th century two conceptions of race existed: one that focused on human biogenetic variation exclusively and was the province of science, and a popular one that dominated all thinking about human differences and fused together both physical features and behavior. This popular conception, essentially a cultural invention, was and still is the original meaning of *race* that scholars in many fields turned their attention to in the latter part of the 20th century and the early 21st century (A. Smedley, 1999a, 1999b, 2002a, 2002b). It is important to explore its origins, examine how it has evolved, and analyze its meaning and significance in those cultures where race became important.

A History of Race and the Ideology of Race

Historians have now shown that between the 16th and the 18th centuries, *race* was a folk idea in the English language; it was a general categorizing term, similar to and interchangeable with such terms as *type, kind, sort, breed,* and even *species* (Allen, 1994, 1997; Hannaford, 1996; A. Smedley, 1999a, 1999b). Toward the end of the 17th century, *race* gradually emerged as a term referring to those populations then interacting in North America—Europeans, Africans, and Native Americans (Indians).[7]

In the early 18th century, usage of the term increased in the written record, and it began to become standardized and uniform (Poliakov, 1982). By the Revolutionary era, *race* was widely used, and its meaning had solidified as a reference for *social* categories of Indians, Blacks, and Whites (Allen, 1994, 1997; A. Smedley, 1999b). More than that, *race* signified a new ideology about human differences and a new way of structuring society that had not existed before in human history. The fabrication of a new type of categorization for humanity was needed because the leaders of the American colonies at the turn of the 18th century had deliberately selected Africans to be permanent slaves (Allen, 1994, 1997; Fredrickson, 1988, 2002; Morgan, 1975; A. Smedley, 1999b).[8] In an era when the dominant political philosophy was equality, civil rights, democracy, justice, and freedom for all human beings, the only way Christians could justify slavery was to demote Africans to nonhuman status (Haller, 1971; A. Smedley, 1999b). The humanity of the Africans was debated throughout the 19th century, with many holding the view that Africans were created separately from other, more human, beings.[9]

The Components of Racial Ideology in United States Society

Eighteenth- and 19th-century beliefs about human races have endured into the 20th and 21st centuries. Those societies in which racial categories are critical to the social structure have certain ideological features—that is, beliefs

[7] This history has been well documented (see Allen, 1994, 1997; Banton & Harwood, 1975; Barzun, 1937/1965; Brace, 1982; Fredrickson, 1988, 2002; Hannaford, 1996; A. Smedley 1999a, 2002a, 2002b). For an in-depth understanding of the processes by which slavery and race were created, see Morgan, 1975. Morgan is the dean of American historians of the colonial period. His classic work is cited by many scholars; it has not been superceded by later historical reconstructions of this era.

[8] There are hundreds of books and articles on slavery and antislavery and on the relationship of race and slavery; it is impossible to cite many of them. We have synthesized the well-known history and refer any reader with questions to the historical literature.

[9] For the 19th-century debates on the questionable humanity of Africans, see Chase, 1980; Fredrickson, 1987; and Haller, 1971, which is now seen as a classic. See also the debates between monogenists and polygenists in Hannaford, 1996, and A. Smedley 1999a. See also Brace, 1982.

about human differences—in common. Race therefore can be seen as an ideology or worldview, and its components have often been spelled out explicitly in social policy.[10] The ideological ingredients can be analytically derived from ethnographic reality (i.e., from descriptions of racist behavior, and especially from the hundreds of historical publications that document the existence of race and racism in North America). This material has been analyzed and these ingredients identified as diagnostic social characteristics of race in North America (see A. Smedley, 1999b, chap. 1). There is widespread agreement in historical and sociological studies about the following characteristics:

1. Race-based societies perceive designated racial groups as biologically discrete and exclusive groups, and certain physical characteristics (e.g., skin color, hair texture, eye shape, and other facial features) become markers of race status.

2. They hold that races are naturally unequal and therefore must be ranked hierarchically (inequality is fundamental to all racial systems). In the United States and South Africa, Africans and their descendants occupy the lowest level of the hierarchy.

3. They assume that each race has distinctive cultural behaviors linked to their biology. The idea of inherited forms of behavior is fundamental to the concept of race and is one basis for the belief in the separation of races (as, e.g., Black music, Black theater, Black literature, Black dance, Black forms of dress, Black language, etc.).

4. They assume that both physical features and behavior are innate and inherited.

5. They assume that the differences among races are therefore profound and unalterable. This justifies segregation of the races in schools, neighborhoods, churches, recreational centers, health centers, and so forth, and proscriptions against intermarriage or intermating.

6. They have racial classifications stipulated in the legal and social system (racial identity by law). (This obtained until recently in the United States and South Africa.)

Skin color, hair texture, nose width, and lip thickness have remained major markers of racial identity in the United States (A. Smedley, 2002a), although the use of these criteria continues to be arbitrary, given the ranges of physical variations in U.S. racial populations. However, physical features and differences connoted by them are not the effective or direct causes of racism and discrimination (see, e.g., Barnes, 2000; Correspondents of the New York Times, 2001; Mathis, 2002). It is the culturally invented ideas and beliefs about these differences that constitute the meaning of race (A. Smedley, 1999b).

The History of Race Ideology

In the United States, race ideology began developing during the late 17th century, in conjunction with the legal establishment of slavery for Africans, and in the 18th century it eventuated in three major groups that were roughly defined and ranked (European Whites, Native Americans [Indians], and "Negroes" from Africa; Allen, 1994; A. Smedley, 1999b). In the mid-19th century, Asian people-first the Chinese and later the Japanese—began to arrive in the United States, and they were fitted into the racial ranking system, somewhere between Whites and Blacks (A. Smedley, 1999b; Takaki, 1993). Also in the mid-19th century, the Irish began to immigrate, followed toward the end of the century by peoples from southern and eastern Europe who were both physically and culturally different from the original English and northern Europeans (Ignatiev, 1995; Takaki, 1993). They, too, were initially seen as separate races and were ranked lower than other Europeans (Chase, 1980; Steinberg, 1989; Takaki, 1993). However, they were eventually assimilated into the "White" category (for an excellent exploration of these processes, see Chase, 1980). The single most important criterion of status was, and remains, the racial distinction between Black and White (Massey, 2001; A. Smedley, 1999b).

Despite legal and social attempts to prohibit intermarriage or intermating, some genetic mixture still occurred. In response, the United States had to resort to a fiction to help preserve the distinctiveness of the White/Black racial (and social) dichotomy. North Americans define as Black anyone who has known African ancestors, a phenomenon known and introduced by historians over half a century ago as the "one drop rule" (see, e.g., Degler, 1971). There is no socially sanctioned in-between classification, even though the last census of 2000 permitted individuals to identify two or more racial ancestries. In South Africa in the 1940s, for historical reasons a large middle category was created, the Colored, so that essentially three more or less exclusive races were established in law (Fredrickson, 1981). And each year, a government board functioned to review racial identities and reassign individuals according to certain subjective appraisals. In none of the states in the United States has there developed a legal mechanism for changing one's race (Fredrickson, 1981).

There is mounting historical evidence that this modern ideology of race took on a life of its own in the latter half of the 19th century (Hannaford, 1996; A. Smedley, 1999b). As a paradigm for portraying the social reality of permanent inequality as something that was natural, this ideology, often but not necessarily connected to human biophysical differences, has been perceived as useful by many other societies. It has led to the exacerbation of already existing interethnic animosities. In Europe, Nazi Germany took the ideology to its greatest extreme, ultimately resulting in the Holocaust of World War II. In Asia, elements of the Western ideology of race were imported to Japan, China, India, and Malaysia (Channa, 2002, 2003; Dikotter, 1997; Katayama, 2002; Kurokawa, 2003; Robb, 1997; Sakamoto, 2002; Tomiyama, 2002).[11]

The contemporary conflicts between the Tutsi and Hutu ethnic groups in East Africa have no basis in tradi-

[10] Legal development of the policies of segregation in the United States and apartheid in South Africa has been well documented in Fredrickson, 1981.

[11] There is some debate in the literature on whether the race concept might have been present in other non-Western societies before the 17th or

tional history but were generated by the policies of European explorers and colonists, who imposed racial identities on these peoples to suit their own purposes (A. Smedley, 1999a; Graves, 2004, has a brief description).

Because of the extensive mixtures of peoples in the first two to three centuries of colonization, it was more difficult to racialize the peoples of Central America, the Caribbean, and South America. None of these societies was able to establish exclusive race categories, but they did develop terminologies that reflected the many variations in phenotype. Most developed color preferences so that individuals with phenotypic traits (e.g., light skin) approximating their European ancestors (conquerors) had higher status (Degler, 1971; Morner, 1967). These societies became increasingly more biased against darker-skinned people during the late 19th and 20th centuries, when there was increasing contact with North Americans, and particularly with the immigration of German Nazi sympathizers after World War II (A. Smedley, 1999b).

The Beginnings of Scientific Classifications of Human Groups

While colonists were creating the folk idea of race, naturalists in Europe were engaged in efforts to establish classifications of human groups in the 18th century. They had to rely on colonists' descriptions of indigenous peoples for the most part, and their categories were replete with subjective comments about their appearances and behaviors. Ethnic chauvinism and a well-developed notion of the "savage" or "primitives" dictated that they classify native peoples as inferior forms of humans.[12] Although there were earlier attempts to categorize all human groups then known, Linnaeus and Blumenbach introduced classifications of the varieties of humankind that later became the established names for the races of the world (Slotkin, 1965).

But it was the influence of Thomas Jefferson that may have had greater impact in bringing science to the support of race ideology. Jefferson was the first American to speculate and write publicly about the character of the "Negro," whom he knew only in the role of slaves on his plantations. He was the first to suggest the natural inferiority of the Negro as a new rationalization for slavery in the only book he wrote, *Notes on the State of Virginia* (Jefferson, 1785/1955), published first in Paris and later in the United States. More than that, he revealed his uncertainty about the position he was taking and called on science to ultimately prove the truth of this speculation (see Jefferson, 1785/1955; for a discussion, see also A. Smedley, 1999b). Since the 1790s and well into the 20th century, the role of science has been to confirm and authenticate the folk beliefs about human differences expressed in the idea of race by examining the bodies of the different peoples in each racial category.

The rise of scientific and scholarly input into the character of races began during the latter part of the 18th century with the writings of the philosopher Voltaire, the planter and jurist Edward Long, and a physician, Dr. Charles White of Manchester, England, among others (A. Smedley, 1999b). In the 19th century, some scholarly men initiated attempts to quantify the differences among races by measuring heads, and later other parts of the human body, with the stated purpose of documenting race inequality (A. Smedley, 1999b; Haller, 1971; Marks, 1995). By the end of the 19th century, more refinements in measuring heads and greater attention to the size and contents of the brain case led scientists to the final critical criterion by which they thought race differences could be measured: the development of tests to measure the functions of the brain. In the early 20th century, intelligence tests became the dominant interest of scientists who were seeking ways of documenting significant differences, especially between Blacks and Whites.[13] As Haller (1971) has pointed out, no one doubted that the races were unequal or that each race had distinctive behaviors that were unique: "The subject of race inferiority was beyond critical reach in the late 19th century" (p. 132).

Recent developments in the fields of genetics and evolutionary biology have prompted a renewed focus on identifying the biological basis of human behavior as well as ascertaining the historical relationships among different populations (Graves, 2004; Olson, 2002). With studies of the human genome and discoveries of the role of DNA in disease, it has become possible to speculate on specific genes as sources of human behavior. Population variations in the genes linked to the making of serotonin, testosterone, and dopamine have already led some race scientists to speculate about race differences in behavior (Oubre, 2004; Rushton, 1995). Some anticipate that they will eventually be able to actually prove race differences in violence, temperament, sexuality, intelligence, and many other mental characteristics.[14] More important, developments in the structuring of an International HapMap, which maps clusters of genes, have revealed variations in strings of DNA that correlate with geographic differences in phenotypes among humans around the world (Olson, 2002). Such findings may well be used by race scientists to argue that

18th centuries (see the discussion in Robb, 1997). However, many instances that some scholars have suggested are indicative of race should more accurately be identified as examples of extreme ethnocentrism (see A. Smedley, 1999a, 1999b).

[12] Historian Margaret Hodgen (Hodgen, 1964) has the best exploration of the concept of savagery in European life and history during the 16th-18th centuries. A discussion of the English image of savagery and its role in the construction of race is found in A. Smedley, 1999b.

[13] The history of intelligence testing has been covered by a number of scholars in the last three or four decades (see Chase, 1980; Kevles, 1985; Marks, 1995; Mensh & Mensh, 1991; A. Smedley, 1999a, 1999b; see especially the articles in Fish, 2002).

[14] Psychologist J. Philippe Rushton (Rushton, 1995) has claimed that he can identify at least 60 social/behavioral variables that distinguish the three major racial groups. He believes that these variables are innate and are directly determined by genes.

geographic variations in DNA confirm the existence of biological human races.

The components of the idea of social race fail to find congruence with the reality of culture as sui generis. And those categories of people that constitute social races bear little relationship to the reality of human biological diversity. From its inception, race was a folk idea, a culturally invented conception about human differences. It became an important mechanism for limiting and restricting access to privilege, power, and wealth. The ideology arose as a rationalization and justification for human slavery at a time when Western European societies were embracing philosophies promoting individual and human rights, liberty, democracy, justice, brotherhood, and equality.[15] The idea of race distorts, exaggerates, and maximizes human differences; it is the most extreme form of difference that humans can assert about another human being or group, as one of its components is the belief that differences are permanent and cannot be overcome (see earlier discussion).

Race essentializes and stereotypes people, their social statuses, their social behaviors, and their social ranking. In the United States and South Africa, one cannot escape the process of racialization; it is a basic element of the social system and customs of the United States and is deeply embedded in the consciousness of its people. Physical traits have been transformed into markers or signifiers of social race identity. But the flexibility of racial ideology is such that distinctive physical traits need no longer be present for humans to racialize others (Katayama, 2002; Saitou, 2002).

Racialized Science and Public Policy

Given that racialized science is based on an imprecise and distorted understanding of human differences, should the term *race* be abandoned as a matter of social policy? Stated differently, if race is not a biological or anthropological reality, should race play a role in policy discussions? From a policy perspective, although the term *race* is not useful as a biological construct, policymakers cannot avoid the fact that social race remains a significant predictor of which groups have greater access to societal goods and resources and which groups face barriers—both historically and in the contemporary context—to full inclusion. The fact of inequality renders race an important social policy concern. At its core, the concept of race depends fundamentally on the existence of social hegemony. As Michael Omi noted, "the idea of race and its persistence as a social category is only given meaning in a social order structured by forms of inequality—economic, political, and cultural—that are organized, to a significant degree, by race" (Omi, 2001, p. 254).

How are resources allocated differentially on the basis of race? The sources of racial inequality remain controversial. Discrimination, the differential and negative treatment of individuals on the basis of their race, ethnicity, gender, or other group membership, has been the source of significant policy debate over the past several decades. Federal and state laws adapted since the landmark 1964 Civil Rights Act outlaw most forms of discrimination in public accommodations, access to resources and services, and other areas. Although this legislation appears to have spurred significant change in some segments of American society, such as in the overt behavior of lenders and real estate agents, debate continues regarding whether and how discrimination persists today. Conservative legal scholars and social scientists argue that discrimination has largely been eliminated from the American landscape (D'Souza, 1996; Thernstrom & Thernstrom, 1999), whereas others argue that discrimination has simply taken on subtler forms that make it difficult to define and identify. Complicating this assessment is the fact that whereas individual discrimination is often easier to identify, *institutional discrimination*—the uneven access by group membership to resources, status, and power that stems from facially neutral policies and practices of organizations and institutions—is harder to identify. Further, it is difficult to distinguish the extent to which many racial and ethnic disparities are the result of discrimination or other social and economic forces.

There is little doubt among researchers who study discrimination, however, that the history of racial discrimination in the United States has left a lasting residue, even in a society that overtly abhors discrimination. "Deliberate discrimination by many institutions in American society in the past has left a legacy of [social and] economic inequality between Whites and minorities that exists today" (Turner & Skidmore, 1999, p. 5), preserving the economic and educational gap between population groups. But discrimination persists today. Racial and ethnic discrimination and disadvantage have been consistently documented in studies of home mortgage lending (U.S. Department of Housing and Urban Development, 1999), housing discrimination and residential segregation (Massey, 2001), and employment and housing practices (Fix, Galster, & Struyk, 1993). More recently, two major reports authored by respected, nonpartisan advisory groups (the Institute of Medicine [B. D. Smedley, Stith, & Nelson, 2003]; Physicians for Human Rights, 2003) have documented persistent patterns of racial and ethnic disparities in health care. Because disparities in health care may reflect a complex mix of social, economic, biologic, and genetic factors and therefore provide a test of the validity of racialized science, in the next section we review relevant literature on health care disparities and assess the implications of racialized science for public policies to address these disparities.

[15] Robert Moore of the University of Liverpool observed that in the mid-1800s, a consensus emerged that human cultural differences were of a permanent kind, expressing underlying natural differences. He quoted an observer of American life, Alexis de Tocqueville, who was among the first to recognize this aspect of the idea of race and who wrote that "the existence of innate and immutable racial characteristics is to be regarded with skepticism and theories founded upon such doctrine are mere rationalizations for slavery and other forms of racial oppression" (Tocqueville, as cited in Stone, 1977, p. 63).

Race, Ethnicity, and Health Care

Over the past three decades, several hundred studies have been published that examine the quality of health care for racial and ethnic minorities relative to nonminorities (Physicians for Human Rights, 2003). Evidence of racial and ethnic disparities in health care is, with few exceptions, remarkably consistent across a range of health care services, including mental health (B. D. Smedley et al., 2003; U.S. Department of Health and Human Services [U.S. DHHS], 2001). These disparities are associated with socioeconomic differences and tend to diminish significantly and, in a few cases, to disappear altogether when socioeconomic factors are controlled. The majority of studies, however, find that racial and ethnic disparities in health care remain even after adjustment for socioeconomic differences and other factors related to health care access (Kressin & Petersen, 2001; Mayberry, Mili, & Ofili, 2000; Physicians for Human Rights, 2003; B. D. Smedley et al., 2003). This research is clear and consistent when comparing African American and White patients, and it is becoming stronger in demonstrating the same disparities between Hispanic and White patients (more research must be done to determine whether American Indians/Alaska Natives, Asian Americans, and Pacific Islander Americans face the same disparities). In general, this research shows the following:

- African Americans and Hispanics tend to receive lower quality health care across a range of disease areas (including cancer, cardiovascular disease, HIV/AIDS, diabetes, mental health, and other chronic and infectious diseases) and clinical services (B. D. Smedley et al., 2003);
- African Americans are *more likely* than Whites to receive less desirable services, such as amputation of all or part of a limb (Gornick et al., 1996);
- Disparities are found even when clinical factors, such as stage of disease presentation, comorbidities, age, and severity of disease are taken into account (B. D. Smedley et al., 2003);
- Disparities are found across a range of clinical settings, including public and private hospitals, teaching and nonteaching hospitals, and so forth (B. D. Smedley et al., 2003);
- Disparities in care are associated with higher mortality among minorities who do not receive the same services as Whites (e.g., surgical treatment for small-cell lung cancer; Bach, Cramer, Warren, & Begg, 1999).

Some of the most rigorous studies in this area assess whether patients are appropriate for the treatment studied by controlling for disease severity using well-established clinical and diagnostic criteria (e.g., Allison, Kiefe, Centor, Box, & Farmer, 1996; Ayanian, Udvarhelyi, Gatsonis, Pasho, & Epstein, 1993; Schneider et al., 2001; Weitzman et al., 1997) or by using matched patient controls (Giles, Anda, Casper, Escobedo, & Taylor, 1995). Several studies, for example, have assessed differences in treatment regimen following coronary angiography, a key diagnostic procedure. These studies have demonstrated that differences in treatment are not due to clinical factors such as racial differences in the severity of coronary disease or overuse of services by Whites (e.g., Canto et al., 2000; Laouri et al., 1997; Peterson et al., 1997; Schneider et al., 2001).

Health care disparities are also found in other disease areas. Several studies demonstrate significant racial differences in the receipt of appropriate cancer diagnostic tests (e.g., McMahon et al., 1999), treatments (e.g., Imperato, Nenner, & Will, 1996), and analgesics (e.g., Bernabei et al., 1998), while controlling for stage of cancer at diagnosis and other clinical factors. Similarly, African Americans with HIV infection are less likely than nonminorities to receive antiretroviral therapy (Moore, Stanton, Gopalan, & Chaisson, 1994), prophylaxis for pneumocystis pneumonia, and protease inhibitors (Shapiro et al., 1999). These disparities remain even after adjusting for age, gender, education, CD4 cell count, and insurance coverage (e.g., Shapiro et al., 1999). In addition, differences in the quality of HIV care are associated with poorer survival rates among minorities, even at equivalent levels of access to care (Bennett et al., 1995; Cunningham, Mosen, & Morales, 2000).

As with other health care services, racial and ethnic disparities also plague mental health care. The U.S. Surgeon General recently completed a major report (U.S. DHHS, 2001) assessing racial and ethnic disparities in mental health and mental health care and found that, more so than in other areas of health and medicine, mental health services are "plagued by disparities in the availability of and access to its services," and that "these disparities are viewed readily through the lenses of racial and cultural diversity, age, and gender" (U.S. DHHS, 2001, p. vi). The Surgeon General also concluded that striking disparities in mental health care exist for racial and ethnic minorities and that these disparities impose a greater disability burden on racial and ethnic minorities. In addition to universal barriers to quality care (e.g., cost, fragmentation of services), the report notes that other barriers, such as mistrust, fear, discrimination, and language differences carry special significance for minorities in mental health treatment, as these concerns affect patients' thoughts, moods, and behavior (U.S. DHHS, 2001).

Public Policy Cannot Ignore Race

As the literature in health care disparities attests, contrary to the optimistic assessments of conservative thinkers (D'Souza, 1996; Thernstrom & Thernstrom, 1999) and, more generally, the American public, race continues to play an important role in determining how individuals are treated, where they live, their employment opportunities, the quality of their health care, and whether individuals can fully participate in the social, political, and economic mainstream of American life. The studies cited previously demonstrate that race continues to matter in important ways.

Race is a means of creating and enforcing social order, a lens through which differential opportunity and inequality are structured. Racialized science, with its emphasis on identifying immutable differences between racial groups, can be expected only to maintain and reinforce existing racial inequality, in that its adherents indirectly argue that no degree of government intervention or social change will alter the skills and abilities of different racial groups. The disproportionate representation of some "racial" groups (e.g., African Americans, American Indians) among lower socioeconomic tiers can therefore be explained as an unavoidable byproduct of human evolution. Yet reinforcing this widely held social stereotype of racial inferiority risks limiting individual human potential, in that individuals' abilities and opportunities would likely be assessed in relation to their racial group.

California businessman Ward Connerly and his allies have proposed that government should not be involved in the collection or analysis of information related to the race or ethnicity of its citizens. They argued (unsuccessfully in California's recent voter referendum, Proposition 54) that data disaggregated by race or ethnicity merely serves to create more social divisions and schisms and that the racial and ethnic disparities observed are generally the product of socioeconomic differences between the racial and ethnic groups. Implicit in this argument is that socioeconomic differences are acceptable-that is, race is increasingly irrelevant in determining one's life opportunities and barriers, but the poor will always be among us. An abundance of evidence, however, demonstrates that race continues to matter in meaningful ways. As long as governments fail to assess racial and ethnic inequality, racialized science will likely attempt to find explanations for racial hegemony in the biology and genetics of the "racial" group rather than in the social attitudes and institutions that perpetuate the idea of race.

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