Varieties of (Homo sapiens): "Africanus negreus (black), Americanus rubescens (red), Asiaticus fusces (tawny), and Europeus albescens (white)." (Linnaeus 1758)

"In my opinion, to dismember mankind into races ... requires such a distortion of the facts that any usefulness disappears." (Hiernaux 1964:43)

"...race and subrace do represent a truth about the natural world, which cannot be adequately described without consideration of them." (Baker 1974:4)

"Race is a term originally applied to populations who shared close common ancestry and certain unique traits, but it has been so overworked and its applications so broad and general that race is nearly useless and is often replaced by ethnic group." (Molnar 1992: 36)

"It is important...to have a clear... understanding of the difference between race and racism, on the one hand, and ethnicity and ethnocentrism on the other." (Smedley 1993: 29)

Shortly after birth, each American baby is placed in a box--not a physical box, just a box on a piece of paper. This process, which counts the child as belonging to one and only one "race" or "ethnic group," will be repeated over and over throughout an individual's lifetime. Current American "boxes" include: 1. White, 2. Black, 3. Hispanic, 4. American Indian, 5. Eskimo or Aleut, 6. Asian or Pacific Islander. Anthropology departments sometimes
receive desperate calls from parents: "I am from Pakistan, should I check 'white' or 'Asian'?" "My wife and I belong to different groups, how do we classify our baby?"

As a child grows, the "box" often will be designated by others, without the person's knowledge or input, as though a simple set of rules could generate a "correct" classification. But is there such a set of rules? Such classification implies that pure races and cultures existed with little intermixture in the recent past. But did such a time ever exist? Before air travel? Before Columbus? Before Marco Polo?

As the initial quotations suggest, anthropologists disagree about the subject of race and ethnicity, and opinions have radically changed over time. Far from reflecting biological and cultural "reality," race and ethnicity are terms increasingly seen as arbitrary constructs fulfilling a social need, with content and limits negotiated among members of each society. How else explain why university affirmative action offices group people from the Indian subcontinent with 'whites,' while in South Africa, they are officially 'Asians'. Japanese visitors to South Africa, however, are classified as 'whites'. In the 1990 census, every non-Native American who is not of Asian descent must be either 'black' or 'white', while 3,500,000 non-Asian South Africans are classified as 'coloured', neither 'black' or 'white'.

For over 100 years, "science"—particularly its biological and anthropological branches—has been asked three questions: Do races exist? If so, why? What is the most accurate racial classification, whether absolute or relative to geography and history? The larger question, most recently addressed by the scientists themselves, is: Why do we care? Why is the race issue important to scholars, and, even more so, to American society at large?

EARLY CLASSIFICATIONS - 18TH CENTURY

Anthropology is the field of knowledge most closely connected to the study of human differences, although attempts to recognize and describe such differences are more ancient than the formal study of anthropology. The French naturalist Buffon, writing in the mid-18th century, may have been the first scholar to use the word 'race' to describe the varieties within a single species, whether humans or dogs, and to attribute these differences to local alterations of a single ancestral group. Like more modern biologists, he saw these physical differences as responses to different climates, diets, and even patterns of behaviors or cultural practices. We now know that agriculture, for example, resulted in decreasing tooth size in modern humans.

In the 18th century, following Linnaeus' classification of the varieties of Homo, the German scholar and physician Blumenbach developed the concept of human races. He drew up lists of physical and behavioral differences among five major "races": Caucasian (Linnaeus' white or Europaeus albescens), Mongolian (Asiaticus fuscus L.), Ethiopian (Africanus negreus), American (Americus rubescens L.) and Malay, the latter not distinguished in Linnaeus' classification, but added in later editions of Blumenbach's work to encompass the peoples of southeast Asia and the Pacific. Like Buffon, Blumenbach argued for a single origin of humankind, but thought that some races had "degenerated" from their original state.

RACE AND RACISM - 19TH CENTURY

From Blumenbach on, physicians dominated the study of human physical differences, emphasizing human anatomy rather than a
broad natural history viewpoint. Early 19th century scholars, like the American physician Morton, used flawed statistics to show that Caucasians had the largest brains, "Negroes" the smallest. (S.J. Gould, The Mismeasure of Man, 1981). Morton attributed these differences to separate creation (polygenism), rather than to adaptation or degeneration, and saw them as immutable. Gould, Smedley (1993) and others have argued that this shift reflects the emergence of a world view in which physical differences or "race" dominated all other kinds of differences such as class or nationality, and were used to justify the oppression of Africans in particular by peoples of European descent.

Smedley's chapter, "Growth of the English Ideology of Race in America," argues that the English, isolated from the more cosmopolitan Mediterranean world, were particularly unprepared to assimilate people with cultural and physical differences. The English colonized Ireland and America at the same time and grouped both Irish and American natives as "heathen," "idolatrous," "wild," and "savage," characteristics used to justify the appropriation of native lands by the more "civilized" English, and the removal or enslavement of the natives themselves.

Anthropologists, though clearly enmeshed in a racist and ethnocentric European and American culture of 19th century scholarship, saw themselves as countering the prevailing theories of the day by asserting human unity. In 1871, Tyler, an Englishman and founder of anthropology, defined the discipline as the study of "man and the races of man." Although Tyler was careful to separate race and culture, physical anthropologists, many of whom continued to support polygenism, tended to confuse race and culture as well as to regard psychological traits and cognitive abilities as inborn, like skin color and hair form.

**BIOLOGY AND CULTURE - SEPARATE BUT CONFUSED**

The confusion of biology and culture continued into the functionalist era of the 1920s and 1930s, with the application of organic models and adaptationist explanations to social phenomena. For example, it was asserted that just as dark skin evolved to protect humans from excessive ultraviolet radiation, so "joking relationships" with the mother's brother evolved to balance a strict avoidance relationship with the father and his relatives. Many so-called functional explanations of biological traits, in particular, were based on untested assumptions. Black boxes are perfect radiators of heat, so it was assumed that dark bodies would perform better in hot weather. In a series of tests conducted by the French Army in North Africa, however, performance differences between whites and blacks under extreme heat conditions failed to materialize. The confusion of biological and cultural or ethnic differences, together with an extreme view of racial and ethnic separation, derived from the polygenists, was incorporated into Nazi ideas of racial hierarchy and purity.

**HOW MANY RACES?**

With more than 200 years of scholarship on the topic of human variation, do we know how many races or how many ethnic groups there are? Biologists define races as populations of a species that differ genetically from one another. The emphasis on genetic differences is important, since two unrelated populations which inhabit the same area can come to resemble one another physically as both respond to the same selective forces. Since gene pools

(continued on p. 11)
change over time in response to natural selection, mutation, random events, and migration or hybridization, biological races are also limited in time. Can the human species be divided into populations that differ genetically from one another?

Many anthropologists today would argue that such a division is impossible, due to extensive migration and hybridization among human groups throughout human history. In a reaction to the discredited studies of the early 20th century, many anthropologists have pointed to the continuous or "clinal" nature of human variation, arguing that biological 'races,' in fact, do not exist. There is no line across the middle of the Sahara, or the Mediterranean, that divides people into "white" and "black," nor is there a north-south line in Eurasia dividing "whites" from "Mongoloids" (or "Asians"). Even the New World remained in genetic contact with the Old through the intermingling of seafaring peoples from both sides of the Bering Sea, as well as of Inuit and Norse in Greenland. Nor is there a set of criteria that will reliably differentiate members of these large racial groups. The use of skin color will group Africans with native peoples of Australia and south Indians, while the use of hair form and hair color will group the latter two with Europeans.

What about genetics? Should not a comparison of the genetics of different populations allow us to define differences and reconstruct historical relationships? Yes, argues L. L. Cavalli-Sforza of Stanford, who has used genetic traits determined from blood samples to construct trees of relatedness for large numbers of human groups worldwide. Genetic traits unrelated to surface differences were once considered to reflect a deeper genetic relationship between peoples, unaffected by natural selection. We now know, however, that even such supposedly "neutral" features as your blood group (A, B, or O) are often subject to natural selection in a way that creates similarities in groups that are otherwise unrelated. For example, both the Irish and the Blackfoot Indians have similar frequencies of A blood; this is more likely to reflect a common disease history than any migration event of the past. People with A blood appear to have been more susceptible to smallpox, while people with O blood were more frequently felled by bubonic plague.

Rebecca Cann, of the University of Hawaii, has constructed trees based on the overall similarity of the mitochondrial DNA genomes in individuals of different populations. These trees often cluster individuals from different populations together, particularly in very diverse regions such as Africa. But J. Marks of Yale University, among others, cautions against the too rapid acceptance of population relationships based on DNA similarities. The degree of similarity between two strands of DNA is a subjective judgement, particularly if the strands are of different lengths, due to deletions or repetitions in one, relative to
the other. Furthermore, as long as we do not understand the relationship between particular DNA sequences and particular traits, we do not know what we are looking at.

Can we even define a local population of humans for the purpose of sampling it and comparing it to others? On a local level, geographers have demonstrated the existence of breeding populations in humans, reflected in the statistical tendency to select one's mate from within a certain radius. Even in industrialized societies of the 20th century, this radius may be surprisingly small: a mile or two in mid-20th century England (Molnar 1992: 195).

In each situation, however, the breeding population of "suitable" or even "actual" mates is always culturally circumscribed or expanded in ways that defy geographical proximity. Immigrants may be required to take a mate from their home population or encouraged to marry into the new one. Cultural rules may prescribe marriage to a cousin (Bedouin), or to the most geographically distant person available (ju/wasi).

Mates taken from outside the geographer's radius may bring changes to the genetic frequencies of the local population or even create new populations. African-American populations exhibit different genetic frequencies from those of their presumed parent populations in West and Central Africa, due to the American pattern of exogamy (mating outside one's group) among once separate African ethnic groups, as well as gene flow with non-African populations in the Americas (primarily western Europeans and eastern Native Americans). In addition, African-Americans were exposed to a different set of natural selection factors in America—climatic, nutritional, and disease differences. For example, the Duffy blood group gene Fy- protects against a particularly deadly form of malaria called vivax malaria. Virtually 100% of contemporary West and Central Africans carry the Fy- gene and are protected against vivax malaria. European, Asian and Native American populations, on the other hand, maintain low frequencies of the Fy- gene and are susceptible to this infectious disease. Approximately 89-93% of African-Americans carry the Fy- gene, reflecting the results of the reduced natural selection pressure of vivax malaria in America as well as genetic change in non-African groups. Similarly, the gene frequencies of individuals classed as "White" in America, frequently reflect substantial percentages of genes that are more common in "non-Whites." This pattern strongly suggests that in the American environment, the flow of genes between formerly geographically distinct peoples has been multidirectional, influencing the subsequent composition of each group.

Restrictions on interbreeding within the geographer's average radius, due to caste or religious differences, for example, may create genetically differentiated groups that occupy the same local area. This has been the case in Ireland, where Catholics and Protestants rarely intermarry. As a result, differences within populations are often as great as differences between populations, making it almost impossible to assign individuals to particular groups, based on physical traits alone. Even in a case where some anthropologists argue for major "racial" differences, e.g. Khoisan vs. "Negroid", in actuality it is impossible to assign every individual to one or the other of these groups on physical grounds alone, just as it is impossible to assign individuals in America to the categories of the census on physical grounds alone. Within the African continent, for example, there is more physical, physiological, and genetic diversity, than among Africans and any
other group, or between Europeans and east Asians. At no time in the past did totally "pure" or "isolated" races exist.

A glance at most introductory texts of physical anthropology, however, shows that efforts to list a few major geographical subdivisions are still current, although always qualified by noting that not all individuals or populations can be put into the categories. Most of these lists closely approximate the original five races of Blumenbach, although some also elevate the Khoisan-speaking peoples of southern Africa to that level of distinctiveness, e.g. Homo sapiens hottentotus, also called Sanids (Baker, 1980: 303-324, 624) or Capoids. Interestingly, the greatest variation in these lists is in the treatment of what the US Census calls "Asian and Pacific Islanders." Where Blumenbach recognized only Mongolians and Malays, others, using 1950s studies by Stanley Garn, may divide the latter into Australians, Melanesians, Micronesians, and Polynesians. In addition, some taxonomies separate peoples of the Indian subcontinent as a separate race. Groups that are assumed to lie outside these large categories, or geographical races, from African-Americans to the Ainu of Japan, are either subsumed, ignored, or treated as curiosities, isolates, or 'hybrids'.

ETHNICITY INSTEAD OF RACE

As noted by Molnar, the term "race" is increasingly replaced in public documents and folk taxonomies by the term "ethnic group" or "ethnicity." Ethnicity is a more recent concept in anthropology than "race," although the underlying concept of "ethnos" or "ethnology," denoting a people distinguished by cultural traits is older, dating back to at least the mid-19th century. According to the Oxford English Dictionary, the term "ethnicity" was first used in 1953 by the sociologist David Reisman to explain how individuals and groups in multi-cultural settings shape their identities and their political and economic goals in terms of their interactions with one another.

How do groups (or the scholars who study them) construct or define the boundaries of an ethnic group? As in the case of race, two contrasting views of ethnicity exist. The "primordialists" hold that ethnicity arises from similarities between individuals of the group in physical features and language. These features have the power to impart a sense of group and individual identity, of belonging to the community. Ethnicity in this view is "natural," and is based on biological (skin color, body shape) or linguistic affinities that are distinct from and prior to particular social or historic conditions.

In contrast, "instrumentalist" models hold that groups create ethnicity for political and economic interests. In this view, "ethnicity" is rationally oriented toward the fulfillment of specific goals like access to economic power, nationalism, or freedom from colonial rule.

Most scholars today reject these simplistic alternatives and hold the position that neither is sufficient to explain ethnic group structure and sentiment. Primordialism overlooks the fact that ethnic identity is not a natural feeling that simply emerges mysteriously in all human communities, but a complex and dynamic set of symbolic meanings patterned in history. Instrumentalists are so concerned with political and economic motivations that they sometimes ignore the question of how the particular elements or symbols of an ethnic identity are chosen. Ethnic consciousness may depend on perceived biological similarities, on a common language or linguistic structure, or on numerous cultural factors and learned behaviors ranging from religion to "styles" of speech and interaction.

Some ethnicities have been determined in large part by recent historical events such as colonization, nationalism or urbanism. In Ethiopia, the "Falasha" Jews were named by Amharic leaders (Falasha means "exile" in Amharic), while in Europe, the Bosnian Muslims identified themselves as Muslims both as a way to further their political power in previous Islamic states, and, more recently, as a form of resistance to Yugoslavian nationalism.

Other ethnicities have long histories. In Africa, the Hutu and Tutsi of Rwanda, and
the Tswana and Sarwa of Botswana predate the onslaught of European colonialism. Nor can the ethnic composition of nations in Europe, (Basques, Flemish), or northern Africa be explained as a correlate of modernity. This is not to imply that ethnic sentiments are "traditional" and unchanging, only that what people believe about their past has a direct relationship to what they are doing in the present. People may believe their ethnic ties are ancient, but the meaning and definition of these changes over time and differs according to historical circumstance. Ethnicity among Hutu and Tutsi, for example, while embedded in a long pre-colonial history, underwent drastic changes in just two years: 1959-61, when the states of Rwanda, Burundi, and Zaire were created. The Muslims of Bosnia, mobilized by ancestry and modern nationalism, do not fit neatly into either the primordialist or instrumentalist conceptions.

ETHNICITY AND STEREOTYPES

Like racial categories, ethnic categories have a static quality that can perpetuate stereotypes of cultural homogeneity and mask within-group variation. Categories such as "European-Americans," "African-Americans," "Hispanic-Americans," and "Asian-Americans" are comprised of many smaller culturally diverse groups. When we fail to recognize this internal variation, we perpetuate stereotypes that often do great disservice and assume that all members of each category are alike.

One benefit of an ethnic focus in anthropology is that it requires us to search for ways in which people, not nature, create their identities. Unfortunately, this emphasis has yet to broaden into public usage.

In the US census of 1970 and 1980, the clearest example of a "race" with little or no biological component was the category "Hispanic." This grouping originally was designed to encompass Spanish-speaking migrants from Latin America, who were also categorized as "brown" due to various admixtures of Africans; native South Americans; and peoples from Spain, Portugal and other European (and Asian) countries. But, if the purpose was to define a biological entity, why should Europeans recently arrived from Spain, or non-Latin individuals who have acquired a Spanish surname through marriage, be included? Why should Spanish-speaking immigrants from Latin America with German surnames be excluded? How should Latin Americans of primarily African descent be categorized? In the 1990 census, the category "Hispanic" was redefined as an ethnic group, so that an individual can also classify him or herself by "race" as a "White," a "Black," or an "Indian" (Amer.). But what ethnic group combines Portuguese from Brazil and Argentineans of Welsh or Syrian descent, except with reference to the "Anglo" culture of the U.S.?

In the U.S., on the other hand, African-Americans or Blacks and European-Americans or Whites remain overemphasized, leading to increasing polarization between these groups, and creating false notions of biological and cultural homogeneity within these groups. Such practices, rooted in the political, economic, and historical circumstances of this nation, continue to obscure the very real commonalities shared by members of the same sex, class, community, or job category, as well as the common values and beliefs of a uniquely American culture that the two groups have jointly created.

If identities, whether racial or ethnic, are indeed cultural and historical constructs, then they are also changeable. At a time, when ethnicity is so often associated with violent conflict throughout the world, a conception of identity as mutable and contingent on circumstance may offer some optimism for the future.

REFERENCES:


Hiernaux, J. "The concept of race and the taxonomy of mankind." In The Concept of Race, A. Montagu ed. (Free Press, 1964)

Marks, J. Human Biodiversity: Genes, Race, and History. (Aldine de Gruyter, 1994)


Molnar, S. Human Variation: Races, Types and Ethnic Groups. 3rd ed. (Prentice Hall, 1992)


Wolf, E. Europe and the People without History. (University of California Press, 1981)

Alison S. Brooks
George Washington University

Fatimah Linda Collier Jackson
University of Maryland

R. Richard Grinker
George Washington University