

In his insightful book, Racism: A Short History, Stanford University historian George M. Fredrickson described the paradox that notions of human equality were the necessary precondition to the emergence of racism. A society premised on an assumption of inequality produced an accepted hierarchy, he argued, one unquestioned even by those relegated to its nadir, thus creating no need to locate the cause of the underlings' position in some specific characteristic on their part that makes them less worthy than others.

However, as societies became increasingly committed to the belief in freedom and equality--as once revolutionary ideas about equal rights for all became more widespread, especially in the West--then those groups systematically denied such entitlements were claimed to possess what Fredrickson called "some extraordinary deficiency that makes them less than fully human." That is, racism arose in this analysis as a result of the contradiction between egalitarian principles coupled with the exclusionary treatment of specific ethnic groups: the rejection of organically hierarchical societies brought with it the implied necessity to account for the fact that some groups were subjected to servitude, enforced separation from the rest of society, or ghettoization.

Beginning around the end of the eighteenth century, as Enlightenment rationalism replaced faith and superstition as the source of authority, the pronouncements of science became the

preferred method for reconciling this difference between principle and practice; the ideological foundation for systematic discrimination shifted from religion to science, as the natural order was invoked to justify inequalities previously sanctified by the divine order.

A number of supposedly scientific rationales have been offered as support for racial discrimination in the United States, each of them having a lengthy history. One approach has been the claim that there are biological dangers involved in racial interbreeding. Indeed, it was in part on the basis of this belief that, in the United States and South Africa, for many years statutory prohibitions against intermarriage were enforced.

The first supposed evidence for this conclusion was provided in the midnineteenth century primarily by physicians who insisted that, as a result of their mixed blood, "mulattoes" were considerably more susceptible to disease than either of their parents and thus exceptionally short-lived; in addition, leading anthropologists of the time predicted that, were persons of different races to intermarry, they would become progressively less fertile, and eventually completely sterile. Of course, abundant evidence from clandestine experiments in Southern laboratories soon made this claim untenable.

In the early twentieth century, the scientific community's discovery of Gregor Mendel's work led to a new,

exciting branch of biology but also a new justification for discrimination, as some geneticists warned of the deleterious consequences resulting from the union of persons from different ethnic backgrounds, especially at a time when immigration from Southern and Eastern Europe was peaking. Charles Benedict Davenport, a member of the National Academy of Sciences and world renowned researcher, described some of the genetic "disharmonies" such intermixtures could produce. If, for example, a member of a tall race, such as the Scots, should mate with a member of a small race, such as the Southern Italians, then, according to Davenport, the child of such a mating might inherit the genes for large internal organs from one parent and the genes for small stature from the other, resulting in viscera that were too large for the frame. There were children, he warned, for whom "every inch over 5' 10" is an inch of danger." Nor were all the genetic incompatibilities merely physical. Davenport explained that the "mulatto" inherited an "ambition and push" from the white parent, combined with "intellectual inadequacy" from the black, making the "unhappy hybrid dissatisfied with his lot and a nuisance to others."

Although belief in such genetic mismatches was once fairly widespread within the scientific community and cited specifically to rationalize various oppressive racial policies, this notion now enjoys far less credibility. However, while there has been absolutely no evidence that racial interbreeding can produce a disharmony of any kind, warnings of some kind of genetic discord are still far from entirely extinct in the modern era. In 1987, Raymond Cattell, the father of personality trait measurement and the 7th most highly cited research psychologist in the twentieth century, referred to the "hideously wrong inscription on the idol in New York Harbor" and cited the intermarriage of immigrants as "partly responsible for the higher crime and insanity rates in the U.S.A. than in the parent countries."

And in 1999 Glayde Whitney, a prominent geneticist and former president of the Behavior Genetics Association, claimed that the intermarriage of "distant races" could produce a harmful genetic mixture in offspring, citing the wide range of health problems afflicting African Americans and their high infant death rate as examples of the effects of "hybrid incompatibilities" caused by white genes that went undetected due to the "one drop" convention defining all "hybrids" as blacks.

However, the most common way in which science has been used to support racial discrimination is through pronouncements that some groups are genetically less well endowed than others in important cognitive or behavioral traits. Of course, even if true such a difference would be irrelevant to issues of social and political equality, but again the use of such claims for oppressive purposes has a long history. For the first third of the twentieth century there was particular concern over the results of early intelligence tests, which supposedly demonstrated that the recent immigrants from Southern and Eastern Europeans were intellectually inferior to their Northern counterparts; data documenting this conclusion were even presented to the House Committee on Immigration and Naturalization during the deliberations leading to the Johnson-Reed Immigration Act of 1924, which imposed strict national quotas, substantially reducing the number of newcomers allowed from the so-called Alpine and Mediterranean countries.

During the second half of the century attempts to prevent blacks from finally attaining social and political equality

often relied on studies purporting to demonstrate their genetic inferiority in intelligence. In the lower court proceedings challenging segregated schools that eventually culminated in the landmark Brown v. Board decision, the Southern strategy had focused initially on states' rights and legal precedents, noting that the oxymoronic concept of "separate but equal" facilities had been upheld in every previous consideration. But when this approach proved unsuccessful, a number of scientists sympathetic to the segregationist cause sought to overturn Brown or prevent its implementation by arguing that genetic differences in intelligence between the races made integrated education an impossibility, harmful to all students. This argument, featuring testimony by a parade of prominent scientists in support of segregation, was actually made in a subsequent district court case seeking to integrate the Savannah-Chatham school system, leading a sympathetic judge to find against the plaintiffs and recommend that the Brown decision be reconsidered--an opinion quickly overruled by the Court of Appeals with a reminder that segregated schools constituted a violation of the constitution, a matter to which scientific studies were irrelevant.

After the legislative victories of the civil rights movement, the most blatant forms of discrimination largely disappeared from American life, and the movement's emphasis shifted from struggling for equal rights to improving the conditions of life for minorities and the poor. Social welfare legislation, enacted as part of Lyndon Johnson's War on Poverty, sought to provide the most impoverished citizens with new access to health care, nutrition, and education.

Here again some scientists opposed these efforts on the grounds that poverty, especially among blacks, was caused primarily by genetic disadvantage--people were poor because they were not very bright--and as a consequence environmental improvement would be of no benefit to them. Indeed, vast expenditures on social programs such as Medicaid and food stamps would only exacerbate the problem, in this view, by assisting the least capable to reproduce. The Nobel Laureate physicist, William Shockley,

predicted that the present system of aid would lead to blacks' "genetic enslavement" due to the proliferation of the genetically less intelligent; the source of their oppression was now internal, and what they really needed, according to Shockley, was not early education, good food and health care but birth control and sterilization.

Obviously equality as an ethical principle concerning the rights to be enjoyed by all members of a society should not be predicated on any scientific conclusion, whether or not it is accurate. This is indisputably true for the traditional American view of rights as "justiciable," encompassing certain freedoms guaranteed to the individual and not subject to violation or contravention by the state. Government does not grant such rights as much as it refrains from interfering with their exercise.

Of course, the claim that specific social programs should be eliminated as a result of genetic differences does not constitute a deprivation of rights in this sense; such "aspirational" entitlements as social and economic assistance, which require funding from the government, do not enjoy the same kind of constitutional protection as, for example, exercise of the franchise or freedom of religion. But whatever degree of legitimacy they may have does not depend in any way on a scientific demonstration of the genetic merit of their recipients. The kind and amount of social support that an affluent society decides to guarantee to its neediest citizens are an expression of its humanitarian ideals and its notion of social justice, derived not from science but from such traditional sources of moral values as religion and conscience. There are no moral directions in genotypes.