Society has long idealized science as an indisputable vehicle of objective truth. This image has given scientists significant power, including the power to shape public opinion and even to affect the formulation of public policy. Throughout history, it cannot be said that science determines politics or that politics determined science, but often the two have been intertwined (Barkan, 5). But wherever there is power, there is a possibility to abuse that power to pursue self interest. While scientists are expected to avoid bias, racist scientists have exploited the opportunity, by seeking to use erroneous data to produce results favorable to their social agenda. It is this intentional adulteration of science that racists have used in the last few centuries to dissemble their studies of racial inferiority as fact.

The purpose of scientific racism is very simple. It is a deliberate attempt to justify and protect a system that allows the exploitation of “inferior” people so that “superior” people can reap economic and political rewards (Marshall, 125). In the United States, a major target of scientific racism was the black population. Both esteemed and unscrupulous scientists alike wrote and believed in these racist theories that served to justify the American system of ante-bellum slavery and post-bellum segregated education.

History of Racism

Contrary to popular belief, the history of racism is succinct, almost a modern invention. One might argue that the history of slavery is a thoroughly documented institution dating back to biblical times; however, discrimination based on race was never an established doctrine. Rather than biological differences, religion, culture, politics, caste or class divisions served as the basis for discrimination in ancient Greek and Roman cultures (Montagu, 37). Even in early American times
slave traders often found slaves to be their mental equal, while others noted the high intelligence of Native Americans (Montagu, 38). When did racism really begin to surface? “Only when voices began to make themselves heard against the inhuman traffic in slaves…supporters of slavery were forced to look about them for reasons” (Montagu, 39).

Perhaps the least known fact about early American racism is its prevalence in society and its almost blind acceptance by the most distinguished scientists and politicians of the day. Though some historical figures questioned the relevancy of the inferiority of certain races in determining human rights, they did not question its accuracy. Thomas Jefferson wrote “I advance it, therefore, as a suspicion only, that the blacks…are inferior to the whites in the endowment of body and mind” (Gould, 87). Abraham Lincoln in a debate said, “There is a physical difference between the white and black races, which I believe will forever forbid the two races living together on terms of social and political equality” (Gould, 87). Charles Lyell, founder of geology stated, “Each race of Man has its place, like the inferior animals” (Gould, 89). It is evident that racism was deeply ingrained in early American and European thought as a justification for the treatment of black Americans as unfit or undeserving of equality.

**Psychological Inferiority**

Personality flaws and immorality were sited as two primary reasons that Black Americans should not be treated as psychological equals. These studies depended heavily on the assumption that physical characteristics were genetically linked to personality traits. “The color of the skin and the crookedness of the hair are only outward signs of many far deeper differences, including…temperament, disposition, character, …instincts, customs, emotional traits and disease” (Ferguson, 3). Unfortunately, the traits associated with being black were often unsavory. According to the entry for “Negro” in the first American Edition of the *Encyclopedia Britannica* (1798), “Vices the most notorious seem to be the portion of this unhappy race: idleness, treachery, revenge, cruelty, impudence, stealing, lying, profanity, debauchery, nastiness and intemperance…strangers to every
sentiment of compassion, and are an awful example of the corruption of man when left to himself” (Eze, 94).

The implication of these personality and moral flaws is that Blacks need to be watched over and cared for by whites because that is what is best for them. Many southerners found it easy to convince themselves that it was their divine duty to care for their slaves and protect their slaves from those who “proposed by the tyranny of legislation to set bounds to their freedom of thought and action” by setting them free (Montagu, 52).

In his work *A Natural History, General and Particular*, Comte de Buffon was the first person to coin the word race. Buffon describes the variety of peoples found on the different continents with his thesis that one species spread throughout the earth and after several generations have “undergone various changes by the influence of climate, food, mode of living, epidemic diseases…” (Leclerc, 27). He also shows his unscientific preference for Caucasians when he writes, “The most temperate climate lies between the 40th and 50th degree of latitude, and it produces the most handsome and beautiful men” (Leclerc, p26). Other famous writers such as Immanuel Kant wrote of the discrete varieties of peoples populating the globe.

Two main theories sought to explain how the different races evolved. Most people, like Buffon, believed in monogenism or that there was a single creation of a single race, and all the races are degenerates from this single source. This degeneration view fit best with biblical history, and absolved Christians from guilty consciences over the ill treatment of their “neighbors” because their slaves were lower beings and not quite men. One study attempting to prove this theory, cited the distance between the belly button and the base of the penis. During the physical development of a man, this distance grows proportionately longer. Because the black men studied had the shortest distance, scientists said they were not completely developed (Gould, 91). Later, racist scientists used Charles Darwin’s theory of evolution to place races of people along an evolutionary chain. Blacks,
whose development supposedly froze at puberty, were believed to be comparable to white adolescents. Again this under-development indicated a need for the care of the white adults.

Alternatively, polygenism, which has also been called ethnology, states that God created man as distinct species with inherent levels of superiority. This idea was less prevalent both because of its contradiction to the Bible and the fact that the races could interbreed successfully and produce fertile offspring (Gould, 90).

**Slavery**

The first justifications of slavery were far from scientific, including biblical references to the story in Genesis of Noah cursing Ham’s descendants to be servants (Thomas, 1). Scientific affirmation of racism was soon to follow. The Great Chain of Being was an early attempt at establishing a hierarchy linking all living organisms of the world from God to man to amoeba. The chain established a purpose for each being: to serve those higher beings in the chain. In 1677, Dr. William Petty declared that savage people were the direct link between Caucasians and the apes. The chain provided an excellent justification to slavery: savage people, such as Africans, were inferior and were put on the earth to serve the superior Europeans (McCaskell, 1). Carl von Linne, in his 1735 work *The System of Nature*, wrote extensively on this popular belief of a God sanctioned hierarchy in nature. He wrote of a classification system based on the four types of races: Americans, regulated by custom; Europeans, regulated by laws; Asians, governed by opinion; and Africans, governed by caprice (Linne, 13). In the description of these race types the superiority of Europeans is well documented.

The most widely known study was based on a bold distortion of epidemiology statistics. The census data of 1840 purported that “insanity and idiocy” was up to 11 times more prevalent in northern free Negroes than southern Negroes. Secretary of State John C. Calhoun in 1844 judged these results to prove the “necessity of slavery.” This study implied a similar social situation as the personality flaws, Calhoun stated that, “The African is incapable of self-care and sinks into lunacy
under the burden of freedom. It is a mercy to give him the guardianship and protection from mental
death” (Thomas, 17). Later, recognized mental disorder specialist, Dr. Edward Jarvis scrutinized the
study and found numerous discrepancies. Among these errors, the census showed northern towns
with no black citizens at all to be the homes of numerous insane black inhabitants (Thomas, 17). Dr.
Jarvis upon discovering the errors was surprised that “statements so glaring false…should have been
so passively acquiesced by…the naturalists, the physicians and the statisticians of America”
(Thomas, 19).

After emancipation, more results were released along the same lines. The new figures
showed a dramatic increase in the number of mental illness cases among blacks. Slavery proponents
contended this was because slave owners were no longer caring for them. In reality, this increase
occurred because of the initial poor assessment of mental illness of slaves. The slave owners who
reported upon the mental health of their slaves based “health” on whether (or not) they were able to
complete tasks. As long as they could find something the slave was capable of doing, he or she was
considered healthy regardless of mental state. Therefore, both the 1840 census data showing low
insanity rates in the South and the later reports showing a dramatic increase of illness were erroneous
because of the inaccurate data gathered about captive slaves (Thomas, 20).

Another line of reasoning for the mental illness of free blacks was that it violated the natural
laws of nature. Proponents for this line of thinking were applying the evolutionary mechanism of
Darwin. This application of Social Darwinism appealed to slave owners because under a “survival of
the fittest” theory, the white man was likened to the red ant who “will issue in regular battle array to
conquer and subjugate the black or Negro ant…these Negro slaves perform all the labor of the
communities into which they are brought” (Montagu, 51). Furthermore, proponents like Thomas
Cobb asserted that it was in the best interest of blacks to be enslaved, “slavery, so far from retarding,
has advanced the Negro race” (Montagu, 52).
Scientists cited the psychological concept of instinct as another popular justification. Blacks were believed to be unable to resist certain instincts, especially sexual instincts. Famous instinct psychologist William McDougall stated that blacks had the unique instinct of submission (Thomas, 15). Another instinct all races shared was “instinctive dislike,” which means that there is an innate feeling of repulsion at the sight of someone that differs physically from the viewer (Thomas, 16). This instinct provided justification for segregation practices.

Education

The myth of intellectual inferiority is still not dispelled today. Recent “scientific” studies such as *The Bell Curve* (1994) continue to assert that blacks do not have an equal capacity of intelligence as whites. Historical studies have substantiated these claims from several different angles.

Initially the most prevalent notion was that black people have smaller brains and thus are less intelligent. The correlation between brain size and intelligence in itself was a questionable assumption. Before the Civil War, scientific findings announced that blacks had less gray matter in their brains (Thomas, 2). Samuel Morton studied the sizes of skulls from different cultures and wrote extensively on the subject in *Crania Americana* (1839). He measured the capacity of skulls and found Africans to have the smallest capacity followed increasingly by ancient Caucasians, Malays, Native Americans, modern Caucasians, and Mongolians (Gould, 110). However upon reexamination, these results also were found suspect. He never considered the average stature of race, nor did he separate the genders. He was guilty of convenient omissions, inadvertent or otherwise, of larger skulls when the desired results were small and smaller skulls when the desired results were large. Regardless of these errors, “Morton was widely hailed as the objectivist of his age” (Gould, 111). A study by George O. Ferguson published first in 1916 indicated that intelligence increased with the degree of whiteness in a person (Ferguson, 125).
Differences in scores on intelligence tests were conclusive to many people that blacks were intellectually inferior. The following excerpt describes well the implications of intelligence testing.

“The Negro’s intellectual deficiency is registered in the retardation percentages of the schools as well as in mental tests. And in view of all the evidence it does not seem possible to raise the scholastic attainment of the Negro to an equality with that of the white. It is probable that no expenditure of time or of money would accomplish this end, since education cannot create mental power, but can only develop that which is innate” (Ferguson, 125).

Similar results echo in numerous published studies, like the words of Stanford psychologist, Lewis Terman in 1916 “dullness seems to be racial…ineducable beyond the merest rudiments of training. No amount of school instruction will ever make them intelligent voters or capable citizens” (Thomas, 35). Words such as these became even more potent when the practice of school segregation came under fire.

In 1969 a notable supporter of genetic intellectual inferiority, Dr. Arthur Jensen published a paper on race and intelligence. He found a significant difference in IQ scores between blacks and whites and discounted environmental factors in favor of an “implicated” genetic factor. He infers that black children can make only a small amount of gain and implies that vocational training would be a better fit for their innate capabilities (Thomas, 42). His theories supported both the inequality that existed in the education system, by implying better schools would not help and segregation because blacks should be learning different skills by different methods. Applying the results of intelligence tests in this way follows “the belief that intelligence was biologically innate and hence unchangeable” (Tucker, 110). Like many studies claiming racial inferiority, Jensen’s has been reviewed and critics found his conclusions overwhelmingly unjustified and based on faulty statistical analyses (Thomas, 32). Most experts agree that “Any intelligence test favors individuals from the particular culture for which it was developed” (Thomas, 39). In this arena, scientific racism still
persists as the book *The Bell Curve* presents “essentially the same argument with more statistics” (Zack, 104).

A famous test that seemed to dispute the racial divisions of intelligence was an Army intelligence test taken by black and white recruits of World War I. The results of the test gave northerners the advantage over southerners in intelligence. In most cases the black northerners did better than the white southerners on the tests (Montagu, 230). Racist literature did not broadcast this fact widely. Another interesting occurrence that has been pointed out is “that when two groups of Whites differ in their IQs, the explanation of the difference is immediately sought in schooling, environment, economic positions of parents, and so on, but that when Negroes and Whites differ in precisely the same way the difference is said to be genetic” (Washburn, 130).

**Conclusion**

Scientific racism is a shameful part of American science. In retrospect, scientists wonder at the absence of critical challenges to these racist results from early American scientists. It did not occur to the scientists to question the results because the concepts were “so congruent with social and political life” (Stepan, 171). This suggestion has implications for scientists of today and tomorrow. Blacks suffered under slavery and unequal education conditions, but these were not the only instances of justifying and protecting the exploitation of people. Biased studies have also oppressed women and immigrants in this country; the eugenics craze affected minorities and Jews throughout the world. What about today? Are there still social biases that scientists are unwillingly incorporating into their studies? Where is there exploitation today that unscrupulous scientific results are seeking to protect? Undoubtedly, the practice of scientific racism exists, but for today’s society to be different from our forefathers, we must demand scrutiny of both our own values and “objective” scientific study. Otherwise, tomorrow we could be reading about the social horrors we justified in our own daily lives.

Ferguson, George O. *The psychology of the Negro*. Wesport, CN: Negro Universities Press, 1916.


