Names

Professor's Names

Course

Date

Scientifically Speaking, There is no Such Thing as Race

One of the greatest errors of early science was the claim that the human species (*Homo sapiens*) was comprised of numerous other subspecies: races. Essentially, early science considered race as a valid construct. Recent advancements in the genome field, however, have left biologists with no option but to admit that there is actually no such thing as race. Yet the race debate continues to rage on unabated since racial supremacists feel betrayed by the last bastion of rational justification they had always relied on. Nonetheless, the fact remains that "there are no neutral conceptualizations of race in science, nor have any of the definitions ever satisfactorily fully explained the phenomenon of race" (Smedley and Smedley 19). What science can prove, however, is that the physical differences between humans—such as skin color, hair texture, and body build—are attributable to the effect of environmental and hereditary factors. Still, that is not weighty enough to justify the categorization of humans into races as distinct subspecies. Actually, on closer inspection, the races are highly similar with members sharing at least 99.9 percent of genes (Smedley and Smedley 19). It is, as a result, a no-brainer to find that all humans share a common origin; and that any existing notions of race are only a reflection of the remaining cultural prejudices.

Scientists answered the race question decisively with the publishing of the findings from the Human Genome Project (HGP). They "hypothesized that the most important genetic material for human functioning is encompassed in" the 99 percent of the "shared set" of genes (Bonham, Warshauer-Baker, and Collins 11). That means that all humans have evolved in way that they function alike and adapt alike to social and environmental conditions. It also means that variations in physical characteristics are not as important as racial supremacists would want society to believe. Still, critics of the scientific turnaround on the race construct, like Sean Last argue that, "groups that evolve together end up resembling each other in countless ways" (par. 3). Essentially, in his article—*Human Races Exist*—Sean Last seeks to turn the race label into a factor for categorizing humans into several subspecies because he cannot fathom how similar-looking people can fail to be part of a unique human subspecies. Admittedly, he makes a commendable review of how other fields treat the race question. He cites the fact that in medicine studies the prevalence of diseases varies according to race type; and that in forensics it is possible to determine someone's race by profiling their biological criterion (Last). However, based on those doubts, explaining why physical differences exist between races is a straightforward affair. According to the study, *Race and Ethnicity in the Genome Era*, humans do not share only 0.1 percent of genetic material. Even then, that gene difference is not responsible for the phenotype. Effectively, just a fraction of the 0.1 percent genetic variation is what causes physical traits to differ (Bonham, Warshauer-Baker, and Collins 11).

In the unlikely event that race is bound to evolve into a scientific construct altogether, then the time between the first migration of humans from Africa into their current habitats is simply not enough. Archeological records show that a small groups of Africans managed to cross into the rest of the world "some 30,000 – 50,000 years ago" (Bonham, Warshauer-Baker, and Collins 12). Yet within time, the highest records of genetic variations can be found in the African continent than anywhere else in the world. Thus, if the minute genetic variations were to form the basis of categorizing humans into subspecies, then Africa's inhabitants would be more deserving of their own unique races than the entire world's race set would. Still, proponents of race as a distinct category of species argue that like other animals, humans who migrated from Africa have had enough time to evolve into other subspecies. The Sean Last article, for example, claims, "If evolution is occurring at a fast enough pace, very little time is needed for subspecies to evolve" (par. 5). The problem with that train of thought, however, is that uses analyses of the evolution of animal species other than *Homo sapiens* to validate its assertions. The counterargument on time needed for species to evolve contains correct references to how 2 waterfowl subspecies and 8 tiger subspecies appeared in just under 72,000 years. Yet that does not necessarily have to be the case for humans because all animal species adapt differently. Essentially, you would not expect humans to evolve into several subspecies the same way that a lizard species, such as the *Laudakia stellio*, would in just 12,000 years.

The race debate continues to cause friction between the opposing sides because earlier justifications based on hereditary characteristics seemed convincing enough. However, in contemporary times, scientists have reviewed such perspectives and found them to be more of hearsay than anything. They have also cast the perpetuation of the hereditary argument to a cultural and social construct that is more subjective than it is rational. Moreover, by analyzing the roots of the term race itself, scientists only found it to be a "a folk idea in the English language" (Smedley and Smedley 19). Thus, when individuals talk of race, they only mean to infer that particular humans are distinguishable due to common characteristics. As a result, race should is synonymous to any other categorizing terms, such as "type, kind, sort, [and] breed" (Smedley and Smedley 19). However, the counterargument to these findings insists that the hereditary angle on race as a distinct subspecies was nonetheless correct because it essentially meant that related humans shared particular genes. To emphasize the assertion, it goes on to contend: "It never meant that every member of one race had a given gene that no member of any other race had" (Last). Yet in the actual sense, that was more of a generalization than an accurate observation because all humans share the large bulk of their genes, anyway.

In conclusion, scientists have now proven beyond all doubt that no human race can claim to be a unique subspecies of *Homo sapiens*. Findings from the Human Genome Project, established how humans share up to 99.9 percent of their DNA. Thus, to claim that the remaining 0.1 percent of the DNA is enough to create a new human subspecies would be laughable. Even if critics based their arguments on why race is a valid scientific construct because some races share particular gene variations; they would still have to contend with considerable inconsistencies. For example, they would have a hard time explaining why within the African race, there is a high degree of gene variation compared to any other race.

Works Cited

Bonham, Vence L., Esther Warshauer-Baker, and Francis S. Collins. "Race and Ethnicity in the Genome Era: The Complexity of the Constructs." *American Psychologist* 60.1 (2005): 9–15. Web.

Last, Sean. "Human Races Exist: Refuting 11 Common Arguments Against the Existence of Race." *The Right Stuff*. N.p., 2015. Web.

Smedley, Audrey, and Brian D. Smedley. "Race as Biology Is Fiction, Racism as a Social Problem Is Real: Anthropological and Historical Perspectives on the Social Construction of Race." *American Psychologist* 60.1 (2005): 16–26. Web.