

Racial Concepts

The Objective View of Race

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I am beginning to understand how astronomers feel. The relation between the scientific study of regional differences in man, and racism, is similar to the relation between astronomy and astrology. Astronomy is an attempt to understand a portion of the universe: astrology is an attempt to convert certain parts of this information into a kind of divination, to predict the characteristics, behavior, or fortunes of human beings. But so far I have not heard of anybody trying to tell astronomers that they cannot use the words "star" or "planet" because to do so might seem to endorse the validity of the horoscopes in the daily paper.

It is a major function of the mind to try to find relations between things. A type of relation that promises to be particularly useful is that between the appearance of something and how that object, or person, will react in a future situation. The behavioral expectations inferred from the external appearance of an individual, including but not limited to genetically determined characters, are a good example. Unfortunately, the hope of finding relations that have practical value readily leads one optimistically to assume relations that are false or very tenuous; this is what most folklore consists of. Science has always been concerned as much with rejecting false relations as with finding true ones.

A basic problem with the definition of the word "race" is the confusion between the attributes of a given population that are genetic in nature versus those that are externally controlled or due to historic events. If the assumption is made that some of these attributes cause the others, or that they all are due to a single causal factor, we will expect them to remain together, continuing to appear in the same individuals from generation to generation. This satisfies the "folklore" generalization that if an individual looks thus-and-so, he will act in a predictable manner. It would be so convenient, if this were true, that people love to believe it. If everything about race is in one tight bundle, you can attach a convenient handle to it, perhaps a color word, and have no further strain on your brain.

It is perhaps as a result of this older idea of race being a correlated bundle of physical and behavioral characteristics, that we have a present disagreement between anthropologists about the use of the word. Physical anthropologists, in light of the overall hereditary nature once assumed for

the whole bundle, are inclined to think that the word "race" should be retained for the elements that actually *are* hereditary. Some cultural anthropologists seem to feel that if the things they are primarily interested in are removed from the definition of race, it becomes a useless term and should be discarded.

Unfortunately, one of the earliest attempts to replace the word "race" was the suggestion by Ashley-Montagu that the phrase "ethnic group" be used as a substitute. This was not a newly coined term. It had been used earlier in connection with European immigration to the United States, and it was applied to nationalities or to smaller groups such as the Serbs and Croatsians of the former Yugoslavia. Although Ashley Montagu was a physical anthropologist, he inadvertently reemphasized cultural and linguistic criteria by the use of the term "ethnic group," and thus, in my opinion, increased rather than eliminated confusion.

A second semantic problem lies in the degree to which categories (of race or anything else) are assumed to denote uniformity of type among individual specimens. Many people in the general public, including some we consider educated, are still struggling with words and statements in a manner that goes back to Plato and the 4th century B.C. Plato theorized that there existed, in a kind of heaven, an ideal model corresponding to every Greek noun, of which actual terrestrial examples were more or less imperfect copies. This theory implied that if things did not conform to type according to the class to which they were assigned, at least they *should*, and that the real world was inferior to the ideal world because of this individual variation. This normative function of the ideal type is wholly inappropriate to biological thinking, in which variation is as essential as similarity; or to statistical thinking, in which variation is itself a quantity subject to measurement. In any sexually reproducing organism, similarity of individuals in a population results from their drawing from the same gene pool according to the laws of probability, and differences between populations are a function of difference in the frequencies of various genes in their separate gene pools.

We could do better if all students, no later than the third grade, had been introduced to the idea that there are different kinds of statements: one kind of statement is "Men are taller than women" and another kind of statement is "Mary is taller than John"; and that it is because these are different kinds of statements that both can be true. At least, let's point this out in our college classrooms. Then our students might be better equipped to understand the nature of biological variation, which is precisely what we must understand to think, speak, and act realistically in regard to what we call race.

It is interesting that while English distinguishes the common noun (for a group) and the proper noun (for an individual) by capitalizing the proper noun, another widely spoken European language, German, capitalizes all nouns, thus de-emphasizing the distinction. Is there any subconscious influence here that causes a German-speaking person to think more rigidly

about class designations, such as race? I leave that to our psychological anthropologists.

If we are to limit descriptions of race to inherited traits, we must turn to the history of the application of genetics to the human species, for the question of inheritance of racial characteristics was a matter of interest quite early on.

One of the earliest studies of Mendelian genetics in the human species involved racial differences and was done by Dr. C. B. Davenport of the Carnegie Institution in 1913. Studying a large population of individuals of known mixed white/black ancestry on the island of Jamaica, he showed by a simple table that in a population of uniform mixed ancestry, there was no correlation between skin color and hair form; that there were individuals with dark skin and straight hair, individuals with light skin and woolly hair; and that these and all other combinations occurred in exactly the numbers that would be expected if the two traits were inherited quite independently (see Figure 1).

Now Dr. Davenport was a racist according to the universal habit of his time. He believed that there were distinct differences, on the average, between the two parental races in functional capacities; but he immediately

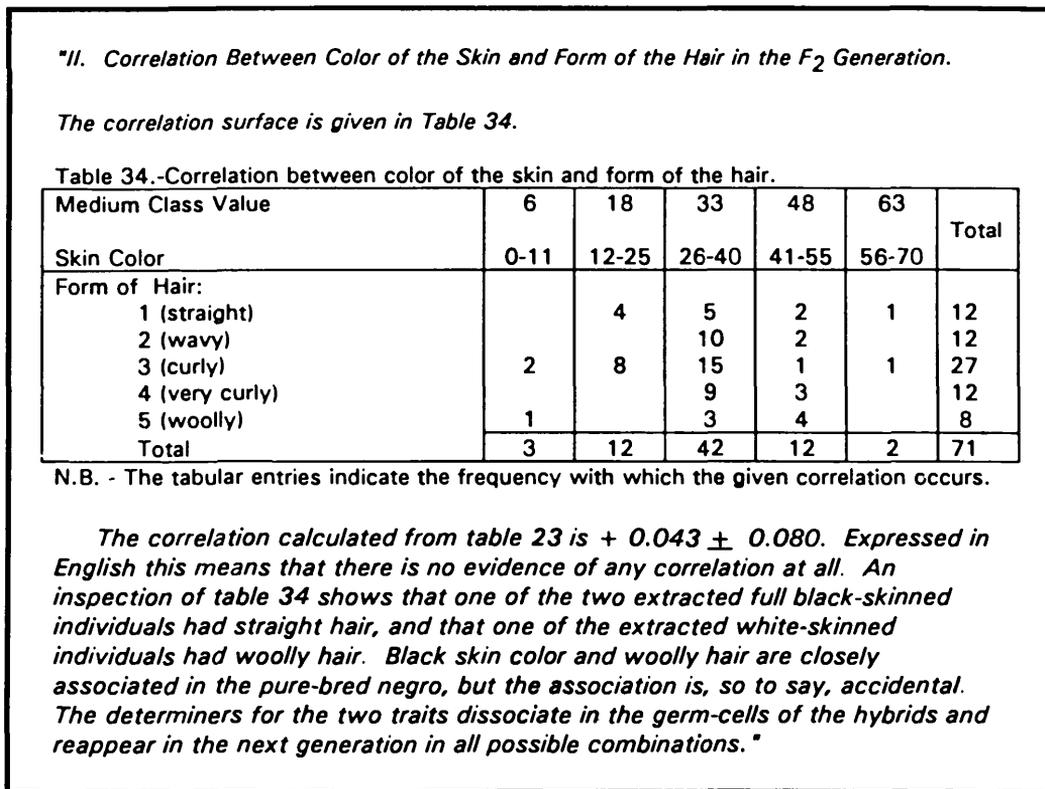


Figure 1. Independent assortment of skin color and hair form. (Source: C. B. Davenport, *Heredity of Skin Color in Negro-White Crosses*. Publication No. 188, p. 45. Washington, DC: Carnegie Institution of Washington, 1913.)

pointed out, correctly, that if two characteristic physical traits segregated in the Mendelian sense in the genetic process, other heritable characteristics would also, and that therefore it was not possible to infer an individual's intelligence or other functional characteristics from his physical traits: it had to be ascertained individually for each person. Thus, the idea of race as a combination of characteristics that were inherently associated and would be correlated forever was effectively "deconstructed" in 1913 by a geneticist who in some respects was still a 19th-century racist but who was, nevertheless, a scientist who understood the meaning of a zero correlation. Seventy-eight years later, many members of the general public have still not gotten the message.

So what is the present definition of race, as the biologist sees it? A race is a population that differs from others by the frequency of certain genes and the characteristics they produce. A more technical way of expressing it is to say that racially different populations have different gene pools. The existence of distinguishable gene pools within a species implies some mechanism of at least partial isolation, which in most cases is geographical in nature. The biologist's definition usually includes an estimate of the percentage of cases, overall, that can be assigned definitely to a particular subspecies if the division into subspecies is to be considered valid. Although all biologists do not use the same figure, 80 percent is commonly given. Interestingly, this is of the same order of magnitude as the precision with which a forensic anthropologist can assign an unknown skull to the population from which it actually comes. The nature of the subspecies, or race, is such that it does not have clear boundaries, except where a geographical barrier at a particular point is truly impassable; thus, no matter what kind of classification one uses, it is never possible to assign every individual to one and only one race, and whole populations may be transitional in phenotype. In the old, simplistic days, it was assumed that the farther back in history you went, the less ambiguity there was about racial groups, and that the present state of the species resulted from historical churning up of groups that at one time were more physically distinct from one another than they now are. In some cases this may be true, in other cases probably not.

The idea of races as watertight categories has been promoted by attempts, for a variety of motives, to make legal distinctions between races. At the beginning of the civil rights movement in the United States, it was quite logically proposed that all designations of race in public records should be expunged. Unfortunately, in a very short time the designations were restored, again for the best kind of motives, so that now in many cities every child entering the first grade has to be assigned to a "race" so that we know which school to bus him to. It is also, of course, necessary to tag people with race designations in order to verify affirmative action.

To come down to practical matters, nowadays it is not sufficient to try to find out what is true in the world. In many circles it is considered neces-

sary to decide, independent of the truth, what to tell people. There have always been different kinds of truth. There is religious truth; you will go to hell if you do not believe it. There is political truth; society will go to hell if everybody does not believe it. The third kind of truth is real truth, which corresponds to some kind of external reality. The latter kind of truth is the only kind from which you can proceed by reasoned stages to a better understanding of the world around you, which may make it possible for you to change and hopefully improve that world. But religious and political truth give the promise of a quick fix. A popular political statement now is "There is no such thing as race." I wonder what people are going to think when they hear this. They would have to suppose that the speaker, if he were dropped by parachute into downtown Nairobi, would be unable to tell, by looking around him, whether he was in Nairobi or Stockholm. This could only damage his credibility. The visible differences between different populations of the world tell everyone that *there is something there*. We had better be prepared to explain what is there, and why, before we discuss what it does or does not mean.

Another problem with refusing to talk about race, except to deny its existence, is that young people, even quite small children, have a remarkable ability to sense when their elders have a hang-up about something. Their reaction is to drop the subject immediately and to go look for information elsewhere. In the days long past when sex, not race, was the great forbidden subject, people were warned that if they did not talk to their children about sex, they would go for information to "bad companions on the street corner." Now, when young people ask about "race" and see a look of panic on your face, they will simply fall back on folklore. That is not going to help matters. The alternative is to be prepared to discuss why different populations look different, which requires a knowledge of genetics and how a race or subspecies can be described, which requires a knowledge of biological variation in general, statistics, central tendencies, measures of variance, and the overlapping of distribution curves. Unfortunately, these are all things that our present precollege school systems usually ignore, which many students do not encounter even in college, and which some members of anthropology departments are not comfortable with either.

To look a little beyond the present to the upcoming future, the promotion of multiculturalism may complicate the picture. When minorities talk about themselves, we may find that their perception of their own identity involves physical and cultural elements bound up together as in the older idea of race. Then what will we tell them? Whatever we tell them, we may get involved in factionalism between traditionalists, modernists, and other elements *within* minority groups, further complicated by the generation gaps that every community has.

I, for one, propose to stick to biological reality, which is something solid to cling to amidst the changing winds of the political scene.