

# The Concept of Race<sup>1</sup>

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IN THIS paper I desire to examine the concepts of race as they are used with reference to man. I shall first deal with the use of this term by biologists and anthropologists, and then with its use by the man-on-the-street, the so-called layman—so-called, no doubt, from the lines in Sir Philip Sidney's sonnet:

I never drank of Aganippe well  
Nor ever did in shade of Tempe sit,  
And Muses scorn with vulgar brains to dwell;  
Poor layman I, for sacred rites unfit.

I shall endeavor to show that all those who continue to use the term "race" with reference to man, whether they be laymen or scientists, are "for sacred rites unfit." Once more, I shall, as irritatingly as the sound of a clanging door heard in the distance in a wind that will not be shut out, raise the question as to whether, with reference to man, it would not be better if the term "race" were altogether abandoned.

At the outset it should, perhaps, be made clear that I believe, with most biologists, that evolutionary factors, similar to those that have been operative in producing riation in other animal species, have also been operative in the human species—but with a significant added difference, namely, the consequences which have resulted from man's entry into that unique zone of adaptation in which he excels beyond all other creatures, namely *culture*, that is to say, the man-made part of the environment.

On the evidence it would seem clear that man's cultural activities have introduced elements into the processes of human riation which have so substantially modified the end-products that one can no longer equate the processes of riation in lower animals with those which have occurred in the evolution of man. The factors of mutation, natural selection, drift, isolation, have all been operative in the evolution of man. But so have such factors as ever-increasing degrees of mobility, hybridization, and social selection, and it is the effects of these and similar factors which, at least so it has always seemed to me, makes the employment of the term "race" inapplicable to most human populations as we find them today.

Of course there exist differences, but we want a term by which to describe the existence of these differences. We do not want a prejudiced term which injects meanings which are not there into the differences. We want a term which as nearly mirrors the conditions as a term can, not one which falsifies and obfuscates the issue.

Terminology is extremely important, and I think it will be generally agreed that it is rather more desirable to allow the conditions or facts to determine the meaning of the terms by which we shall refer to them, than to have pre-existing terms determine the manner in which they shall be perceived and ordered, for pre-existing terms constitute pre-existing meanings, and such meanings have a way of conditioning the manner in which what we look at shall be perceived. Each time the term "race" is used with reference to man, this is what, I think, is done.

The term "race" has a long and tortured history. We cannot enter upon that here. The present-day usage of the term in biological circles is pretty much the sense in which it was used in similar circles in the 19th century, namely, as a subdivision of a species the members of which resemble each other and differ from other members of the species in certain traits. In our own time valiant attempts have been made to pour new wine into the old bottles. The shape of the bottle, however, remains the same. The man-on-the-street uses the term in much the same way as it was used by his 19th century compeer. Here physical type, heredity, blood, culture, nation, personality, intelligence, and achievement are all stirred together to make the omelet which is the popular conception of "race." This is a particularly virulent term, the epidemiology of which is far better understood by the social scientist than by the biologist—who should, therefore, exercise a little more caution than he usually does when he delivers himself on the subject.

The difficulty with taking over old terms in working with problems to which they are thought to apply is that when this is done we may also take over some of the old limitations of the term, and this may affect our approach to the solution of those problems. For what the investigator calls "the problem of human races" is immediately circumscribed and delimited the moment he uses the word "races." For "race" implies something very definite to him, something which in itself constitutes a solution, and the point I would like to make is that far from the problem meaning something like a solution to him, it should, on the contrary, constitute itself in his mind as something more closely resembling what it is, namely, a problem requiring investigation.

Instead of saying to himself, as the true believer in "race" does, "Here is a population, let me see how it fits my criteria of 'race,'" I think it would be much more fruitful of results if he said to himself, instead, "Here is a population, let me go ahead and find out what it is like. What its internal likenesses and differences are, and how it resembles and how it differs from other populations. And then let me operationally describe what I have found," that is, in terms of the data themselves, and not with reference to the conditions demanded by any pre-existing term.

The chief objection to the term "race" with reference to man is that it takes for granted as solved problems which are far from being so and tends to close the mind to problems to which it should always remain open. If, with ritual fidelity, one goes on repeating long enough that "the Nordics" are a

race, or that "the Armenoids" are, or that "the Jews" are, or that races may be determined by their blood group gene frequencies, we have already determined what a "race" is, and it is not going to make the slightest difference whether one uses the old or the new wine, for we are back at the same old stand pouring it into the old bottles covered with the same patina of moss-like green.

It is the avoidance of this difficulty that T. H. Huxley had in mind when in 1865, he wrote, "I speak of 'persistent modifications' or 'stocks' rather than of 'varieties,' or 'races,' or 'species,' because each of these last well-known terms implies, on the part of its employer, a preconceived opinion touching one of those problems, the solution of which is the ultimate object of the science; and in regard to which, therefore, ethnologists are especially bound to keep their minds open and their judgements freely balanced" (1865:209-10).

It is something to reflect upon that, a century later, this point of view has still to be urged.

In the year 1900, the French anthropologist Joseph Deniker published his great book, simultaneously in French and in English, *The Races of Man*. But though the title has the word in it, he objected to the term "race" on much the same grounds as Huxley. The whole of his introduction is devoted to showing the difficulties involved in applying to man the terms of zoological nomenclature. He writes, "We have presented to us Arabs, Swiss, Australians, Bushmen, English, Siouan Indians, Negroes, etc., without knowing if each of these groups is on an equal footing from the point of view of classification."

"Do these real and palpable groupings represent unions of individuals which, in spite of some slight dissimilarities, are capable of forming what zoologists call 'species,' 'subspecies,' 'varieties,' in the case of wild animals, or 'races' in the case of domestic animals? One need not be a professional anthropologist to reply negatively to this question. They are *ethnic groups* formed by virtue of community of language, religion, social institutions, etc., which have the power of uniting human beings of one or several species, races, or varieties, and are by no means zoological species; they may include human beings of one or of many species, races, or varieties." "They are," he goes on to say, "theoretic types" (19:2-3).

When, in 1936, Julian Huxley and A. C. Haddon published their valuable book on "race," *We Europeans*, they took pains to underscore the fact that "the existence of . . . human sub-species is purely hypothetical. Nowhere does a human group now exist which corresponds closely to a systematic sub-species in animals, since various original sub-species have crossed repeatedly and constantly. For the existing populations, the non-committal term *ethnic group* should be used. . . . All that exists today is a number of arbitrary ethnic groups, intergrading into each other" (1936:106). And finally, "The essential reality of the existing situation . . . is not the hypothetical sub-species or races, but the *mixed ethnic groups*, which can never be genetically purified into their original components, or purged of the variability which they owe to past crossing. Most anthropological writings of the past, and many of the

present fail to take account of this fundamental fact" (1936:108). "If *race* is a scientific term," these authors point out, "it must have a genetic meaning" (1936:114).

Haddon, as an anthropologist, was familiar with Deniker's book, and it is possible that the noncommittal term "ethnic group" was remembered by him as one more appropriately meeting the requirements of the situation and thus came to be adopted by both authors in their book. It was from this source, that is from Huxley and Haddon, that I, in turn, adopted the term "ethnic group" in 1936 and have consistently continued to use it since that time. The claim is that the noncommittal general term "ethnic group" meets the realities of the situation head on, whereas the term "race" does not. Furthermore, it is claimed that "ethnic group" is a term of heuristic value. It raises questions, and doubts, leading to clarification and discovery. The term "race," since it takes for granted what requires to be demonstrated within its own limits, closes the mind on all that.

It is of interest to find that quite a number of biologists have, in recent years, independently raised objections to the continuing use of the term "race," even, in some cases, when it is applied to populations of lower animals. Thus, for example, W. T. Calman writes, "Terms such as 'geographical race,' 'form,' 'phase,' and so forth, may be useful in particular instances but are better not used until some measure of agreement is reached as to their precise meaning" (1949:14). Hans Kalmus writes, "A very important term which was originally used in systematics is 'race.' Nowadays, however, its use is avoided as far as possible in genetics" (1948:45). In a later work Kalmus writes, "It is customary to discuss the local varieties of humanity in terms of 'race.' However, it is unnecessary to use this greatly debased word, since it is easy to describe populations without it" (1958:30). G. S. Carter writes that the terms "'race,' 'variety,' and 'form' are used so loosely and in so many senses that it is advisable to avoid using them as infraspecific categories (1951:163). Ernst Hanhart objects to the use of the term "race" with reference to man since he holds that there are no "true races" among men (1953:545). Abercrombie, Hickman, and Johnson, in their *A Dictionary of Biology* (1951), while defining species and subspecies consistently, decline even a mention of the word "race" anywhere in their book. L. S. Penrose in an otherwise highly favorable review of Dunn and Dobzhansky's excellent *Heredity, Race and Society*, writes that he is unable "to see the necessity for the rather apologetic retention of the obsolete term 'race,' when what is meant is simply a given population differentiated by some social, geographical or genetical character, or . . . merely by a gene frequency peculiarity. The use of the almost mystical concept of race makes the presentation of the facts about the geographical and linguistic groups . . . unnecessarily complicated" (1952:252).

To see what Penrose means, and at the same time to make our criticism of their conception of "race," let us turn to Dunn and Dobzhansky's definition of race. They write, in the aforementioned work, "Races can be defined as populations which differ in the frequencies of some gene or genes" (1952:118). This

definition at once leads to the question: Why use the word "race" here when what is being done is precisely what should be done, namely, to describe populations in terms of their gene frequency differences? What, in point of fact, has the antiquated, mystical conception of "race" to do with this? The answer is: Nothing. Indeed, the very notion of "race" is antithetical to the study of population genetics, for the former traditionally deals with fixed clear-cut differences, and the latter with fluid or fluctuating differences. It seems to me an unrealistic procedure to maintain that this late in the day we can re-adapt the term "race" to mean something utterly different from what it has always most obfuscatingly and ambiguously meant.

We may congratulate ourselves, and in fact often do, that the chemists of the late 18th and early 19th centuries had the good sense to throw out the term "phlogiston" when they discovered that it corresponded to nothing in reality, instead of attempting to adapt it to fit the facts which it was not designed to describe, and of which, indeed, it impeded the discovery for several centuries. The psychologists of the second decade of this century had the good sense to do likewise with the term "instinct" when they discovered how, like a bunion upon the foot, it impeded the pilgrim's progress toward a sounder understanding of human drives (Bernard 1924).

It is simply not possible to redefine words with so longstanding a history of misuse as "race," and for this, among other cogent reasons, it is ill-advised. As Simpson has said, "There . . . is a sort of Gresham's Law for words; redefine them as we will, their worst or most extreme meaning is almost certain to remain current and to tend to drive out the meaning we prefer" (1953:268).

For this reason alone it would appear to me unwise to afford scientific sanction to a term which is so embarrassed by false meanings as is the term "race." There is the added objection that it is wholly redundant, and confusingly so, to distinguish as a "race" a population which happens to differ from other populations in the frequency of one or more genes. Why call such populations "races" when the operational definition of what they *are* is sharply and clearly stated in the words used to convey what we mean, namely, populations which differ from one another in particular frequencies of certain specified genes? Surely, to continue the use of the word "race" under such circumstances is to exemplify what A. E. Housman so aptly described as "calling in ambiguity of language to promote confusion of thought" (1933:31).

When populations differ from each other in the frequency of the sickle-cell gene or any other gene or genes, all that is necessary is to state the facts with reference to those populations. That is what those populations are in terms of gene frequencies. And those are the operative criteria which we can use as tools or concepts in giving an account of the realities of the situation—the actual operations.

I have thus far said nothing about the anthropological conception of "race" because this is to some extent yielding to genetic pressure, and because the future of what used to be called the study of "race" lies, in my view, largely in the direction of population genetics. The older anthropological conception of

"race" still occasionally lingers on, suggesting that it is perhaps beyond the reach both of scientific judgment and mortal malice. Insofar as the genetic approach to the subject is concerned, many anthropologists are, as it were, self-made men and only too obviously represent cases of unskilled labor. However, my feeling is that they should be praised for trying rather than blamed for failing. The new anthropology is on the right track.

Recently Garn and Coon (1955) have attempted to adapt the terms "geographic race," "local race," and "microgeographical race," for use in the human species. They define, for example, "A geographical race" as, "in its simplest terms, a collection of (race) populations having features in common, such as a high gene frequency for blood group B, and extending over a geographically definable area" (1955:997).

In this definition I think we can see, in high relief as it were, what is wrong with the continuing use of the term "race." The term "geographical race" immediately delimits the group of populations embraced by it from others, as if the so-called "geographical race" were a biological entity "racially" distinct from others. Such a group of populations is not "racially" distinct, but differs from others in the frequencies of certain of its genes. It was suggested by the UNESCO group of geneticists and physical anthropologists that such a group of populations be called a "major group" (Montagu 1951:173-82). This suggestion was made precisely in order to avoid such difficulties as are inherent in the term "geographical race." Since Garn and Coon themselves admit that "geographical races are to a large extent collections of convenience, useful more for pedagogic purposes than as units for empirical investigation" (1955:1000), it seems to me difficult to understand why they should have preferred this term to the one more closely fitting the situation, namely, "major groups." It is a real question whether spurious precision, even for pedagogical purposes, or as an "as if" fiction, is to be preferred to a frank acknowledgment, in the terms we use, of the difficulties involved. Garn and Coon are quite alive to the problem, but it may be questioned whether it contributes to the student's clearer understanding of that problem to use terms which not only do not fit the conditions, but which serve to contribute to making the student's mind a dependable instrument of imprecision, especially in view of the fact that a more appropriate term is available.

The principle of "squatter's rights" apparently applies to words as well as to property. When men make a heavy investment in words they are inclined to treat them as property, and even to become enslaved by them, the prisoners of their own vocabularies. High walls may not a prison make, but technical terms sometimes do. This, I would suggest, is another good reason for self-examination with regard to the use of the term "race."

Commenting on Garn's views on race, Dr. J. P. Garlick has remarked, "The use of 'race' as a taxonomic unit for man seems out of date, if not irrational. A hierarchy of geographical, local and micro-races is proposed, with acknowledgements to Rensch and Dobzhansky. But the criteria for their definition are

nowhere made clear, and in any case such a scheme could not do justice to the many independent fluctuations and frequency gradients shown by human polymorphic characters. Surely physical anthropology has outgrown such abstractions as 'Large Local Race. . . Alpine: the rounder-bodied, rounder-headed, predominantly darker peoples of the French mountains, across Switzerland, Austria, and to the shores of the Black Sea' " (1961:169-70).

Garn and Coon do not define "local races" but say of them that they "can be identified, not so much by average differences, but by their nearly complete isolation" (1955:997). In that case, as Dahlberg (1942) long ago suggested, why not call such populations "isolates"?

"Microgeographical races" also fail to receive definition, but are described as differing "only qualitatively from local races." In that case, why not use some term which suggests the difference?

In short, it is our opinion that taxonomies and terms should be designed to fit the facts, and not the facts forced into the procrustean rack of pre-determined categories. If we are to have references, whether terminological or taxonomical, to existing or extinct populations of man, let the conditions as we find them determine the character of our terms or taxonomies, and not the other way round.

Since what we are actually dealing with in human breeding populations are differences in the frequencies of certain genes, why not use a term which states just this, such as *genogroup*, and the various appropriate variants of this? If necessary, we could then speak of "geographic genogroups," "local genogroups," and "microgenogroups." A genogroup being defined as a breeding population which differs from other breeding populations of the species in the frequency of one or more genes. The term "genogroup" gets as near to a statement of the facts as a term can. The term "race" goes far beyond the facts and only serves to obscure them. A *geographic genogroup* would then be defined as a group of breeding populations characterized by a marked similarity of the frequencies of one or more genes.

A *local genogroup* would be one of the member populations of a geographic genogroup, and a *microgenogroup* a partially isolated population with one or more gene frequency differences serving to distinguish it from adjacent or nonadjacent local genogroups.

It is to be noted that nothing is said of a common heredity for similarity in gene frequencies in a geographic genogroup. The common heredity is usually implied, but I do not think it should be taken for granted, except within the local genogroups and the microgenogroups. One or more of the genogroups in a geographic genogroup may have acquired their frequencies for a given gene quite independently of the other local populations comprising the geographic genogroup. This is a possibility which is, perhaps, too often overlooked when comparisons are being made on the basis of gene frequencies between populations, whether geographic or not.

But this must suffice for my criticism of the usage of the term "race" by

biologists and anthropologists. I wish now to discuss, briefly, the disadvantages of the use of this term in popular usage, and the advantages of the general term "ethnic group."

The layman's conception of "race" is so confused and emotionally muddled that any attempt to modify it would seem to be met by the greatest obstacle of all, the term "race" itself. It is a trigger word. Utter it, and a whole series of emotionally conditioned responses follow. If we are to succeed in clarifying the minds of those who think in terms of "race" we must cease using the word, because by continuing to use it we sanction whatever meaning anyone chooses to bestow upon it, and because in the layman's mind the term refers to conditions which do not apply. There is no such thing as the kind of "race" in which the layman believes, namely, that there exists an indissoluble association between mental and physical characters which make individual members of certain "races" either inferior or superior to the members of certain other "races." The layman requires to have his thinking challenged on this subject. The term "ethnic group" serves as such a challenge to thought and as a stimulus to rethink the foundations of one's beliefs. The term "race" takes for granted what should be a matter for inquiry. And this is precisely the point that is raised when one uses the noncommittal "ethnic group." It encourages the passage from ignorant or confused certainty to thoughtful uncertainty. For the layman, as for others, the term "race" closes the door on understanding. The phrase "ethnic group" opens it, or at the very least, leaves it ajar.

In opposition to these views a number of objections have been expressed. Here are some of them. One does not change anything by changing names. It is an artful dodge. Why not meet the problem head-on? If the term has been badly defined in the past, why not redefine it? Re-education should be attempted by establishing the true meaning of "race," not by denying its existence. It suggests a certain blindness to the facts to deny that "races" exist in man. One cannot combat racism by enclosing the word in quotes. It is not the word that requires changing but people's ideas about it. It is a common failing to argue from the abuse of an idea to its total exclusion. It is quite as possible to feel "ethnic group prejudice" as it is to feel "race prejudice." One is not going to solve the race problem this way.

Such objections indicate that there has been a failure of communication, that the main point has been missed. The term "ethnic group" is not offered as a substitute for "race." On the contrary, the term "ethnic group" implies a fundamental difference in viewpoint from that which is implied in the term "race." It is not a question of changing names or of substitution, or an artful dodge, or the abandonment of a good term which has been abused. It is first and foremost an attempt to clarify the fact that the old term is unsound when applied to man, and should therefore not be used with reference to him. At the same time "ethnic group," being an intentionally vague and general term, is designed to make it clear that there is a problem to be solved, rather than to maintain the fiction that the problem has been solved. As a general term it leaves all question of definition open, referring specifically to human breeding



populations, the members of which are believed to exhibit certain physical or genetic likenesses. For all general purposes, an "ethnic group" may be defined as one of a number of breeding populations, which populations together comprise the species *Homo sapiens*, and which individually maintain their differences, physical or genetic and cultural, by means of isolating mechanisms such as geographic and social barriers.

The re-education of the layman should be taken seriously. For this reason I would suggest that those who advocate the redefinition of the term "race," rather than its replacement by a general term which more properly asks questions before it attempts definitions, would do well to acquaint themselves with the nature of the laymen as well as with the meaning of the phenomena to which they would apply a term which cannot possibly be redefined. If one desires to remove a prevailing erroneous conception and introduce a more correct one, one is more likely to be successful by introducing the new conception with a distinctively new term rather than by attempting redefinition of a term embarrassed by longstanding unsound usage. Professor Henry Sigerist has well said that "it is never sound to continue the use of terminology with which the minds of millions of people have been poisoned even when the old terms are given new meanings" (1951:101).

There is, apparently, a failure on the part of some students to understand that one of the greatest obstacles to the process of re-education would be the retention of the old term "race," a term which enshrines the errors it is designed to remove. The deep implicit meanings this term possesses for the majority of its users are such that they require immediate challenge whenever and by whomsoever the term "race" is used.

Whenever the term "race" is used, most people believe that something like an eternal verity has been uttered when, in fact, nothing more than evidence has been given that there are many echoes, but few voices. "Race" is a word so familiar that in using it the uncritical thinker is likely to take his own private meaning for it completely for granted, never thinking at any time to question so basic an instrument of the language as the word "race." On the other hand, when one uses the term "ethnic group," the question is immediately raised, "What does it mean? What does the user have in mind?" And this at once affords an opportunity to discuss the facts and explore the meaning and the falsities enshrined in the word "race," and to explain the problems involved and the facts of the genetic situation as we know them.

The term "ethnic group" is concerned with questions; the term "race" is concerned with answers, unsound answers, where for the most part there are only problems that require to be solved before any sound answers can be given.

It may be difficult for those who believe in what I. A. Richards has called "The Divine Right of Words" to accept the suggestion that a word such as "race," which has exercised so evil a tyranny over the minds of men, should be permanently dethroned from the vocabulary, but that constitutes all the more reason for trying, remembering that the meaning of a word is the action it produces.

## NOTES

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<sup>2</sup> The term "genogroup" was suggested to me by Sir Julian Huxley during a conversation on September 29, 1959.

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