HUMAN SKELETON

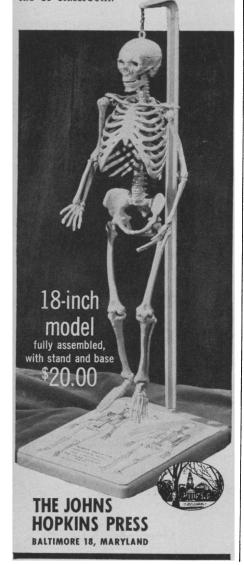
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by Leon Schlossberg

Instructor of Art as Applied to Medicine and Medical Illustrator, The Johns Hopkins University School of Medicine and The Johns Hopkins Hospital



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to assume that water from the ocean will ever be very cheap. Prices quoted for converting ocean water invariably cover only the conversion cost; administrative expense and the cost of installing and maintaining distribution systems represent up to three-fourths of the charge for delivering water to a consumer's tap.

RICHARD D. HOAK

Mellon Institute, Pittsburgh, Pennsylvania

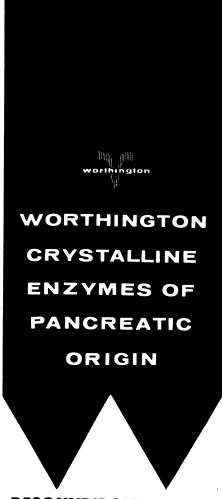
Racism and

"The Mankind Quarterly"

In The Mankind Quarterly there appeared, some time back, an article by Henry E. Garrett (1) entitled "Klineberg's chapter on race and psychology." It constitutes an unwarranted criticism of Klineberg's pamphlet Race and Psychology, published by UNESCO in 1952 (edition 2, in English, 1956). Garrett departs from the main theme to make various assertions about the biological, mental, and moral "inferiority" of Negroes and about the obvious degeneration of mixed-breed groups.

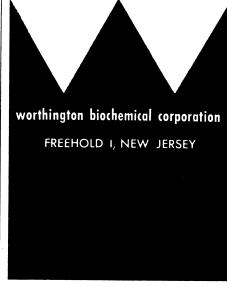
To quote from Garrett's review (1, p. 21): "The weak, disease-ridden population of modern Egypt offers dramatic evidence of the evil effects of a hybridization which has gone on for 5000 years. In Brazil, coastal Bahia with its negroid mixtures is primitive and backward as compared with the relatively advanced civilization of white southern Brazil. In the West Indies, the civilization is advanced almost exactly in the degree to which the populations are unmixed with the Negro. Haiti is an unhappy example of what the Negro can do when left to govern himself."

And from page 22 of the same article: "Klineberg states flatly that 'no racial factor has been discovered to be responsible' for crime. As usual, the fault lies in the social environment. Undoubtedly social factors are important, but it is hard to see how such influences can excuse the literally scandalous crime rate of the Negro in the United States. In 1954, the FBI reported (Dept. of Justice, Vol. 25, No. 2) the following ratios of Negro to white crimes: For murder, the Negro/white ratio is 16:1; for robbery, 13:1; for prostitution and vice, 16:1; for rape, 6:1. These ratios hold despite the fact that the Negro constitutes only 10% of the general population. It requires a degree of



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imagination not possessed by the reviewer to see no 'racial factor' in these figures" (italics mine).

These and many other statements of the same tenor which appeared in Garrett's review prompted the just reaction of several anthropologists. Biological racism, to judge from the first issue of *The Mankind Quarterly*, is being revived, with arguments as feeble as they are erroneous; the harmful effects of unscientific racism during the past decades are only too well known.

The reaction, as qualified as it is moderate, to Garrett's paper, may be read in Skerlj (2) and Comas (3).

Now the second issue of *The Mankind Quarterly* has appeared. The editorial therein, commenting on reaction to the magazine, includes the following:

"A few abusive letters have, however, also been received, although their numbers are negligible in comparison with those which have expressed pleasure at the production of *The Mankind Quarterly*. Whatever the status of the writers of these letters, they can be considered little better than cranks."

No names are given, but undoubtedly the comments are directed to those anthropologists who are not in accord with this resurgence of racism. Certainly the well-established scientific standing and personality of the two authors mentioned above (Skerlj and Comas) cannot logically be associated with the assertions in the editorial.

There is no question that in the field of science opposing points of view arise, because of differences in knowledge or background or because of adherence to schools based on different interpretations of the same data or on premises which cannot be harmonized, and so forth. However, this is not the case here. Racial differences exist. These differences should be and are being studied. A whole branch of anthropology is concerned with this study in an effort to determine what the differences are and how they may be used—to understand them from every possible angle (genetic, morphological, social, and so forth) but always within the framework of serious and scientific investigation. The 1952 UNESCO Statement on Race is quite clear on this point.

There is such a thing as freedom of research and freedom of teaching. What should not be allowed is what *The Mankind Quarterly* has set out to do—that is, to use science, or rather pseudoscience, to try to establish postulates of racial superiority or inferiority based on



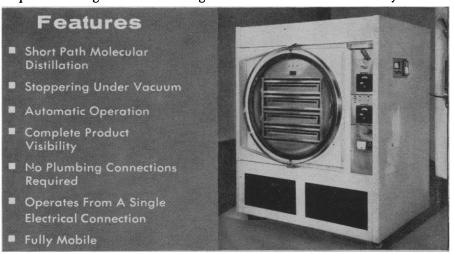
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8 DECEMBER 1961 1929

biological differences, when the traits may prove to be good or bad, advantageous or not, depending on the environment in which they exist and the purpose and end they serve (4).

I am now formally addressing Science, as the official voice of the American Association for the Advancement of Science, to ask that the Association urge the scientists who are accessible to it (I would suggest, among others, Medawar, Haldane, Simpson, Huxley, Neel, Wright, Dunn, Dobzhansky, and de Beer), United States citizens or not,

to take action, in the name of the Association, against this unwelcome, ill-founded, unbiological outgrowth of racism (5).

The purpose of this note is not to initiate a discussion of whether or not there are scientific bases for establishing racial differences of biological order which carry concepts of superiority or inferiority. What is known about adaptation, genetics, mutations, or selection today refutes the a priori views of those who, like Garrett, are intent on maintaining pseudoscientific racism. I

have no other purpose than to denounce this attitude of men of science who, with strange antiscientific spirit, distort facts, as Archbishop Wilberforce did a century ago, when he was so well exposed by Thomas Huxley in the memorable Oxford session on evolution.

It seems pertinent, therefore, to quote, however briefly, from a few scientists whose views contrast with Garrett's position.

Medawar (6) wrote: "Attempts at selection are, in fact, torn between conflicting interests: the characters we are hoping to establish and fix in the population-height or weight, perhaps, or, in the fruit-flies that are so often used for these experiments, bristlinessmay well find their most extreme expression in the true-breeding homozygous form; but that is not going to be much consolation if these homozygous forms are inferior in fitness, and are therefore at constant disadvantages compared with the forms that do not breed true. Artificial selection and natural selection pull opposite ways." That is, as Hulse (7) has clearly stated, the concept of race, to have any scientific utility, must be based on genotype rather than on phenotype.

I quote now from Caspari (8): "Heterozygotes frequently have adaptive values superior to either homozygote. This phenomenon of 'heterosis' makes it possible for two alleles to remain in a population, and in this way maintains the genetic variability and adaptability of population. Heterosis is frequently expressed in a lower phenotype variability of heterozygotes."

Penrose wrote:

"No genetical evidence has so far appeared to indicate that the human race is not all one species. In other words, unions between males and females from any different national geographical or cultural groups can all be fertile and their offspring normal. Matings of Europeans, Africans, Americans, Indians or Oceanics with all kinds of Asians are biologically successful, as indeed are crosses between these groups. . . . (9, p. 121).

"In the case of 'race mixture,' therefore, the result is just that we get a new or unusual combination of alleles at a number of different loci; there is no theoretical reason why such new combination should be disadvantageous. . . . (9, pp. 121-122).

"It is clear from the trend in recent decades that, in future, more and more mixtures of the older, isolated, human groups are to be expected. The result



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will be an increase of variety within populations for many generations, in the sense that many new combinations of genes will be produced. On the whole this can be regarded as a favourable development because it will increase the number of man's possible inborn reactions, whether physical or psychological, to his rapidly changing civilized environment" (9, p. 122).

Finally, from the 1951 UNESCO Statement on Race, signed by 14 eminent geneticists and anthropologists, I quote the following:

"Furthermore, so far as it has been possible to analyze them, the differences in physical structure which distinguish one major group from another give no support to popular notions of any general 'superiority' or 'inferiority' which are sometimes implied in referring to these groups" (p. 12).

"Studies within a single race have shown that both innate capacity and environmental opportunity determine the results of tests of intelligence and temperament, though their relative importance is disputed" (p. 13).

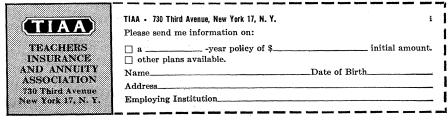
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Should all the scientists, then, who subscribed to the 1951 Statement on Race, and also Skerli, Comas, Medawar, Simpson, Penrose, Caspari, and others, be considered "little better than cranks"?

Indeed, The Mankind Quarterly's attitude is so harmful that I hope the AAAS takes some action.

Note added in proof: While this letter was in press, the July-September 1961 issue of The Mankind Quarterly (2, No. 1) has appeared. In it the same extreme racial trend is followed. Among other papers, it contains a review by A. James Gregor of Comas's Racial Myths-a review which is full of totally unjustified personal attacks and insinuations of a political type, without basis and completely outside the framework of the problem under discussion.

Santiago Genoves

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References and Notes

- References and Notes

 1. H. E. Garrett, The Mankind Quarterly 1, No. 1, 15 (1960).

 2. B. Skerlj, Man 60, 172 (1960).

 3. J. Comas, Current Anthropol. 2, 303 (1961).

 4. Another article by Garrett, "The equalitarian dogma," appeared in the April 1961 issue of The Mankind Quarterly. It was reproduced in Perspectives in Biology and Medicine [4, 480 (1961] and in the Negro Digest [12, 38 (1961)]. It has been unfavorably commented on by M. J. Herskovits in the Negro Digest [12, 43 (1961)], and by G. A. Harrison in Man [61, 189 (1961)].

 5. I cite two examples of action taken in the past. In 1951 the American Association of Physical Anthropologists and some 20 other learned societies formally condemned a measure adopted by the board of directors of the University of California as "violating the rights of academic freedom and tenure." In 1955 the
- of academic freedom and tenure." In 1955 the same association declined to participate in the
- meeting of the AAAS in Atlanta, Georgia, because of racial discrimination in that state.

 P. B. Medawar, The Future of Man: The Reith Lectures, 1959 (Methuen, London,
- 1960), p. 54. F. S. Hulse, Human Biol. 32, 63 (1960). E. Caspari, "Genetic basis of behavior," in Behavior and Evolution, A. Roe and G. G. Simpson, Eds. (Yale Univ. Press, New Haven,
- Conn., 1958), pp. 103-127. L. S. Penrose, Outline of Human Genetics (Heineman, London, 1959).

The Scientist and World Affairs

The inference to be drawn from Florence Moog's comment on the present state of affairs [Science 134, 797 (1961)] is that the world is no longer our business, as scientists, and we had best retreat to our cracked and yellowed ivory towers and leave the affairs of the world to those who are presumed to know more about them. I agree that we are perilously close now to "the flaming ramparts of the world, when the thundering regions of the sky will fall