

Science on Race

While old racial concepts give way to new ones, scholars still debate whether race even exists.

by PATRICIA MC BROOM

For eight hours last week, 20 scientists alternately denied and upheld the concept of human races. When all had been said, Dr. Theodosius Dobzhansky, professor of genetics at Rockefeller University, took the podium and in measured tones offered his opinion of the symposium: "I am known as a compromiser," he said, "but the conflicting opinions tonight are beyond my ability to compromise."

"To deny the existence of racial differences is futile," he told the American Association for the Advancement of Science panel on "the Utility of the Construct of Race."

If races did not exist they would have to be invented in order to deal with the "wild variety" of three billion people, said Dr. Dobzhansky.

At the same time, he noted, there is "no careful, objective definition" of race that permits grouping people into discrete categories. If such separation existed, mankind would be composed of distinct species, not different races.

Dr. Dobzhansky said the number of races the human species can be divided into is a completely arbitrary matter. It could be three, four, five or 35.

Brazil, in fact, recognizes 40. A current textbook lists five while another acknowledges 65.

Herein lies the scientific controversy: Because the races overlap, creating a continuum, and because that continuum can be broken into as many parts as one wishes, some scholars are maintaining that races do not exist at all.

Mankind is a single continuous species, said Dr. Morton H. Fried, an anthropologist from Columbia University. So loose are the divisions below the species level, that it is impossible, he said, to sensibly relate race to any other variable. Studies which attempt links between race and such things as intelligence and adaptability are "destructive and antisocial," he charged. They cannot even define accurately what they wish to study, he said.

Dr. Fried called for an end to the "pseudoscientific investigation of race."

Dr. Fried's comments served to point out the miasma that often distorts racial studies in the United States. Several speakers acknowledged that the American concept of race is a product of "hyperconflict." It is so loaded with

emotional connotations that many scientists have shied away from the subject altogether, fearing that their work, particularly work on genetics, would be misinterpreted and misused.

Also any attempt to study races in the United States encounters environmental inequality which makes basic racial distinctions virtually impossible.

To some scientists such distinctions are mythical in any case. Heredity and environment interact so completely that the two are forever inseparable: "Any work that tries to separate them is scientifically worthless," said Dr. Herbert G. Birch of the Albert Einstein College of Medicine.

In this view, a concept of race that rests on genes alone is invalid as a basis for study.

Dr. Birch recalled an experiment in which rats were supposedly bred for brightness and dullness. The trouble was they were selectively bred according to how well they ran a particular maze. When the maze—the rat's environment—was changed to highlight visual cues, the dull rats became bright and the bright ones, dull. Applied to humans, the rat test simply means that many tests of intelligence do not ask the right questions. Nor do human environments always ask the right questions; change the conditions and very subtle differences, perhaps even racial differences, in sight, hearing and touch, make large differences in the ability to learn and achieve.

Two symposium members, however, did venture out on a racial limb. Substituting the word "populations" for "races," Drs. Benson E. Ginsberg of the University of Chicago and William S. Laughlin of the University of Wisconsin said that the differences between human groups are more than skin deep.

The human species is not genetically uniform, either in physical appearance, physiology or behavior and was probably less so in the past than it is today, said geneticist Ginsberg.

Human populations have been separated by distance, geography, language, religion and other cultural factors—all of which helped to determine which human traits were valued and therefore which genes were multiplied.

"It would be nothing short of remarkable if we were to find that the

Ainu (Japan) and the Zulu (Africa) were alike in genetic capacities and therefore in behavioral characteristics."

Drs. Ginsberg and Laughlin contended that the different populations of the earth are not in fact equal genetically, but all have equal potential. Every reasonably large human group possesses the full spectrum of human genes, in so far as talent and behavior are concerned, they said.

The two men estimated that any group of 30,000 people on earth is genetically capable of recreating every accomplishment of mankind, without genetic crossing from any other group.

The number, 30,000, is a guess based on the achievements of past civilizations such as the Mayan which, while isolated from outside genes, generated mathematics, astronomy, writing, architecture and the concept of zero—all from a base of primitive hunters.

Genetic potential was probably pulled out by population density, said Dr. Laughlin. Density allowed the gifted to seek each other out, marry selectively, and thus accentuate the genes responsible for memory, intellect and talent.

While "positive" selection took place, "negative" selection did not. There was no attempt to breed out talent, simply a failure to exploit potential. And genetic potential does not atrophy from disuse, said Dr. Ginsberg, "The deuces remain in the deck."

Recognizing these genetic differences between populations "offers the major scientific hope for upgrading our biological condition," Dr. Ginsberg told the symposium. He estimated that the full human potential can be pulled out of any population within seven to ten generations. This will occur naturally, through the tendency of gifted people to marry each other, once society offers full educational opportunity.

Since the Ginsberg-Laughlin thesis was treated with near total silence throughout, it is questionable whether other panelists considered this construct of race to be a "major scientific hope" for upgrading the human species.

But some areas of agreement emerged, the most important one being that no superiority or inferiority can be attributed to race and that the word "race," no longer useful, should be replaced with "population."