

all contemporary racial groups subsequently evolved from this common ancestry. Many competent scientists will honestly disagree with the main thesis of *The Origin of Races*, and Dr Coon frankly admits his ignorance of many parts of the entire story. His unassailable reputation as a scholar, however, carries with it the assurance that this new concept of human evolution cannot be ridiculed or ignored, but that it constitutes a challenge which must be confirmed or disproven.

The genetic implications in *The Origin of Races* are of considerable importance. The ability to evolve cultures is the one outstanding characteristic which sets *Homo sapiens* apart from all other hominoids. It is inconceivable that it could have resulted from a single mutation. It must have involved a series of them, over considerable periods of time. The threshold from *erectus* to *sapiens* is blurred, and the change is essentially a quantitative one. The concept of parallel evolution is not new, and numerous examples are on record. Mutations are recurrent, and the belief that such occurrences are responsible for parallel changes in different races and at different times is not inconsistent with genetic principles. But it is highly inconsistent with both logic and observation to assume that exactly the same numbers and kinds of mutations occurred in the evolution of capacity for cultural development in the five different populations. The obvious conclusion is that although this capacity is possessed by all the races of mankind, it surely varies in kind and amount from one to another.

Perhaps the most serious objection to Coon's conclusion, from a genetic standpoint, is that it calls for remarkable stability in chromosome numbers and homologies in five geographic races over a period of 500,000 years. This is most unusual but, in the opinion of this reviewer, it does not constitute an insurmountable obstacle. There is considerable variation in chromosome stability and plasticity from one class of organisms to another. For example, most interspecific hybrids are partially or completely sterile. Intergeneric hybrids have been produced in a few instances, notably in birds. Perfectly healthy pheasants have been raised, each of whose grandparents belonged to a different species. This necessitated a high degree of homology between chromosomes of the species involved in the grandparental crosses. It is not unreasonable to assume that high stability may have been a characteristic of the chromosomes of *Homo erectus* and *Homo sapiens* throughout a span of half a million years.

*The Origin of Races* is a new milestone in our knowledge of the evolution of man. It should be on the book shelves of all scientists, as well as of others who are interested in the history of mankind. It is undoubtedly being viewed with serious concern by the advocates of egalitarian nonsense.

DAVID C. RIFE.

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In this volume, Professor Coon, a former President of the American Association of Physical Anthropologists, and one of the most distinguished living men in that field, launches a devastating, coordinated assault on the notion that race is "merely a paint job" or, as the ineffable Ashley Montagu once put it, "a modern myth."

Coon has assembled massive evidence from such varied fields as zoogeography, genetics, physiology, anatomy, comparative dentition, linguistics and archaeology on the descent of man and the origin of races. He has presented the evidence of the 300-odd bone-bearing sites which have yielded evidence of the presence of fossil man.

Coon agrees with the late Franz Weidenreich, to whom this book is dedicated, in positing *presapiens* rraciation. Races, in short, are allopatric

subspecies, originating not later than the *Homo erectus* phase of human evolution. Coon writes:

All the evidence available from comparative ethnology, linguistics and prehistory archaeology, indicates a long separation of the principal races of man. This is contrary to the current idea that *Homo sapiens* arose in Europe or western Asia about 35,000 B.C., fully formed as from the brow of Zeus, and spread over the world at that time, while the archaic species of men who had preceded him became conveniently extinct. Actually, the *homines sapientes* in question were morphologically the same as living Europeans. To derive an Australian aborigine or a Congo pygmy from European ancestors of modern type would be biologically impossible.

Coon divides mankind into five major racial subspecies: Caucasoid, Mongoloid, Australoid, Congoid and Capoid. The Mongoloids, due to their more isolated habitat, are more divergent and specialized than the rest and, since *Sinanthropus* of about 360,000 years ago, show consistent racial form.

In the Pleistocene, the Australoids occupied the southeastern segment of the Oriental Faunal Region of Sclater and Wallace, according to Coon, whence they migrated to cover the Australian area, leaving behind Australoid enclaves of living primitives. The Congoids—modern Negroes—occupied all of Africa south of the Sahara in the Pleistocene, but, by the early Post-Pleistocene, were compressed into tropical West Africa by the expansion of other racial elements.

Of the expanding and viable races, the Mongoloids erupted from southern and central China to occupy their present Asian habitat and all of the Americas before its European settlement. The other inheritors of the earth, the Caucasoids, are seen by Coon as having occupied Western and Central Europe and the Middle East during the Pleistocene.

The most enigmatic racial element is the Capoids: primarily Bushmen and Hottentots. Coon regards this group as a major race, which occupied North Africa, but was driven southward toward the Cape in the late Pleistocene by the more capable Caucasoids. The process of dwarfing and presumably the tendency toward pedomorphism got under way not later than 9000 years ago.

Coon gives a masterly analysis of the forging of race by evolutionary interaction between man and physical habitat. The zoological laws of Allen, Bergmann, Gloger and Rensch are supplemented by more recent data on the relationship of racial survival to cold-and-heat tolerance, high altitudes and stress and crowding.

Excessive social pressure and compression among animals can stimulate the hypothalamus to send messages which set off a series of glandular commands to reduce sperm production, ovulation and growth, leading to dwarfing, lowered fertility and lactation, altered sex ratios and higher morbidity and mortality. Death in animals through such sequences is associated with high cholesterol levels. Coon suggests that in man these processes are selective for stress-resistant strains with higher intelligence. Among animals, neuro-endocrinological adjustment and competition tend to keep populations within definite limits even in the absence of the Malthusian factor.

Of the five major races, two, the Australoids and Capoids, are vestigial. They are evolutionary failures, represented by the remnants of fossil peoples in remote enclaves. The Negro has shown a high degree of evolutionary adaptation to manual work in the Tropics, but, in all articulated societies, he sinks to the bottom of the social pyramid. The Caucasoids and Mongoloids, the only two of the five races which evolved in response to temperate-to-cold environments, are the sole successful

subspecies of *Homo sapiens* and are, and always have been, the creators and carriers of civilizations.

Professor Coon avoids the emotion-laden area of comparative racial intelligence, though he may perhaps enter it in a sequel volume tentatively entitled *The Living Races of the World*. He does point out, however, that races differ in the pace of their evolutionary development and in the times when they cross major evolutionary watersheds. Thus, he finds that the earliest Caucasoid *Homo sapiens*—Swanscombe and Steinheim—are about 300,000 to 350,000 years old; our earliest Mongoloid *sapiens* specimen is 100,000 to 150,000 years old, whereas within the Congoid race there are no known *sapiens* bones as early as 10,000 years ago.

Similarly with fire, a means of keeping warm, cooking food, warding off predators and providing a milieu that enables man to rise from baboon to specifically human society. Fire was known to the Mongoloid *Homo erectus* 360,000 years ago; to Caucasoid *sapiens* 300,000 years ago. By contrast, fire did not reach Negro Africa until 40,000 years ago, and the meticulous investigations of Louis Leakey and Desmond Clark confirm that virtually the entire hand-ax period in East Africa was fireless.

"It is a fair inference," Coon asserts, ". . . that the [human] subspecies which crossed the evolutionary threshold into the category of *Homo sapiens* the earliest have evolved the most, and that the obvious correlation between the length of time a subspecies has been in the *sapiens* stage and the levels of civilization attained by some of the populations may be related phenomena."

This is a work of erudition, clear logic and impressive accumulation of evidence. In an era less characterized by intellectually dishonest social scientists it would probably mark a turning point from the propagandistically motivated denial of the significance of race to a more realistic attitude. Whether intellectual integrity can triumph over a vested majority, which prostitutes science to egalitarian and socialistic preconceptions, however, is a very different question.

NATHANIEL WEYL.

## MAN IN PROCESS

By Ashley Montagu. Mentor, New York, 1961. Pp. 278. Price \$0.75.

If, in recent times, an audible sigh has been heard to escape the academic community, it is because Professor Ashley Montagu has delivered himself of another volume of collected writings. Like almost all his previously published works, these essays are devoted to dispelling the following "myths": (1) that there is any evidence that human races differ in their natural psychological and temperamental endowments; (2) that there is evidence that the blood of the various races of man differs in any substantial way; (3) that there is any good reason for retaining, in our scientific lexicons, the word "race." Attending this purgation is the insistence on a positive thesis: that man is by nature "good," "cooperative," "friendly," "loving," "kind"—in effect, a jolly good fellow.

Unfortunately any assessment of his arguments is beset by the difficulty that Professor Montagu has rarely been known to say what he means or to mean what he says. When Professor Montagu makes the following pronouncements: "In spite of innumerable investigations calculated to discover whether there exist any innate mental differences between the ethnic groups of man, all the evidence indicates that there are no such significant differences" (p. 35), and "the evidence indicates that such mental and cultural differences as are observed to exist between different groups