

# Book Reviews

## THE DESCENT OF MAN

By Elaine Morgan. Stein and Day, New York, 1972. Pp. 258.

By now, most well-informed people know that the dolphin — and such related cetaceans as the killer whale — may be the only living creatures with brains rivalling that of man.

Elaine Morgan, an Oxford-trained biologist, explores the implications of the challenging hypothesis that man belongs to the small and select group of animals which forsook the land for the sea during the Pliocene. (She points out that this theory was first advanced in 1960 by Professor Sir Alister Hardy, F.R.S., in an article in *The New Scientist* and later over the B.B.C.)

On the African continent, the Pliocene was a 12-million-year-long era of intense desiccation, in which the plains turned into a howling wilderness of parched forest and swirling dust storms. In seeming support of this theory, we have plenty of ape fossils from the preceding Miocene, but in all of Africa no Pliocene fossil beds have yet yielded the remains of apes or prehomnids.

Mrs Morgan's theory is that our brachiating ape ancestors were driven by drought from the refuge of the trees. Most of those who became plains animals fell victim to fiercer and swifter predators. A few pushed out from the incipient interior desert to the shorelines of surrounding seas, where they survived as wading and swimming pelagic mammals.

What is the evidence in favor of this strange theory? First, *Homo sapiens* has lost almost all his fur, characteristic of such aquatic mammals as whales, manatees and hippos, and such putatively formerly aquatic animals as the elephant. Second, man's sense of smell has atrophied in favor of acute bifocal vision. Third, the shift from quadruped to biped stance with accompanying structural changes would have merely slowed down a land animal, but increased range of vision and involved few problems of weight-stress in a pelagic one. Fourth, the protected position of the vagina is unique among land animals, but common among marine ones. Fifth, human breast development facilitates suckling while mother and infant are floating on the water. Such sirenians as dugongs and manatees uniquely share this trait. And, of course, *Homo sapiens* can weep salt tears — a vestigial reminder, Mrs Morgan surmises, of human kinship with the birds and animals which hunt in the sea. These need and have a mechanism to reduce the saline content of their blood to normal after accidentally swallowing sea water.

Proceeding from these bold observations, Mrs Morgan evolves an original, somewhat gynocentric system of human evolution. She tends to ridicule Robert Ardrey's reliance on observations of the aggressive and militaristic baboon troop in seeking a key to the origins of human society, since the baboon is not even an ape. What she calls "the Tarzan school" of anthropologists has ignored the gentle gorilla in its search for animal clues to human behavior, not to mention the chimpanzee social order, in which troop leadership is attained mainly by attention-getting gestures and clowning. (Our emotional kinship with the chimpanzee may explain why Bob Hope is one of the richest men on earth!)

Elaine Morgan denies the Ardrey version of the Cain and Abel story. This is the theory that little *Australopithecus africanus* came down from the trees to become "an ape with the capacity for murder" (as Ardrey dramatically puts it) and exterminated his larger and more placid

vegetarian cousin, *Australopithecus robustus*. Thus, we allegedly descend exclusively from the killer apes. Mrs Morgan points out that it is improbable that Africanus suddenly became a carnivore, since all apes and, for that matter, all primitive human societies, except the Eskimo, are both vegetarian and meat-eaters. Moreover, if Africanus killed off the Robustus males, he probably mated with the Robustus females. If so, to claim Africanus as man's sole ancestor would be no more logical than to assert that the British are not Anglo-Saxons, but Normans.

In Mrs Morgan's gynocentric system, pair-bonding does not arise from man's needs as a hunter. She observes that the mother-child relationship is the basic tie throughout the animal kingdom. Under conditions of prolonged human infancy and cave domicile, families emerged around the protection of stored food, hearth, and finally females free from intruder males.

From the standpoint of the emergence of races, *The Descent of Woman* suggests new insights. The desiccation of Africa during the Pliocene would have proceeded from the central hinterland and gradually extended toward coastal areas in which the nearness of the oceans acted as a brake on desert-formation. Thus, one can conceive of man's distressed primate ancestors emigrating radially, that is to say, retreating from the continental heartland toward the oceans as the spokes of a wheel diverge from its hub. The territorial isolation of these aquatic and semi-aquatic prehuman populations from each other would then have been immense. Races would presumably have been formed during this period. The self-evident implications are that Weidenreich and Coon were correct in positing riation prior to the emergence of *Homo sapiens* as a species and that the races of man differentiated from each other millions of years ago during the Pliocene. However, it does not necessarily follow that equally large differences existed in the nature of these pelagic habitats and hence in their impact on natural selection. On the contrary, the fact that all human races are believed to be interfertile (including even Yeti-Caucasian crosses) suggests the opposite.

The jaunty style and somewhat polemic tone of Mrs Morgan's book may persuade some readers that it is to be taken lightly. If so, they are mistaken.

NATHANIEL WEYL

## MORE ETHNOLOGICAL ELEMENTS OF AFRICA

By R. Gayre of Gayre. The Armorial, Edinburgh, 1972. Pp. 149. Price £3.00.

The appearance of this slender, but insight-rich, volume again emphasises the significance of Dr Gayre's contributions to our knowledge of the racial evolution of Africa, the ethnic composition of its present populations, and the implications of ethnopsychic difference for viable government in the area.

The collection opens with three short and intriguing papers on the Lemba, the Venda and the Rozwi in which Dr Gayre advances the daring hypothesis that all are significantly imbued with Caucasoid genes and that the Lemba in particular probably descend in large part from Judaized Arabs. Commenting on Lemba observance of the Mosaic dietary code, Dr Gayre observes:

These similarities cannot be just a matter of chance. To reject pork and to kill in the kosher manner by bleeding would alone be a