

APES MORE EVOLVED THAN MAN, SAYS WASHINGTON SCIENTIST

The bodies of apes and monkeys are more evolved, that is, more highly specialized physically in many respects than the human body. Man has specialized on the production of a large and useful brain, and has allowed his body to remain in a relatively primitive state. These ideas, startlingly opposed to current notions, are put forth by Dr. Adolph H. Schultz, of the Carnegie Institution, in the Journal of the Washington Academy of Sciences.

In his review of the many resemblances between man and the apes, Dr. Schultz has made use of features that develop both before birth and during growth to adult stature. One of the outstanding examples of greater physical specialization in the lower animals is the disappearance of the thumb in certain species of monkeys, which goes along with the much-noticed lengthening of the arms in the direction of special adaptation for climbing. All that is left of the thumb in these monkeys is a mere stump or rudiment, though occasionally a specimen appears in which a longer thumb is evident.

Even in the matter of getting rid of a tail, certain of the apes have out-evolved man, says Dr. Schultz, for they have less of a rudimentary tail than man himself. And during the time before birth, man's tail is well-developed externally reaching a length nearly one-fifth that of his body. Sometimes the external tail in man persists after birth. A record case of the kind is cited with a picture by Prof. Schultz, who shows a picture of a twelve-year-old boy from Indo-China with a tail nine inches long.

In the position of the eyes also the monkeys have gone farther from the primitive animal state than man has. In the lower animals the eyes are far apart, being indeed in many forms on quite opposite sides of the head. In the pre-natal development of both man and monkeys the eyes start far apart, and become relatively closer together as growth proceeds. But in man they remain noticeably farther apart than they do in many of the simians. In the development of the outer ear, however, man occupies an intermediate position; for while the ear of the chimpanzee is enormous compared with that of man, the gorilla's ear is just about of human size, and the ear of the orang is considerably smaller.

Another little-known feature described by Prof. Schultz is the so-called carpal hillock, a little fleshy projection on the wrist, crowned with a few long hairs or bristles. In some of the lower animals this is well developed and seems to serve as an organ of touch, but in most monkeys it is absent. However, in the fetuses of monkeys it is present, hairs and all, and once in a while it crops up in an adult monkey. In the human being before birth the same hillock appears and later vanishes, but it never has the hairs.

Prof. Schultz sums up his paper as follows: "The outstanding conclusions from these embryological studies can be summarized by stating that the many striking resemblances between man, ape, and monkey in early development, and their frequently closely corresponding growth changes can only be understood by assuming one common origin for all primates, including man, from which they inherited the tendency for the same ontogenetic processes which have become modified in many instances through a variety of later specializations. Furthermore, there exists ample evidence for the conclusion that the human body is in many points less specialized and hence has remained in some parts phylogenetically, as well as ontogenetically, more original and 'primitive' than have various other primates."
