

specimens in Humphry's table was 100, and a similar mean was obtained by Flower. In the three gorillas measured by Humphry the mean index was only 77·7; the mean of the three gorillas in Mr. St. George Mivart's tables¹ was 81·6, whilst Flower puts this index in the gorilla at 80. The index in the chimpanzee and orang is therefore very high, and expresses that the forearm closely approximates in length to the upper arm, so that they may be described as hyperdolichokerkic. In the gorilla, on the other hand, there is a much greater disproportion between the length of the radius and humerus, for the mean index is about 80. In this respect the Andaman Islanders and Fuegians surpass the gorilla in the relative length of the forearm to the upper arm, for the radio-humeral index in them averages between 80 and 82, so that in the proportion of forearm to upper arm they are probably the most ape-like of the races of men. Europeans again are at the opposite end of the series, for the mean radio-humeral index in them did not reach 75, whilst the Australians, Kaffirs, Negros, &c., form an intermediate series.

The tibio-femoral index in my three chimpanzees ranged from 81 to 83·5, and the mean was 82·4. Professor Humphry's four specimens gave a mean 80·6. In my single orang this index was 86, and the mean of Humphry's two specimens was 86·8. His three gorillas had a mean 81, and Mr. Mivart's specimens had the same index. In Europeans this index is about 82, whilst in the Australians, Negros, Andaman Islanders, and Fuegians it was higher, and ranged from 83 to 85 or 86, according to the mode of measurement adopted. The difference therefore in the relative length of the tibia to the femur in man, as compared with the chimpanzee and gorilla, is not very marked. In the orang, however, the index rises considerably, owing to the greater proportional length of the tibia, and it is also to be noted that in the lower races of men there is a rise in this index as compared with Europeans, so that as regards the proportion of leg to thigh they are more in accordance with what is found in the orang.

The femoro-humeral index in my three chimpanzees ranged from 94 to 100·3, with a mean of 97·7, so that the humerus sometimes exceeded the femur in length. The mean index computed from Humphry's measurements of four chimpanzees was 98, and Flower places it at about 100. In the orang the humerus is much longer than the femur, and in my specimen the femoro-humeral index was 133·4, the mean of Humphry's two specimens was 132, and Flower gives it as 130. In the three gorillas measured by Humphry the humerus was longer than the femur, though not in the same proportion as in the orang, and the mean index was 119; in Mivart's specimens the mean index was also 119, and in Flower's 120. There is thus a considerable range of difference in the relative proportions of femur to humerus in the great Anthropoid apes, for, whilst in the orang and gorilla the humerus considerably exceeds the femur in length, in the chimpanzee these bones are almost equal and as a rule the femur is somewhat longer than the humerus.

¹ On the Appendicular Skeleton of the Primates, *Trans. Roy. Soc. Lond.*, 1867.