

THURSDAY, APRIL 20, 1871

APE RESEMBLANCES TO MAN

THE Zoological Society can hardly fail to derive decided material advantage from the publication of Mr. Darwin's "Descent of Man." It has been said that already there is a perceptible increase in the visitors to the monkey-house, though an early spring has no doubt co-operated with scientific zeal in the promotion of pilgrimages to the Regent's Park, undertaken in the interest of a more than Chinese worship of ancestors. These visits would, perhaps, be considerably increased if it were very widely known that a fine specimen of a closely-related structural ally was there to be seen and heard, and one the resemblance of which to us has, I venture to think, not been generally appreciated sufficiently. I allude to the fine specimen of the Hoolock Gibbon which has been some time at the Gardens, and which appears to rejoice in good health, good temper, and good voice.

Differing so greatly and fundamentally as I do from Mr. Darwin, it is with sincere pleasure that I give my testimony to the correctness of his appreciation of the value and bearing of man's bodily structure on his zoological position. There can, I think, be no doubt that his frame is so closely related to that of the anthropoid division of the Old World apes, that to accord to it the rank of a family is to go to the extreme of maintainable distinction. Descending, however, to smaller divisions, it is generally taken for granted that the palm of resemblance to ourselves can be disputed by the Orang (*Simia*), or by the African genus *Troglodytes* (which includes both the Gorilla and Chimpanzee) alone. The third member, however, of the anthropoid Simian Graces—the genus *Hylobates* (long-armed apes or Gibbons)—has claims to advance for an award in its favour which I am disposed to consider not unworthy of consideration. Assuming, for argument's sake, the truth of Mr. Darwin's hypothesis that man's body was derived by natural generation from some form of ape, it may, I think, possibly be the case that we have in the existing Gibbon the representative of an ancestor more in the direct line than either the Orang or the African forms, and this in spite of the many points in which the Gibbon recedes yet further from human structure. For though it is indisputable that we can enumerate a greater number of points of resemblance between man and *Simia* or *Troglodytes* than between man and the Gibbons, while it would be easy to draw out a catalogue of details by which the last-named apes differ more from man than do *Simia* and *Troglodytes*, nevertheless there are certain points in which the Gibbon genus resembles *Homo* which are striking and perhaps significant. Although the enormous length of the arms disguises the resemblance, yet the proportions of the Gibbon's frame (as in some respects long ago pointed out by Professor Huxley) are singularly human. The length of the leg as compared with the trunk, and the form and proportion of the bony thorax, are points which may be mentioned. Again, a Gibbon (the Siamang) is the only ape which possesses that striking human feature—a true chin. The slight prominence of the nose too is also very

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remarkable, a point which has not escaped the notice of Mr. Darwin, and is to be seen in the living specimen here referred to. Again, the power, quality, and compass of the voice are qualities justly dwelt upon by the last-named author; and, finally, the gentle, yet quick and active nature of the Gibbon is eminently noteworthy.

On the other hand the Orang is a very specially organised, quite aberrant beast (as I have elsewhere endeavoured to show), and the brain in the genus *Troglodytes* is considered by Gratiolet to indicate altogether other relationships. Now it is not impossible, on the hypothesis assumed, that the Orang, Gorilla, and Chimpanzee may be types which have really diverged further from that anthropoid root-form which most nearly resembled man than has the Gibbon, and that adaptations to conditions may have superinduced many of those human resemblances which at present characterise them. It seems difficult, certainly, to apply this view to some details, such *e.g.* as the vaginal process of the temporal bone on the basis cranii. On the other hand, it is not in the highest but in one of the lowest of the *Simiadae* that I have found an anchylosed styloid process to be occasionally present.

A very interesting fact is the great Miocene Gibbon of Europe, the *Dryopithecus*, which goes to confirm the view here suggested as to the dignity of *Hylobates*; but of course we can but speculate inconclusively till Palæontology furnishes us with the nearest extinct representatives of the Gorilla, Chimpanzee, and Orang.

To prevent misconception, I may add that fully recognising the truth of Mr. Darwin's appreciation of man's zoological position, which I have ever maintained and indeed laboured to support, I none the less completely differ from him when I include the totality of man's being. So considered, Science convinces me that a monkey and a mushroom differ less from each other than do a monkey and a man.

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THE COLLECTION OF INVERTEBRATE ANIMALS IN THE FREE PUBLIC MUSEUM, LIVERPOOL

II.

WE have mentioned in a previous article* the division of the series of Invertebrate Animals in the Liverpool Museum into 216 groups. The following is the plan of arrangement adopted in connection with each group.

Wherever circumstances permit the plan includes: (1) A printed schedule. (2) Exotic species. (3) British representatives. (4) The printed tablet. (5) Earliest fossils. (6) Diagrams and other illustrations. (7) Species and varieties on a more extended scale.

(1) The schedule, of which an example follows, is printed in large type, and is placed conspicuously at the head of the drawer; it is designed to show the derivation of the group, *e.g.*—

" Group 198.

SUB-KINGDOM—*Annulosa*, Skeleton external, ringed.PROVINCE—*Arthropoda*, Limbs jointed.CLASS—*Insecta*, Legs six.SUB-CLASS—*Metabola*, Transformations complete.ORDER—*Lepidoptera*, Wings with scales.

* See NATURE, vol. iii. p. 202.

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