

***THOMAS HENRY
HUXLEY***



***ON THE RELATIONS
OF MAN TO THE LOWER
ANIMALS***

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Small a Scale As These Simply Exemplify the Statements in The Text, The Proof of Which is to Be Found in the Objects Themselves.

Fig. 18.—lateral Views, of the Same Length, Of The Upper Jaws of Various Primates. 'i', Incisors; 'c', Canines' 'pm', Premolars; 'm', Molars. A Line is Drawn Through the First Molar of Man, 'gorilla', 'cynocephalus', and 'cebus', And the Grinding Surface of The Second Molar is Shown in Each, Its Anterior and Internal Angle Being Just Above The 'm' of 'm2'.

Fig. 19—the Skeleton of the Hand and Foot Of Man Reduced From Dr. Carter's Drawings in Gray's 'anatomy.' the Hand is Drawn To A Larger Scale Than the Foot. The Line 'a A' in The Hand Indicates The Boundary Between the Carpus and The Metacarpus; 'b B' That Between The Latter and the Proximal Phalanges; 'c C' Marks The Ends of The Distal Phalanges. The Line "a' A'" in The Foot Indicates The Boundary Between The Tarsus and Metatarsus; "b' B'" Marks That Between the Metatarsus And the Proximal Phalanges; and "c' C'" Bounds The Ends of The Distal Phalanges; 'ca', the Calcaneum; 'as', The Astragalus; 'sc', The Scaphoid Bone in the Tarsus.

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Fig. 21.—drawings of the Internal Casts Of a Man's And Of a Chimpanzee's Skull, of the Same Absolute Length, and Placed In Corresponding Positions. 'a'. Cerebrum; 'b'. Cerebellum. The Former Drawing is Taken from a Cast in the Museum of The Royal College Of Surgeons, the Latter from The Photograph

of The Cast Of a Chimpanzee's Skull, Which Illustrates the Paper by Mr. Marshall 'on The Brain of The Chimpanzee' in the 'natural History Review' for July., 1861. The Sharper Definition of the Lower Edge Of The Cast Of The Cerebral Chamber in The Chimpanzee Arises from the Circumstance That The Tentorium Remained In That Skull and Not in the Man's. The Cast More Accurately Represents The Brain in Chimpanzee Than In the Man; and The Great Backward Projection Of the Posterior Lobes of The Cerebrum Of The Former, Beyond The Cerebellum, is Conspicuous.

Fig. 22.—drawings of the Cerebral Hemispheres Of a Man And of a Chimpanzee Of the Same Length, in Order to Show The Relative Proportions of the Parts: The Former Taken from a Specimen, Which Mr. Flower, Conservator of the Museum Of The Royal College Of Surgeons, Was Good Enough to Dissect for Me; the Latter, from The Photograph Of A Similarly Dissected Chimpanzee's Brain, Given in Mr. Marshall's Paper Above Referred To. 'a', Posterior Lobe; 'b', Lateral Ventricle; 'c', Posterior Cornu; 'x', the Hippocampus Minor.

Multis videri poterit, majorem esso differentiam Simiae et Hominis, quam diei et noctis; verum tamen hi, comparatione instituta inter summos Europae Heroes et Hottentottos ad Caput bonae spei degentes, difficillime sibi persuadebunt, has eosdem habere natales; vel si virginem nobilem aulicam, maxime comtam et humanissimam, conferre vellent cum homine sylvestri et sibi relicto, vix augurari possent, hunc et illam ejusdem esse speciei.—'Linnaei Amoenitates Acad. "Anthropomorpha."'

THE question of questions for mankind—the problem which underlies all others, and is more deeply interesting than any other—is the ascertainment of the place which Man occupies in nature and of his relations to the universe of things. Whence our race has come; what are the limits of our power over nature, and of nature's power over us; to what goal we are tending; are the problems which present themselves anew and with undiminished interest to every man born into the world. Most of us, shrinking from the difficulties and dangers which beset the seeker after original answers to these riddles, are contented to ignore them altogether, or to smother the investigating spirit under the featherbed of respected and respectable tradition. But, in every age, one or two restless spirits, blessed with that constructive genius, which can only build on a secure foundation, or cursed with the spirit of mere scepticism, are unable to follow in the well-worn and comfortable track of their forefathers and contemporaries, and unmindful of thorns and stumbling-blocks, strike out into paths of their own. The sceptics end in the infidelity which asserts the problem to be insoluble, or in the atheism which denies the existence of any orderly progress and governance of things: the men of genius propound solutions which grow into systems of Theology or of Philosophy, or veiled in musical language which suggests more than it asserts, take the shape of the Poetry of an epoch.

Each such answer to the great question, invariably asserted by the followers of its propounder, if not by himself, to be complete and final, remains in high authority and esteem, it may be for one century, or it may be for twenty: but, as invariably, Time proves each reply to have been a mere approximation to the truth—tolerable chiefly on account of the ignorance of those by whom it was accepted, and wholly intolerable when tested by the larger knowledge of their successors.