

Inheritance, he says, fixed these habits on the descendants, and finally, by further elaboration, the organs were entirely transformed. However correct, as a whole, this fundamental thought may be, yet Lamarck lays the stress too exclusively on *habit* (use and non-use of organs), certainly one of the most important, but not the only cause of the change of forms. Still this cannot prevent our acknowledging that Lamarck quite correctly appreciated the mutual co-operation of the two organic formative tendencies of Adaptation and Inheritance. What he failed to grasp is the exceedingly important principle of "Natural Selection in the Struggle for Existence," with which Darwin, fifty years later, made us acquainted.

It still remains to be mentioned as a special merit of Lamarck, that he endeavoured to prove the *development of the human race* from other primitive, ape-like mammals. Here again it was, above all, to habit that he ascribed the transforming, the ennobling influence. He assumed that the lowest, original men had originated out of men-like apes, by the latter accustoming themselves to walk upright. The raising of the body, the constant effort to keep upright, in the first place led to a transformation of the limbs, to a stronger differentiation or separation of the fore and hinder extremities, which is justly considered one of the most essential distinctions between man and the ape. Behind, the calf of the leg and the flat soles of the feet were developed; in front, the arms and hands, for the purpose of seizing objects. The upright walk was then followed by a freer view over the surrounding objects, and led consequently to an important progress in mental development. Human apes thereby soon gained a great advantage over the other