

remains in detail (like all the pedigrees of animals and plants previously discussed) a more or less approximate general hypothesis. This however does not affect the application of the theory of descent to man. Here, as in all investigations on the derivation of organisms, one must clearly distinguish between the general *theory* of descent and the special *hypotheses* of descent. The general *theory* of descent claims full and lasting value, because it is an inductive law, based upon all the whole series of biological phenomena and their inner causal connection. Every special *hypothesis* of descent, on the other hand, has its special value determined by the existing condition of our biological knowledge, and by the extent of the objective empirical basis upon which we deductively establish this particular hypothesis. Hence, all the individual attempts to obtain a knowledge of the pedigree of any one group of organisms possesses but a temporary and conditional value, and any special hypothesis relating to it will become the more and more perfect the greater the advance we make in the comparative anatomy, ontogeny, and palæontology of the group in question. The more, however, we enter into genealogical details, and the further we trace the separate off-shoots and branches of the pedigree, the more uncertain and subjective becomes our special *hypothesis* of descent on account of the incompleteness of our empirical basis. This however does no injury to the general *theory* of descent, which remains as the indispensable foundation for really profound apprehension of biological phenomena. Accordingly, there can be no doubt that we can and must, with full assurance, regard the derivation of man—in the first place, from ape-like forms; further back, from lower