

important deduction of the Theory of Descent, that is, the palæontological development of man from ape-like, and through them from still lower, mammals, and consider such a transformation of organic form as impossible. But, I ask, are the phenomena of the individual development of man, the fundamental features of which I have here given, in any way less wonderful? Is it not in the highest degree remarkable that all vertebrate animals of the most different classes—fishes, amphibious animals, reptiles, birds, and mammals—in the first periods of their embryonic development cannot be distinguished at all, and even much later, at a time when reptiles and birds are already distinctly different from mammals, that the dog and the man are almost identical? Verily, if we compare those two series of development with one another, and ask ourselves which of the two is the more wonderful, it must be confessed that *ontogeny*, or the short and quick history of development of the *individual*, is much more mysterious than *phylogeny*, or the long and slow history of development of the *tribe*. For one and the same grand change of form is accomplished by the latter in the course of many thousands of years, and by the former in the course of a few months. Evidently this most rapid and astonishing transformation of the individual in ontogenesis, which we can actually point out at any moment by direct observation, is in itself much more wonderful and astonishing than the corresponding, but much slower and gradual transformation which the long chain of ancestors of the same individual has gone through in phylogenesis.

The two series of organic development, the ontogenesis of the individual and the phylogenesis of the tribe to which