

with comparative anatomy and the history of development will find as little difficulty about the origin of completely new organs as about the utter disappearance of rudimentary organs. The disappearance of the latter, viewed by itself, is the converse of the origin of the former. Both processes are particular phenomena of differentiation, which, like all others, can be explained quite simply and mechanically by the action of natural selection in the struggle for life.

When we closely examine the first appearance of new organs, we as a rule observe nothing more than an increased growth of one part of some already existing organ. But as this part undertakes other functions, in accordance with the laws of division of labour and the change of labour, a separation soon becomes evident which leads to the gradual development of the new organ, in accordance with the theory of selection. This development is determined both by the physiological laws of growth and nutrition, as also happens in the reverse case, in that of retrogression in rudimentary organs.

The infinite importance of the study of rudimentary organs for the fundamental questions of natural philosophy cannot be too highly estimated (see chap. xix. of my "General Morphology," p. 266) ; we might set up with their aid a theory of the *unsuitability of parts* in organisms, as a counter-hypothesis to the old popular doctrine of the *suitability of parts*. This latter dualistic teleology finally leads us to supernatural dogmas and miracles, whereas we obtain from the former, monistic dysteleology, a firm foundation for our mechanical interpretation of nature ; it leads us, by means of *teleological mechanism*, to pure Monism (see Chap. XIV.).