

first brilliant attempt to fill up conjecturally the broken lines of development and descent as the Darwinian conception of living nature postulates them.¹ As a first and daring approximation, they deserve to have assigned to them a prominent place in the history of the scientific thought of our age. In elaborating his pedigrees, Professor Haeckel has taken up and more clearly defined the analogy between the development of the embryo in the higher organisms and the supposed transition from lower to higher forms which is found in the classification of the genera or species of animals and plants. He has termed this analogy the 'great law of biogenesis, of the development of life in the individual ($\tau\acute{o}\ \delta\acute{\nu}$), and the species or tribe ($\tau\acute{o}\ \phi\acute{\upsilon}\lambda\omicron\nu$), expressed also as the parallelism of ontogenesis and phylogenesis. Long before Darwin and the appearance of the theory of descent this analogy² was pointed out in a restricted

¹ The later editions of the 'Origin of Species' contain the following reference to Haeckel (6th ed., p. 381): "Prof. Haeckel, in his 'Generelle Morphologie,' and in other works, has brought his great knowledge and abilities to bear on what he calls phylogeny, or the lines of descent of all organic beings. In drawing up the several series he trusts chiefly to embryological characters, but receives aid from homologous and rudimentary organs, as well as from the successive periods at which the various forms of life are believed to have first appeared in our geological formations. He has thus boldly made a great beginning, and shows us how classification will in the future be treated." And Huxley (art. "Evolution," p. 752) says: "Whatever hesitation may not unfrequently

be felt by less daring minds in following Haeckel in many of his speculations, his attempt to systematise the doctrine of evolution, and to exhibit its influence as the central thought of modern biology, cannot fail to have a far-reaching influence on the progress of science."

² As to the early anticipations of this so-called "law of biogenesis," they are given with more or less completeness by many modern writers, such as Huxley in his article on Evolution (1878, 'Ency. Brit.'), P. Geddes (ibid., art. "Reproduction"), Yves Delage ('L'Hérédité,' &c., p. 159), J. A. Thomson ('The Science of Life,' p. 133, &c.) The most important earlier statement is that quoted by Huxley from Meckel's 'Entwurf einer Darstellung der zwischen dem Embryo-