

one who loved above all things to watch the works of nature in their proper abodes—who combined the poetical with the scientific interest,—by Goethe. The term *genesis*¹ has long been employed to describe the processes by which the actual world has come to be what it is. To the statical and dynamical aspects of the abstract sciences correspond accordingly to some extent the morphological and genetic aspects of the natural sciences. To some extent only, for in nature, where everything is subject to continual flow, we never come upon a realisation of absolute rest, a pure form, a rigid type. Rather would I put it in this way: In the perpetual variety of change the morphological view tries to define those recurring forms or types which present themselves again and again, towards which all changes seem to revert; thus bringing some order into

14.
Morphology
and genetics.

morphological writings have been for the first time completely edited and annotated in the three volumes (6 to 8) of the second division of his works now being published by the Goethe-Gesellschaft at Weimar. The authority whom I approach nearest in the use I make of the term morphology is probably Haeckel. See the first book of his 'Generelle Morphologie der Organischen Wesen' (1866, vol. i. pp. 1-108).

¹ Goethe's morphological studies were equally directed towards the formation and the transformation of living things: morphology was to him the science of "Bildung und Umbildung." In the course of the century the terms morphology and morphological school have come to mean more and more that complex of comparative researches which historically prepared the genetic, developmental, or evolutionist school of thought, but which

were mainly dominated by the conception of fixed types and forms, and, though searching for the laws of modification, did not rise to a clear enunciation of a theory of evolution and descent. Goethe himself hovered all his life long between an artistic predilection for the perfect form or model and a deeper philosophical conviction of the continual flow of things. See a remark of his ('Werke,' II., vol. vi. p. 304) in an aphorism on "genetic treatment": "Erst bin ich geneigt mir gewisse Stufen zu denken; weil aber die Natur keinen Sprung macht, bin ich zuletzt genöthigt mir die Folge einer ununterbrochenen Thätigkeit als ein Ganzes anzuschauen, indem ich das Einzelne aufhebe, ohne den Eindruck zu zerstören." See also a remark on Goethe's undefined position in Carus, 'Geschichte der Zoologie' (1872), p. 590.