

and changing it, may easily creep in, it will perhaps be better in future to substitute for it the more accurate term, *development*.

The great value which the *History of Development* possesses for the scientific understanding of animal and vegetable forms, has now for half a century been so generally acknowledged that, without it, it would be impossible to make any sure progress in organic morphology, or the theory of forms. But the history of development has generally been understood to embrace only one part of this science, namely, that of organic individuals, usually called Embryology, but more correctly and comprehensively, *Ontogeny*. But, besides this, there is another history of development of organic species, genera, and tribes (phyla), which has the most important relations to the former.

The subject of this is furnished to us by the science of petrifications, or palæontology, which shows us that each tribe of animals and plants, during different periods of the earth's history, has been represented by a series of entirely different genera and species. Thus, for example, the tribe of vertebrated animals was represented by classes of fish, amphibious animals, reptiles, birds, and mammals, and each of these groups, at different periods, by quite different kinds. This palæontological history of the development of organisms, which we may term *Phylogeny*, stands in the most important and remarkable relation to the other branch of organic history of development, I mean that of individuals, or *Ontogeny*. On the whole, the one runs parallel to the other. In fact, the history of individual development, or *Ontogeny*, is a short and quick recapitulation of the slow