

independently—that they have no blood-relationship—we are forced to admit a supernatural creation, and must either suppose that every single organic individual was a special act of creation (to which surely no naturalist will agree), or we must derive all individuals of every species from a single individual, or from a single pair, which did not arise in a natural manner, but was called into being by command of a Creator. In so doing, however, we turn aside from the safe domain of a rational knowledge of nature, and take refuge in the mythological belief in miracles.

If, on the other hand, with Darwin, we refer the similarity of form of the different species to real blood-relationship, we must consider all the different species of animals and plants as the altered descendants of one or a few most simple original forms. Viewed in this way, the Natural System of organisms (that is, their tree-like and branching arrangement and division into classes, orders, families, genera, and species) acquires the significance of a real genealogical tree, whose root is formed by those original archaic forms which have long since disappeared. But a truly natural and consistent view of organisms can assume no supernatural act of creation for even those simplest original forms, but only a coming into existence by *spontaneous generation** (archigony, or generatio spontanea). From Darwin's view of the nature of species, we arrive therefore at a *natural theory of development*; but from Linnæus' conception of the idea of species, we must assume a *supernatural dogma of creation*.

Most naturalists after Linnæus, whose great services in

* Archebiosis (Bastian), Abiogenesis (Huxley).