has yet been observed of one species passing through a series of inappreciable modifications into another. Every species appears to have an area of maximum development, and this has been called the metropolis of the species; and practically we must employ the same methods in investigating the laws of its distribution as if we still regarded it as having been specially created in its metropolis.

It is the same in dealing with the law of representation. Accepting an evolution doctrine, we should certainly regard closely allied or 'representative' species as having descended comparatively recently from a common ancestry, and as having diverged from one another under somewhat different conditions of life. It is possible that as our knowledge increases we may be able to trace the pedigree of our modern species, and some attempts have already been made to sketch out the main branches of the universal genealogical tree;[1] but practically we must continue to accord a specific rank to forms which exhibit characters to which we have been in the habit of assigning specific value.

"Every species has three maxima of development,—in depth, in geographic space, in time. In depth, we find a species at first represented by few individuals, which become more and more numerous until they reach a certain point, after which they again gradually diminish, and at length altogether disappear. So also in the geographic and geologic distribution of animals. Sometimes the genus to which the species belongs ceases with its disappearance, but not unfrequently a succession of similar

[1] Ernst Haeckel, op. cit.