

It will appear, and indeed it hardly requires to be proved, that those steps in systematic zoology which are due to the light thrown upon the subject by physiology, are the result of a long series of labors by various naturalists, and have been, like other advances in science, led to and produced by the general progress of such knowledge. We can hardly expect that the classificatory sciences can undergo any material improvement which is not of this kind. Very recently, however, some authors have attempted to introduce into these sciences certain principles which do not, at first sight, appear as a continuation and extension of the previous researches of comparative anatomists. I speak, in particular, of the doctrines of a *Circular Progression* in the series of affinity; of a *Quinary Division* of such circular groups; and of a relation of *Analogy* between the members of such groups, entirely distinct from the relation of *Affinity*.

The doctrine of Circular Progression has been propounded principally by Mr. Macleay; although, as he has shown,¹³ there are suggestions of the same kind to be found in other writers. So far as this view negatives the doctrine of a mere linear progression in nature, which would place each genus in contact only with the preceding and succeeding ones, and so far as it requires us to attend to more varied and ramified resemblances, there can be no doubt that it is supported by the result of all the attempts to form natural systems. But whether that assemblage of circles of arrangement which is now offered to naturalists, be the true and only way of exhibiting the natural relations of organized bodies, is a much more difficult question, and one which I shall not here attempt to examine; although it will be found, I think, that those analogies of science which we have had to study, would not fail to throw some light upon such an inquiry. The prevalence of an invariable numerical law in the divisions of natural groups, (as the number *five* is asserted to prevail by Mr. Macleay, the number *ten* by Fries, and other numbers by other writers), would be a curious fact, if established; but it is easy to see that nothing short of the most consummate knowledge of natural history, joined with extreme clearness of view and calmness of judgment, could enable any one to pronounce on the attempts which have been made to establish such a principle. But the doctrine of a relation of *Analogy* distinct from *Affinity*, in the manner which has recently been taught, seems to be obviously at variance with that gradual approximation of the classificatory to the phy-

¹³ *Linn. Trans.* vol. xvi. p. 9.