

Fishes, and Sensual Fishes; and so also in the classes of Reptiles, Birds, and Mammalia.¹

I have entered into so many details upon these vagaries of the distinguished German philosopher, because these views, however crude, have undoubtedly been suggested by a feature of the animal kingdom, which has thus far been too little studied: I mean the analogies which exist among animals, besides their true affinities, and which cross and blend, under modifications of strictly homological structures, other characters which are only analogical. But it seems to me that the subject of analogies is too little known, the facts bearing upon this kind of relationship being still too obscure, to be taken as the basis of such important groups in the animal kingdom as the orders are, and I would insist upon considering the complication or gradation of structure as the feature which should regulate their limitation, if under order we are to understand natural groups expressing the rank, the relative standing, the superiority or inferiority of animals in their respective classes. Of course, groups thus characterized cannot be considered as mere modifications of the classes, being founded upon a special category of features.

SECTION IV.

FAMILIES.

Nothing is more indefinite than the idea of form, as applied by systematic writers, in characterizing animals. Here, it means a system of the most different figures having a common character, as, for instance, when it is said of Zoophytes that they have a radiated form; there, it indicates any outline which circumscribes the body of animals, when, for instance, animal forms are alluded to in general, instead of designating them simply as animals; here, again, it means the special figure of some individual species. There is in fact no group of the animal kingdom, however extensive or however limited, from the branches down to the species, in which the form is not occasionally alluded to as characteristic. Speaking of Articulates, C. E. v. Baer characterizes them as the type with elongated forms; Mollusks are to him the type with massive forms; Radiates that with peripheric symmetry; Vertebrates that with double symmetry, evidently taking their form in its widest sense as expressing the most general relations of the different dimensions of the

¹ See further developments upon this subject in OXEN'S Naturphilosophie, and in his Allgemeine

Naturgeschichte, vol. 4, p. 582. Compare also the following chapter.