

therefore their highest perfection; the Polypi, Acephala and Worms are respectively at the lowest or simplest portion of each branch. Secondly, it is manifest that the three highest classes have each a special reference to the highest development of the psychical powers of the branch, and of its organs of sense and nervous system. The three middle classes represent the highest adaptation of the type to variety of locomotion and habitat. The three lowest classes represent the modification of the type with especial reference to the highest development of the mere vegetative life. Class, then, represents the expression of the general intention of the Creator in the construction of the members of a branch. Ways and means, or combinations of organs, are the indications of that intention which we most readily perceive. In this limited sense we are quite willing to accept the definition of our author.

In the ordinary division of the vertebrates, even the popular mind, we think, has all along recognised this principle. The Mammal, the Bird, the Reptile and the Fish, differ not merely in structure; but the first is the expression of the Vertebrate type in relation to its highest psychical powers, the second in relation to extent of locomotive powers, the third and fourth in relation to mere vegetative life in air and in water respectively.

3. *Orders* have been fruitful causes of difference among naturalists. The ground on which they should stand is thus stated :

“To find out the natural characters of orders from that which really exists in nature, I have considered attentively the different systems of Zoology in which orders are admitted and apparently considered with more care than elsewhere, and in particular the *Systema Naturæ* of Linnæus, who first introduced in Zoology that kind of groups, and the works of Cuvier, in which orders are frequently characterised with unusual precision, and it has appeared to me that the leading idea prevailing everywhere respecting orders, where these groups are not admitted at random, is that of a definite rank among them, the desire to determine the relative standing of these divisions, to ascertain their relative superiority or inferiority, as the same order, adopted to designate them, already implies. The first order in the first class of the animal kingdom, according to the classification of Linnæus, is called by him *Primates*, expressing, no doubt, his conviction that these beings, among which Man is included, rank uppermost in their class. Blainville uses here and there the expression of