

The problem of organisation was much easier in dealing with plants than with animals. In the former there seems to be only one organ or system of organs definitely developed and marked off—namely, the organs of fructification; and these had accordingly served Linnæus and his successors as the leading character for their descriptive classification. In animals there are, or seem to be at least, four or five well-defined and separated systems of organs. The selection, for the purposes of classification and morphology, was much more difficult. Accordingly we find Cuvier, who between the years 1795 and 1817 devoted himself to the morphological and anatomical study of the animal kingdom, hesitating in the selection of the leading character according to which he should classify and arrange it. As I have had occasion to remark above,¹ he finally in 1812 settled on the nervous system as the leading character governing the figure of an animal organism.² Before

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pose, but of no other value. The others, known as 'natural' classifications, are arrangements of objects according to the sum of their likenesses and unlikenesses, in respect of certain characters; in morphology, therefore, such classifications must have regard only to matters of form, external and internal. And natural classification is of perennial importance, because the construction of it is the same thing as the accurate generalisation of the facts of form, or the establishment of the empirical laws of the correlation of structure" (Huxley in 'Life of Owen,' vol. ii. p. 283).

¹ See vol. i. p. 130 of this history.

² On the gradual development of Cuvier's classification see Carus, 'Geschichte der Zoologie,' pp. 602,

612, 614. "It did not escape Cuvier that the idea of subordination is artificial, and that the importance of an organ can only be fixed by experience—namely, through the proof of its constancy. Nevertheless he follows this principle, but naturally becomes vacillating. Thus in 1795 he names the organs of reproduction, to the action of which the animal owes its existence, and the organs of circulation, on which depends the individual preservation of the animal, as the most important, whilst in 1812, following the example of Virey, he declares the nervous system to be that system for the maintenance of which the other systems solely exist" (*loc. cit.*, p. 602).