

permanent influence on the formation of natural classes. Adanson's attempt, bold and ingenious, belonged, both in time and character, to a somewhat earlier stage of the subject.³ Enthusiastic and laborious beyond belief, but self-confident, and contemptuous of the labors of others, Michael Adanson had collected, during five years spent in Senegal, an enormous mass of knowledge and materials; and had formed plans for the systems which he conceived himself thus empowered to reach, far beyond the strength and the lot of man.⁴ In his *Families of Plants*, however, all agree that his labors were of real value to the science. The method which he followed is thus described by his eloquent and philosophical eulogist.⁵

Considering each organ by itself, he formed, by pursuing its various modifications, a system of division, in which he arranged all known species according to that organ alone. Doing the same for another organ, and another, and so for many, he constructed a collection of systems of arrangement, each artificial,—each founded upon one assumed organ. The species which come together in all these systems are, of all, naturally the nearest to each other; those which are separated in a few of the systems, but contiguous in the greatest number, are naturally near to each other, though less near than the former; those which are separated in a greater number, are further removed from each other in nature; and they are the more removed, the fewer are the systems in which they are associated.

Thus, by this method, we obtain the means of estimating precisely the degree of natural affinity of all the species which our systems include, independent of a physiological knowledge of the influence of the organs. But the method has, Cuvier adds, the inconvenience of presupposing another kind of knowledge, which, though it belongs only to descriptive natural history, is no less difficult to obtain;—the knowledge, namely, of all species, and of all the organs of each. A single one neglected, may lead to relations the most false; and Adanson himself, in spite of the immense number of his observations, exemplifies this in some instances.

We may add, that in the division of the structure into organs, and in the estimation of the gradations of these in each artificial system, there is still room for arbitrary assumption.

In the mean time, the two Jussieus had presented to the world a "Natural Method," which produced a stronger impression than the

³ *Familles des Plantes*, 1763. ⁴ Cuvier's *Eloge*. ⁵ Cuv. *Eloges*, tom. i. p. 282.