

the Hydroids resemble the Polyps, with which, indeed, they have been united as members of the same class; while the Discophoræ proper constitute the characteristic group of Acalephs, the group which has always been considered the typical group of this class. The Ctenophoræ bear the same relation to Echinoderms as the Hydroids bear to the Polyps; and this resemblance of the Ctenophoræ and Echinoderms is especially recognizable in the peculiarity of their vertical chymiferous tubes with their locomotive flappers, and the homology there is between them and the ambulacral system of the Echinoderms. But neither the resemblance of Hydroids to Polyps nor that of Ctenophoræ to Echinoderms is a real indication of affinity: it is only an analogy, arising from a similarity of form in parts which have only a general homology, and no special homology with one another. But this analogy, once recognized, has its significance. It confirms the views presented above respecting the relative standing of the three orders of Acalephs. Hydroids, as the lower order of Acalephs, are analogous to the Polyps, the lowest class of Radiates; Discophoræ, the most characteristic type of Acalephs, occupy a middle position between them and the Polyps, as the Acalephs, considered as a class, occupy an intermediate position between the Polyps and Echinoderms; and the Ctenophoræ, as the highest order in the class of Acalephs, correspond to the Echinoderms, and especially to the Holothurioids, the highest order of the highest class among Radiates.

Such analogies may be traced in other classes of the animal kingdom. Assuming that the Articulates embrace only three classes,—the Worms, Crustacea, and Insects; and that the Insects themselves form only three orders,—Myriapods, Arachnids, and Insects proper, no one can fail to perceive the analogy between the Myriapods as the lowest order of Insects, and the Worms as the lowest class of Articulates, or between the Arachnids as the second order of Insects, and the Crustacea as the second class of Articulates; and the highest order among Insects consists of those best representing the character of the class of Insects, which stands highest among Articulates. Perhaps objections may be raised against this primary division of the Insects into three orders, and perhaps also against the division of Articulates into three classes; but to my mind these analogies would have great weight in establishing this classification as correct. Whatever may be said of the analogies alluded to between the orders of Acalephs and the classes of Radiates, I have no hesitation in affirming that there are only three orders in the class of Acalephs, and that these orders stand to one another in the position I have assigned to them,—the Hydroids being the lowest, the Discophoræ next, and the Ctenophoræ highest.