

There is still another feature among Polyps, which ought to be considered in this connection. Not only do the Halcyonoids, the higher order among Polyps, form compound communities in all their representatives, but we find that these compound communities tend to acquire a marked individual independence, which is fully reached in those types of this order which, like *Veretillum*, *Renilla*, and *Pennatula*, move about freely, and these are the highest among the Halcyonoids. A similar tendency to individualization of communities is also observed in the highest Actinoids; for some Madrepores not only form complicated communities, but exhibit, at the top of their branches, an individual which, though forming part of the community, is larger than all the lateral individuals, and gives, as it were, individuality to each branch.

With these facts before us, it will not be difficult to determine the relative standing of the *Rugosa* and *Tabulata*. The *Rugosa* differ from the *Tabulata* in having a considerable number of representatives which are simple individuals; or, when they form communities, these are a loose aggregation of a few individuals maintaining a certain degree of independence: we never find among them communities formed of innumerable closely combined individuals, such as occur among *Tabulata*, in many of which there exists a direct communication between adjoining individuals through pores in their walls. I am, therefore, inclined to consider the *Rugosa* as inferior to the *Tabulata*; and their prevalence in the oldest rocks and their early extinction in geological times, while *Tabulata* are continued to this day, confirm this view. The *Rugosa* seem to me to stand in the same relation to the *Lucernarioids* among *Hydroids*, as the *Actiniæ* stand to the *Fungidæ* among genuine *Polyps*. And here, again, we have a remarkable analogy between the two types, in the circumstance that *Fungidæ* are the oldest genuine *Corals* known, as the *Rugosa* are the oldest type among *Hydroids*.

All this is in perfect accordance with the character of the higher *Acalephs*. As we have seen before, the *Ctenophoræ* are analogous to *Echinoderms*; but *Echinoderms* have reached a degree in organic complication in which individuality, as such, becomes a character of superiority. In conformity with this analogy, we find that all *Ctenophoræ* are free individuals, and so are the *Discophoræ* also; while the free naked-eyed *Medusæ* arising from *Hydroids* occupy, in that respect, an intermediate position between the higher *Acalephs* and the lower *Hydroids*, which form large and highly complicated communities, and bear, in their perfect state, sessile *Medusæ* buds only. I do not see that any objection can be made to the rank here assigned to the *Acalephs* in general. It seems to me to be determined by their whole structure, as well as by their mode of development, and must be considered as the true expression of their natural affinities, if the lowest *Hydroids* are those in which the hydroid elements prevail over the me-