

The Radiate animals, finally, differ from the three other principal forms by their body being the combination of four or more main sections united in the form of radii (Paramera).

The distinction of these four principal forms of animals, which has become extremely productive in the development of zoology, is commonly ascribed entirely to Cuvier. However, the same thought was expressed almost simultaneously, and independently of Cuvier, by Bär, one of our greatest German naturalists, who did the most eminent service in the study of animal development. Bär showed that in the development of animals, also, four different main forms (or types) must be distinguished.²⁰ These correspond with the four plans of structure in animals, which Cuvier distinguished on the ground of comparative anatomy. Thus, for example, the individual development of all Vertebrate animals agrees, from the commencement, so much in its fundamental features that the germs or embryos of different Vertebrate animals (for example, of reptiles, birds, and mammals) in their earlier stages cannot be distinguished at all. It is only at a late stage of development that there gradually appear the more marked differences of form which separate those different classes and orders from one another. In like manner the plan of structure, which shows itself in the individual development of Articulate animals (insects, spiders, crabs), is from the beginning essentially the same in all Articulate animals, but different from that of all Vertebrate animals. The same holds good, with certain limitations, in Molluscous and Radiated animals.

Neither Bär, who arrived at the distinction of the four animal types or principal forms through the history of the individual development (Embryology), nor Cuvier, who