

the existing knowledge of the early development of the germs of animals by discovering the ovum in the body of the mammalia before fructification, and by this and other discoveries secured his claim to be considered the greatest embryologist of his own age, and perhaps of all time. He goes on to examine to what extent the morphological differences which the animal kingdom exhibits in its various members can be taken as a guide to the genetic differences in the growth and development of the higher organisms. He, in fact, tried to ascertain how far the facts of classification throw a light on the facts of development, how far the changing embryo of the higher animal gradually passes through the permanent forms of the lower animals. He combats the idea that the classification or morphological arrangement can be uni-serial—*i.e.*, brought into one continuous line or order.

his researches. He wishes to distinguish carefully between facts and theory, and is very cautious as to the latter, a trait which runs through all his writings. It is also very interesting to see how in his biography of Cuvier (posthumously published by Stieda) he considers it a merit of that great naturalist not to have indulged in genetic theories. "It is evident that Cuvier in his youth had also a genetic system in view, such as Oken afterwards followed up, but that he must soon have found out that this task was unattainable for him. He abandoned it, and sought rather to draw from the manifoldness of the formed product inferences regarding the conditions of its genesis. Thus he arrived at the teleological conceptions which he developed on various occasions. German naturalists

draw from all this, especially in the age of Schelling's 'Naturphilosophie,' the conclusion that Cuvier was not a philosophical mind. To me it seems that we recognise in it Cuvier's desire for clearness. He dropped the higher task because he found that it would not lead him to clear views" ('Lebensgeschichte Cuvier's von K. E. von Baer,' ed. Stieda, 1897, p. 72). English readers, to whom the genetic view has only become familiar since Darwin or perhaps Lyell, will find with astonishment how in the writings of Baer, before Lyell and even before the appearance of Cuvier's final system, genetic ideas were thought to be prevalent, and were criticised elaborately and received with the utmost caution even by the great propounders of the doctrine of development.