

Animals differ according to the type of organisation to which they belong. Thus the "embryo of the vertebrate animal is from the very first a vertebrate animal, and at no time agrees with an invertebrate animal."<sup>1</sup> Having, however, once fixed the existence of special organic forms, he asks whether within the limits of such form no law can be discovered to formulate the development of the individual. He believes there can,<sup>2</sup> and he proceeds to explain it in terms which for the most part might appear unaltered in the most modern work on evolution. He states that the more special type is developed from the more general, "and that the more different two animal forms are, so much the further back must their development be traced to find them similar." Indeed he thinks it probable that "in the condition of the actual germ all embryos which are developed from true ova agree," and he anticipates the cellular theory of Schwann, established by observation ten years later, by suggesting that the simple vesicle is the common fundamental form "from which all animals are developed, not only ideally but actually and historically."<sup>3</sup> In further examining the process of development, von Baer introduces the very suggestive term<sup>4</sup> *differentiation*. "The higher and lower development of the animal coincides perfectly with that histological and morphological differentiation which gradually arises in the course of the development of the individual."<sup>5</sup> Development, in fact, is the estab-

<sup>1</sup> *Loc. cit.*, p. 220 ; transl., p. 210.

<sup>2</sup> *Ibid.*, p. 221.

<sup>3</sup> *Loc. cit.*, p. 224 ; transl., p. 213.  
On this anticipation see, however, von Baer's later explanation in 'Reden, &c.,' vol. ii. p. 250.

<sup>4</sup> The German term is "Sonderung," which Huxley renders by the English term "Differentiation."

<sup>5</sup> *Loc. cit.*, p. 229, 230 ; transl., p. 219.