

preceded the reptile, the reptile preceded the bird, the bird preceded the mammiferous quadruped, and the mammiferous quadruped preceded man. And yet, is there one of these great divisions in which, in at least some prominent feature, the present, through this mysterious element of degradation, is not inferior to the past? There was a time in which the ichthyic form constituted the highest example of life; but the seas during that period did not swarm with fish of the degraded type. There was, in like manner, a time when all

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at the moment of their origin, the eggs of all animals have such a resemblance to each other, that it would be impossible to distinguish, even by the aid of the most powerful microscope, the ovarial egg of a craw-fish, for example, from that of true fish. And yet who would deny that beings in every respect different from each other exist in these eggs? It is precisely because the difference manifests itself at a later period, in proportion as the embryo develops itself, that we are authorized to conclude, that, even from the earliest period, the eggs were different, — that each had virtual qualities proper to itself, although they could not be discovered by our senses. If, on the contrary, any one should find two eggs perfectly alike, and should observe two beings perfectly identical issue from them, he would greatly err if he ascribed to these eggs different virtual qualities. It is therefore necessary, in order to be in a condition to suppose that virtual properties peculiar to it are concealed in an animal, that these properties should manifest themselves once, in some phase or other of its development. Now, applying this principle to the theory of cranial vertebræ, we should say, that if these vertebræ virtually exist in the adult, they must needs show themselves in reality, at a certain period of development. If, on the contrary, they are found neither in the embryo nor the adult, I am of opinion that we are entitled likewise to dispute their virtual existence.

“Here, however, an objection may be made to me, drawn from the physiological value of the vertebræ, the function of which, as is well known, is, on the one hand, to furnish a solid support to the muscular contractions which determine the movements of the trunk, and, on the other, to protect the centres of the nervous system, by forming a more or less solid case completely around them. The bodies of the vertebræ are particularly destined to the first of these