

suggested the theory of descent: it was used by those who most strongly repudiated such a doctrine.¹

In the absence of any satisfactory explanation of the continual recurrence of certain definite forms in nature, and the presence of an evident relationship and a clear indication of metamorphosis in single instances, it was natural that morphologists of the first order, such as Owen, and other authorities in science, such as Whewell in England and Alexander Braun in Germany, should have recourse to older views and vague philosophical theories. Owen in 1848 spoke of a specific organising principle which "moulds in subserviency to the exigencies of the resulting specific forms," argues that the knowledge of such a being as man must "have existed before man appeared, for the divine mind which planned the archetype also foreknew all its modifications," and concludes that we learn from the past history of our globe that "nature has advanced with slow and stately steps, guided by the archetypal light, amidst the wreck of worlds, from the first embodiment of the vertebrate idea under its old ichthyic vestment until it became arrayed in the glorious garb of the human form."²

¹ Huxley in 'Life of R. Owen,' vol. ii. p. 302.

² See Owen's treatise 'On the Nature of Limbs,' 1849, pp. 85, 86. In the essay 'On the Archetype and Homologies of the Vertebrate Skeleton,' he concludes with the following remarks: "Now, besides the *ιδέα*, organising principle, vital property, or force, which produces the diversity of form belonging to living bodies of the same materials, which diversity cannot be explained by any known pro-

perties of matter, there appears also to be in counter-operation during the building up of such bodies the polarising force pervading all space, and to the operation of which force, or mode of force, the similarity of forms, the repetition of parts, the signs of the unity of organisation may be mainly ascribed. The Platonic *ιδέα* or specific organising principle or force would seem to be in antagonism with the general polarising force, and to subdue and