

by an almost infinite series of adaptations of life to its environment, whereby, through a corresponding series of transformations, present complexity has grown out of former simplicity.¹

The great and fruitful ideas which Darwin brought to the attention of the whole world have long since been incorporated into human thought. Not the least important among them is the new scientific concept of fitness, as it emerges from the discussion of natural selection. Before Darwin, this concept possessed all the vagueness of an idea which, though in part founded on observation, was not to be explained with the help of existing scientific theories. But although Darwin's fitness involves that which fits and that which is fitted, or more correctly a reciprocal relationship, it has been the habit of biologists since Darwin to consider only the adaptations of the living organism to the environment.²

¹ The ideas which are associated with the names of de Vries, as well as the very different hypotheses of Driesch, Bergson, and others are, of course, concerned with the manner, not with the fact of adaptation and organic evolution.

² Far different was the earlier point of view. An examination of Whewell's *Bridgewater Treatise* at once reveals important, if often fallacious, discussions of environmental fitness; *e.g.* "It has been shown in the preceding chapters that a great number of quantities and laws appear to have been *selected* in the construction of the universe; and that by the