

Haeckel and others pointed to various features in the development of the human embryo and claimed that at one time it was similar to a fish, at another time to an amphibian, at another time to a reptile, and so on. Most biologists now insist that the alleged similarities to adult stages of these various creatures are rather far-fetched. Those who still hold that there is an actual recapitulation say that the similarities are to the embryonic forms of these various animals rather than to the adult stage. Further investigation, however, has shown that even these alleged similarities are comparatively slight, and that many features in the development of the human embryo are quite different from those in the embryo of these various non-human types of life.

The development of an embryo to its form at birth is an involved and complicated process. It exists under conditions very different from those under which it is later to live. The process of specialization of various organs is extremely complex. As the science of embryology advances it is being recognized more and more that the developing and changing features of the embryo are adapted to the necessities of this complex process rather than being in any sense a recapitulation of something that is alleged to have happened to ancestors millions of years ago.

It is unfortunate that the recapitulation theory, which was really an ill-founded guess, should have been called a law, and should have been widely presented as an argument for evolution. Instead of advancing the science of embryology it introduced an extraneous and quite unwarranted element, and thus hindered progress toward fuller understanding of this complicated process.

#### EVIDENCE FROM BIOGEOGRAPHY

Darwin says that his first impetus toward thinking that some species had developed out of others, instead of all being distinct creations, came from his observations on the Galapagos Islands, where he found birds that were similar to *those*