The early studies of evolutionary developmental biology (Evo-Devo) come from several sources. Tributaries flowing into Evo-Devo come from such disciplines as embryology, developmental genetics, evolutionary biology, ecology, paleontology, systematics, medical embryology and mathematical modeling. This essay will trace one of the major pathways, that from evolutionary embryology to Evo-Devo and it will show the interactions of this pathway with two other sources of Evo-Devo: ecological developmental biology and medical developmental biology. Together, these three fields are forming a more inclusive evolutionary developmental biology that is revitalizing and providing answers to old and important questions involving the formation of biodiversity on Earth. The phenotype of Evo-Devo is limited by internal constraints on what could be known given the methods and equipment of the time and it has been framed by external factors that include both academic and global politics.

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The morphogenesis of evolutionary developmental biology

The early studies of evolutionary developmental biology (Evo-Devo) come from several sources. Tributaries flowing into Evo-Devo came from such disciplines as embryology, developmental genetics, evolutionary biology, ecology, paleontology, systematics, medical embryology and mathematical modeling. This essay will trace one of the major pathways, that from evolutionary embryology to Evo-Devo and it will show the interactions of this pathway with two other sources of Evo-Devo: ecological developmental biology and medical developmental biology. Together, these three fields are forming a more inclusive Evolutionary Developmental Biology that hosts articles that cover all aspects of the causes and consequences of the evolution of development. Addressing those questions involves the investigation of the origin and structure of variation among populations and species. This encompasses how development evolves and underlies diversity, the evolutionary forces involved and all the aspects in which these involve interactions with the environment, in both an instructive and a selective sense, as well as reconstruction and inference of ancestral features of organisms. Developmental biology is the science that investigates how a variety of interacting processes generate an organism’s heterogeneous shapes, size, and structural features that arise on the trajectory from embryo to adult, or more generally throughout a life cycle.

It represents an exemplary area of contemporary experimental biology that focuses on phenomena that have puzzled natural philosophers and scientists for more than two millennia. Philosophers of biology have shown interest in developmental biology due to the potential relevance of development for understanding evolution, the theme of re