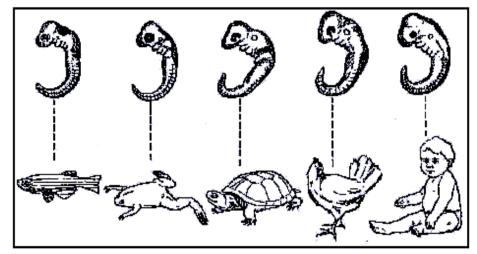


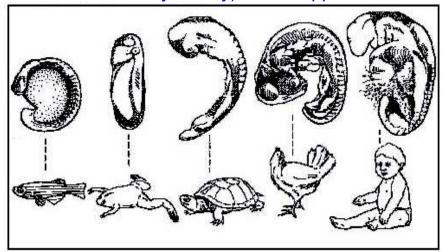
## Developmental Evidence in a Nutshell

Many who learn about evolution in school hear the phrase, "ontogeny recapitulates phylogeny," meaning that evolutionary history is supposedly replayed during the growth and development of an organism. Commonly cited is the alleged presence of fish gills in human embryos during growth (which are NOT true gills but rather are small wrinkles in the neck that appear during development). These ideas were put forth by 19<sup>th</sup> century embryologist Ernst Haeckel, who today is known to have fabricated and exaggerated much of his data. Accurate comparisons of embryos of humans, fish, chickens, and amphibians show they begin very different, briefly become somewhat similar at an intermediate stage, and then end different. If "ontogeny recapitulates phylogeny," these embryos should be similar from the very beginning and grow more different during development. Because they start different, these patterns of animal development are at odds with predictions of evolution. Compare these drawings below (from *Icons of Evolution*):

**MYTH:** Similarities in development of animal embryos indicate that they share a common ancestry. This representation, common in textbooks, is based off of the faked data of 19<sup>th</sup> century embryologist Ernst Haeckel.



**FACT:** Different organisms have different patterns of development from conception onward. The phrase, "ontogeny recapitulates phylogeny" (development reflects evolutionary history) is not supported.



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