

*Phylogeny*, the history of the development of these various phyla, classes, orders, families, and species.

*Ontogeny*, the history or study of the development of the individual, generally called embryology. In reality the scope of embryology is the ontogenetic study of the various species, and this branch of developmental study alone can be checked by direct, 'exact' observation, for the simple reason that the individuals alone are entities, while the species, genera, families, etc., are abstract ideas.

*The ontogenesis of any given living organism is a short, condensed recapitulation of its ancestral history or of its phylogenesis.* This is Haeckel's 'fundamental biogenetic law.'

A complete proof of the phylogeny of any creature would be given by the preservation of an unbroken series of all its fossil ancestors. Such a series will in most cases, for obvious reasons, always remain a desideratum. In a few cases, however, the desideratum is nearly