

tion does but mold the organism ; the environment it changes only secondarily, without truly altering the primary quality of environmental fitness. This latter component of fitness, antecedent to adaptations, a natural result of the properties of matter and the characteristics of energy in the course of cosmic evolution, is as yet nowise accounted for. It exists, however, and must not be dismissed as gross contingency. The mind balks at such a view. Coincidences so numerous and so remarkable as those which we have met in examining the properties of matter as they are related to life, must be the

metaphor, instead of guiding the ramifications of the tree of life, it would, in Mivart's excellent phrase, do little more than apply the pruning knife to them. In other words, its functions are mainly those of the third Fate, not the first, of Siva, not of Brahma. — PATRICK GEDDES and J. ARTHUR THOMSON, "Evolution." New York, Home University Library, 1911, p. 248.

"But as my conclusions have lately been much misrepresented, and it has been stated that I attribute the modification of species exclusively to natural selection, I may be permitted to remark that in the first edition of this work, and subsequently, I placed in a most conspicuous position — namely, at the close of the Introduction — the following words: 'I am convinced that natural selection has been the main but not the exclusive means of modification.'" — CHARLES DARWIN, "The Origin of Species by Means of Natural Selection." New York, reprinted from the Sixth London Edition, The Home Library, pp. 495-496.