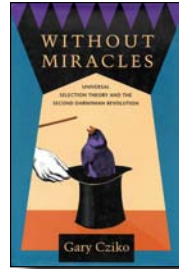


Without Miracles

Universal Selection Theory and the Second Darwinian Revolution

Review from
Library Journal, October 15 1995
by H. James Birx



© 2000 MIT Press

978-0262531474 (paperback)

978-0262032322 (hardcover)

By Gary Cziko

Cziko, an educational psychologist, critically examines puzzles of fit on many levels, from providential through instructionist to selectionist theories of explanation. His naturalistic and mechanistic interpretation of evolution rejects miracles, innatism, teleology, and natural theology. Especially influenced by zoologist Richard Dawkins and psychologist Donald T. Campbell, Cziko argues that the emergence of global diversity and ongoing adaptive complexity in and among organisms (e.g., the immune system and instinctive behavior), as well as throughout the human world from neurons to computers, is due to the pervasive process of cumulative variation and selection. In particular, his universal selection framework includes an ultra-Darwinian explanation for the emergence of language, acquisition of knowledge, and development of science and technology. Cziko even maintains that blind variation and hindsighted selection also apply to advances in drug design, genetic engineering, and directed molecular evolution. The result is similar to Daniel Dennett's *Darwin's Dangerous Idea* (LJ 4/15/95). Fascinating and unique, this strictly Darwinian presentation balances current attacks on Darwinism. Highly recommended for academic and larger public library science collections.

—H. James Birx, *Canisius Coll., Buffalo, N.Y.*