

THE VALUE OF PALEONTOLOGY

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Received March 1, 1983

There are two main poles in current theoretical paleontology: 1) The extreme actualistic view - Paleontology can never overcome its limits relative to, and must always defer to, neontology (cf. Patterson, 1981, *Ann. Rev. Ecol. Syst.* 12:195-223). Here the primary concern is relationships of groups with extant members. 2) The nomothetic view - Paleontology is guardian of "vast times and effects" (Gould, 1980, *Paleobio.* 6:98); it can overcome its inherent limits and reach new generalizations beyond those of neontology: a view supported by false hopes and unfounded scenarios (e.g. species selection; cf. Schopf and Hoffman, 1983, *Science* 219:438-439)? Also, Gould (op. cit., p. 112) would reject cladistic classification and thus any hope of monophyletic, evolutionarily comparable taxa.

We argue that fossil specimens do not differ in kind from extant specimens. The strength of paleontology is in the uniqueness of its objects (but not an irreducible uniqueness) before its supposed access to vast amounts of time. Paleontology contributes organisms not known to neontology. The present is no more capable of explaining the past than the past is the present. Deductions from patterns in paleontology are, like deductions from patterns in neontology, deductions.

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Evolutionary Theory 6: 210 (April, 1983)

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