Extinction and the Value of Diversity

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Abstract

Session: Perspectives on Extinction (Julien Delord, David Sepkoski, Marco Tamborini, Derek Turner). As a number of authors have observed, biodiversity has come to be seen as an intrinsic scientific and cultural value. In other words, biological diversity-the sheer multiplicity and heterogeneity of living things-is now understood to have an inherent value that is not reducible to the utilitarian or aesthetic worth of any particular individual species: the value of diversity is diversity itself. Extinction plays a central role in this understanding of biodiversity, since diversity is something that is understood to be fragile and tenuous, constantly endangered by the threat of loss. Whereas most historians who have examined this phenomenon have placed the modern biodiversity movement in the context of a history of conservation biology and endangered species protection, I want to frame it in a new perspective. This talk will examine the influence of biological theories about the nature and dynamics of extinction-and especially mass extinction-on the current valuation of biological diversity. I will focus particularly on the ways that paleobiological analyses of global historical diversity patterns during the 1970s and 80s have contributed to a new understanding of extinction as an often catastrophic phenomenon with significant and permanent ecological and evolutionary consequences. I will argue that this new model of extinction has played a prominent conceptual and rhetorical role in debates surrounding the current biodiversity crisis, which I will examine in critical historical perspective.

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