

# Critique of Critical Criticism: a review of uses and abuses of theory criticisms in ecology and economics

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## **Abstract**

Ecology has, like other branches of life sciences, a bipolar pattern of research traditions, from mechanism-reductionism to emergentism-holism. Each tradition has pitfalls and problems of their own. However these are compounded when they are involved in sociopolitical issues, and borrowings from other sciences (particularly from economics) are seen as a legitimization mechanism for ill-founded theses. Here we review classic and current debates on ecological paradigms and their sociopolitical implications and borrowings from economic theory, and discuss their soundness. Furthermore we point to alternatives in formal economic tools, and as a case study provide a historical analysis of the economic interests during the early and largely unknown development of succession theory in forestry. We do this by calling for much more historical and philosophical consciousness for researchers when “problematic” interdisciplinary relationships are detected.