

Where does human cultural niche construction fit in?

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Evolutionary theory traditionally models a single inheritance system in evolution, genetic inheritance. Attempts to model human evolution exclusively in terms of genetic inheritance foundered when it was realized that human cultural activities, based primarily on human cultural inheritance can sometimes modify natural selection in human environments in ways that change human genetics. That led to dual inheritance models of human evolution, developed by gene-culture coevolutionary theorists, based on genetic and cultural inheritance. Independently, Odling-Smee, et al (2003) developed niche construction theory, based on genetic inheritance and ecological inheritance in all organisms. Combining niche construction theory and gene-culture coevolutionary theory subsequently promoted a triple inheritance model of human evolution incorporating genetic, ecological and cultural inheritance. It now appears possible to reduce human cultural inheritance, inclusive of material culture and cultural knowledge, to potent components of a general human ecological inheritance. This paper argues the case for doing that.

Odling-Smee, F.J., K.N. Laland & M.W. Feldman. 2003. Niche construction. The neglected process in evolution. P.U. P.

