Why culture evolves without being an inheritance system

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Abstract

Session: 'New directions in the study of inheritance' Human cultures preserve a lot of information that would be lost if left to the care of biological mechanisms. Is this is enough to treat culture as an inheritance system? This talk argues against that view. Human minds often acquire cultural material in ways that are neither aimed at, nor conducive to, faithful replication. As a result, if we use the Price equation to describe cultural change, most of the change would be captured by the second term on the right hand-side of the equation - that describes changes due to transmission biases rather than selection. The omission of such biases may be the source of some frequent misunderstandings found in the 'gene-culture coevolution' literature. One of them concerns the 'Docility hypothesis' (as defended by Herbert Simon, Pete Richerson, Herbert Gintis, and others). It holds that cultural transmission produces a significant quantity of genuinely altruistic behaviors as a maladaptive by-product. We inherit from society a legacy of norms, know-hows and mores, most of them adaptive. Hidden among them is a set of altruistic norms, which compel us to sacrifice our own fitness for the sake of non-kin group members. This hypothesis stands or falls on the assumption that humans fail to select and transform what they learn from others - so much so that they incur maladaptive consequences. The inheritance metaphor carries many such implicit assumptions, that call for careful scrutiny.

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