NEANDERTHALS IN PLATO’S CAVE
A Relativistic Approach to Cultural Evolution

George F. Steiner
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Hardcover version and e-book available @

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ISBN 978-1-53611-940-4
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“The general topic of the cultural origins of hominins is receiving ever increased attention, not only from specialists but also from the informed section of the public. Steiner has incorporated the most recent, cutting-edge developments in this complex field and he presents a realistic hypothesis of the early cognitive evolution of humans.”

— Prof. Robert G. Bednarik
Convener and Editor-in-Chief, IFRAO

Dual inheritance theory (DIT) recognizes the fact that for the last 50 millennia cultural evolution has had a marked impact on our anatomy, behavior and cognition. Unfortunately, by considering ‘cumulative cultural evolution’ as the ‘natural choice’ of all cognitively modern humans, DIT implies that technological innovation is the index of progress, and that the ‘ratcheting’ of innovations becomes the ‘goal’ of cultural evolution. This is accomplished by developing a certain degree of social complexity in which the biased copying of cultural models becomes a technique of cultural transmission. Small and isolated populations are therefore ‘doomed,’ and the ‘treadmill model’ takes effect, in which the lack of demographic strength results in impaired social learning and loss/infidelity in copying. However, the anthropological literature documents small and isolated groups that have—despite these ‘handicaps’—developed intricate exchange networks that do not necessarily rely on technological innovation and function only in low demographical settings. Not only that the parameters upon which cultural transmission is based in DIT—prestige, skills, success—are unknown, but certain ‘leveling mechanisms’ ensure that these parameters become eliminated and thus, no cultural models can rise to prominence. Interestingly, these societies do not seem to be plagued by cultural ‘loss’ and, instead of hopelessly running the treadmill and living in poverty, they have developed egalitarian and, to an extent, ‘affluent’ societies. The cultural evolution of these groups does not rely on accumulation, but rather on ‘reduction.’ The reductive cultural orientations of such ‘primitive’ societies are not an ancestral developmental stage, but rather an independent achievement.

Populations following a reductive cultural orientation—known in anthropology as ‘immediate-return’ hunters-gatherers—are often described as ‘pedomorphic,’ due to their markedly neotenous features. On the other hand, populations that follow a cumulative type of cultural evolution are surprisingly ‘rugged’ phenotypes. In the case of the latter, a cultural leap occurred during the Middle/Upper Paleolithic transition, which resulted in the entrenchment of archaic behavioral traits upon which hierarchical societies became established. Conversely, in the case of reductive orientations, a cultural regression seems to have occurred, but only during the early Holocene. The adoption of a cultural primitivism—immediate-return subsistence—offered a degree of flexibility that allowed for a neotenal leap. This enabled the reduction of archaic behavioral traits and the emergence of egalitarian societies.
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