Rob Boyd presents evidence that people in small-scale, mobile hunter-gatherer societies cooperated in large numbers to produce collective goods and participated in communal efforts like warfare and trade. This evidence suggests that large-scale cooperation occurred in the Pleistocene societies that encompass most of human evolutionary history, and therefore it is unlikely that large-scale cooperation in Holocene food producing societies results from an evolved psychology shaped only in small group interactions. In humans, extensible, grammatical language and increased cognitive ability makes possible more complex planning, and cumulative cultural evolution allows the gradual evolution of complex norms regulating human action that are adapted to particular environments. It is plausible that these differences may support the evolution of large-scale cooperation supported by direct sanctions through mechanisms that are not available to other animals.

Rob Boyd (PhD, Ecology, UCDavis) is Professor in the School of Human Evolution and Social Change at Arizona State University. He has taught at Duke and Emory Universities and UCLA. Much of Rob’s research focuses on incorporating cultural transmission into the Darwinian theory of evolution, and using the modified theory to understand why humans are such peculiar creatures.