

The evolution of the human family

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Compared to other species, humans show a remarkable degree of variation in family organization. This talk presents recent advances in the application of evolutionary thinking to the study of the human family, focusing on the evolution of monogamous marriage.

First, I present the results of a game-theoretic model investigating the co-evolution of marriage and wealth inheritance strategies. The analysis shows that where resources are transferred across generations, monogamous marriage may be advantageous because it "concentrates" wealth in a limited number of heirs. It may also be advantageous because a female may grant her husband higher probability of paternity if he marries monogamously, leading to exclusive investment of his resources in her offspring. This may explain why monogamous marriage prevailed across societies of Europe and Asia practicing intensive agriculture, and why it first emerged in these regions: here land was limited and the partitioning of estates depleted their value. Consistently, cultural norms promoting high paternity, such as ideologies of virginity and sexual fidelity, were common in these societies.

Second, I present the results of two case studies testing specific predictions of the theoretical model. One case study focuses on evaluating the prediction of an "early" origin of monogamous marriage, linked to the development of intensive modes of production such as plough agriculture. In agreement with this prediction, phylogenetic comparative analysis of marriage strategies across Indo-European-speaking societies reconstructs monogamous marriage as the ancestral state. The other case study focuses on the predicted association between monogamous marriage and norms stipulating the transfer of wealth to a man's wife's offspring, as opposed to alternative inheritance strategies. This prediction is supported by analysis of variation in marriage and inheritance strategies across a world-wide sample of societies, while controlling for the confounding effects of Christianization.

Finally, I discuss implications of these findings for our understanding of the evolution of human family systems.