

UC Riverside

Cliodynamics

Title

Are Cultural and Evolutionary Views of Human Warfare Converging? A Review of War, Peace and Human Nature: The Convergence of Evolutionary and Cultural Views, edited by Douglas P. Fry (Oxford University Press, 2015)

Permalink

<https://escholarship.org/uc/item/4125090f>

Journal

Cliodynamics, 6(1)

Author

Mathew, Sarah

Publication Date

2015

DOI

10.21237/C7clio6127980

Copyright Information

Copyright 2015 by the author(s). All rights reserved unless otherwise indicated. Contact the author(s) for any necessary permissions. Learn more at <https://escholarship.org/terms>

Are Cultural and Evolutionary Views of Human Warfare Converging?

A Review of War, Peace and Human Nature: The Convergence of Evolutionary and Cultural Views, edited by Douglas P. Fry (Oxford University Press, 2015)

Sarah Mathew

Arizona State University

War, Peace and Human Nature: The Convergence of Evolutionary and Cultural Views, edited by Douglas P. Fry, provides a wealth of information on various topics related to human conflict. The book begins with chapters from an ecological and evolutionary perspective that build a foundation for thinking about human conflict based on the selective forces that shape conflict and restraint in other animals. It then moves to a discussion of prehistoric conflict, which includes detailed summaries of archaeological data that provide a window into the state of violence before complex, centralized societies predominated the world. Next is a valuable segment on the nature of conflict in contemporary, egalitarian hunter-gatherers, including the Hadza of Tanzania, the Batek of Malaysia, the Moriori of New Zealand, and aboriginal societies of Australia. A section on war and peace in other primates follows, covering chimpanzee warfare, conflict and peace-making among baboons, and a comparison of conflict resolution mechanisms in children and non-human primates. The book concludes with a section discussing the psychological basis of killing in combat—including an intriguing discussion on the aversion to killing that combatants in modern military have had to confront and overcome. For those interested in a review of conflict and mechanisms of conflict resolution in humans, this book consolidates a wide variety of pertinent information.

Note that the book is not just about warfare, but about conflict in general, which can include a variety of inter-personal conflict, including physical aggression between same-sex individuals, domestic violence, conflict within social relationships, verbal aggression, and alcohol-induced fights. Some readers may find this problematic. The evolutionary forces that shape warfare differ from the evolutionary forces that shape inter-personal violence because warfare can occur only if the problem of collective action is solved. Thus, the evolution of warfare is tightly linked to the mechanisms underpinning the evolution of cooperation. This fact alone accounts for the rarity of warfare in most of the animal kingdom despite the prevalence of myriad other forms of conflict. So, for readers interested in the

Corresponding author's e-mail: sarah.mathew@asu.edu

Citation: Mathew, Sarah. 2015. *Are cultural and evolutionary views of human warfare converging?* 6: 108–110.

evolution of warfare, the book may seem like a grab bag of too many unrelated phenomena.

A weakness of the book is that it does not live up to its title, which promises a convergence between cultural and evolutionary views. The book does not present a mechanistic framework by which evolutionary and cultural viewpoints can be combined. This is disappointing, especially because over the last two decades, theoretical frameworks such as cultural group selection have been developed that explain how warfare (Turchin 2006; Turchin et al. 2013; Turchin 2010; Zefferman and Mathew 2015) as well as other social behaviors in humans (Boyd and Richerson 2010; Richerson et al. 2014; Henrich 2004) are shaped by selection operating on societies with different cultural norms. Cultural group selection provides an explicit mechanism by which the cultural norms and institutions of some societies evolve to motivate citizens to engage in warfare despite the tremendous personal risks to doing so.

For instance, the Turkana, an egalitarian pastoral society in Kenya, launch high-risk cattle-raids in which they engage in a firefight to obtain livestock, take revenge, and get access to grazing and watering sites. Despite the risk (50% of adult male mortality in certain populations is due to warfare), Turkana men participate in combat because the cultural norms of their society promote doing so (Mathew and Boyd 2011; Mathew and Boyd 2014). Cowards and deserters on raids are sanctioned by their community whereas brave warriors are praised and rewarded. There is some evidence that these norms arose by cultural group selection: Turkana norms governing warfare prohibit raiding other Turkana, and only promote raiding other cultural groups. Thus, the norms benefit the cultural group, not smaller or larger social units.

Cultural group selection can also explain why there is considerable variability in the prevalence, scale, and mode of warfare (Zefferman and Mathew 2015). The question of how prevalent warfare is across societies has long been a point of disagreement between cultural approaches and the traditional evolutionary approaches that have not taken cultural factors seriously. Some of the chapters in this volume continue to echo this divide while doing little to resolve it.

Instead, the convergence in this book stems from including the distinct perspectives from both cultural and evolutionary literatures. This is at best a weak form of convergence—only a step beyond the scholarly context of the past, in which the two sides operated in isolation or open hostility of each other. Unfortunately, the reader is still left with the job of synthesizing these perspectives into a coherent framework. It is unclear what aspects of the cultural and evolutionary viewpoints are at odds: Are the perspectives different merely because they examine the phenomenon at different levels? Or are there contradictions between these perspectives that need to be resolved? Lastly, the book does not

sufficiently flesh out why convergence is necessary to better explain human warfare.

Convergence is, in fact, imperative: it is increasingly evident that human warfare could not have evolved without culture. In no other species do large numbers of reproductively able, genetically unrelated individuals bear immense personal costs to fight together against opponents. So far, there is no way to explain this feature of human warfare without explicitly incorporating cultural factors into evolutionary models. Although this book provides an excellent starting point to discover the various perspectives arising from cultural and evolutionary viewpoints, the next step of fusing these together to produce the much-needed convergence still remains to be done.

References

- Boyd, R, and PJ Richerson. 2010. "Transmission Coupling Mechanisms: Cultural Group Selection." *Philosophical Transactions of the Royal Society B* 365 (1559): 3787–3795.
- Henrich, J. 2004. "Cultural Group Selection, Coevolutionary Processes and Large-Scale Cooperation." *Journal of Economic Behavior & Organization* 53 (1): 3–35.
- Mathew, S, and R Boyd. 2011. "Punishment Sustains Large-Scale Cooperation in Prestate Warfare." *Proceedings of the National Academy of Sciences* 108 (28): 1091–6490.
- . 2014. "The Cost of Cowardice: Punitive Sentiments towards Free Riders in Turkana Raids." *Evolution and Human Behavior* 35 (1): 58–64.
- Richerson, Peter, Ryan Baldini, Adrian Bell, Kathryn Demps, Karl Frost, Vicken Hillis, Sarah Mathew, et al. 2014. "Cultural Group Selection Plays an Essential Role in Explaining Human Cooperation: A Sketch of the Evidence." *The Behavioral and Brain Sciences* (October 28): 1–71. doi:10.1017/S0140525X1400106X.
- Turchin, Peter. 2006. *War and Peace and War: The Rise and Fall of Empires*. Plume.
- . 2010. "Warfare and the Evolution of Social Complexity: A Multilevel-Selection Approach." *Structure and Dynamics* 4 (3) (November 7).
- Turchin, Peter, Thomas E Currie, Edward A L Turner, and Sergey Gavrillets. 2013. "War, Space, and the Evolution of Old World Complex Societies." *Proceedings of the National Academy of Sciences of the United States of America* 110 (41) (October 8): 16384–9. doi:10.1073/pnas.1308825110.
- Zefferman, Matthew R, and Sarah Mathew. 2015. "An Evolutionary Theory of Large-Scale Human Warfare: Group-Structured Cultural Selection." *Evolutionary Anthropology* 24 (2) (March 4): 50–61. doi:10.1002/evan.21439.