

Review of

## “Ultrasociety:

**How 10,000 Years of War Made Humans the Greatest Cooperators on Earth”**

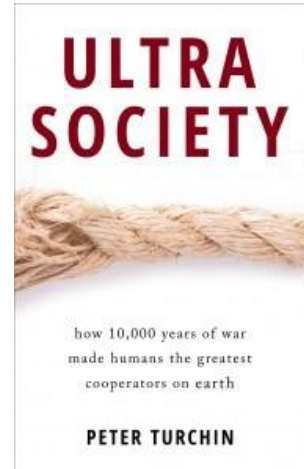
by [Peter Turchin](#) (2016).

**Rating:** 5 stars

**Title:** “The Hard but Hopeful Facts of Multilevel Cultural Evolution”

**Text:**

This popular and seminal work in scientific history is less about war than about “multilevel cultural evolution”. That is, Turchin develops a theory of history using the methodology of an evolutionary biologist, but one focused more on group selection than individual survival-of-the-fittest. For humans, the groups range broadly, from small clans of hunter-gatherers all the way up to empires. And, when you think about it, it should not be surprising that war has played a fundamental role in the spread or decline of different groups. But so has its opposite – cooperation.



Turchin asks, What is it about the cultures of certain groups that enables them to thrive when others fail? This is no easy task because the archeological record poses some puzzles. In resolving those puzzles, Turchin takes on key figures of the academic establishment, such as Richard Dawkins and Steven Pinker. His key analytical tool is called the “Price Equation”, actually the “Price Inequality”. It specifies when group selection is effective or not, in terms, not just of whether one group has an advantage over another, but also of the homogeneity of the groups. For example, a very cohesive group which has a military advantage over another group, and which defeats the other group, will be in a position to spread the cultural traits which characterize that cohesiveness. But if those cultural traits vary little from those of the defeated group, then there will be no cultural evolutionary effect. As an example of the latter Turchin cited endemic warfare in the highlands of New Guinea, where there is no difference between neighboring tribes. But in the modern world, significant differences in technology, institutions, or ideology can be spread quite quickly, not only by military victories, but also by economic supremacy.

The biggest puzzles center around inequality and war. Early humans lived in highly egalitarian societies of a few dozen to at most a few hundred individuals. These were so egalitarian that if a leader, such as a successful warrior, attempted to lord it over others as “chief” on a permanent

basis, that person was soon demoted, even killed if necessary, as it undermined the sharing ethic on which survival depended. Yet at some point chiefdoms did develop, even to the point of becoming “archaic states” after a few thousand years, lavish but cruel regimes like that encountered by Captain Cook in the Hawaiian Islands. These states were ruled by god-kings who engaged in extreme despotism, violence, and warfare, which gave them an advantage over smaller and less cohesive neighboring groups. Then, around 1000 BC states slowly began to morph into empires with a lessening of overall violence, in part because a bigger fraction of the people lived within the imperial boundaries. Yet, unlike the archaic states, these empires paid more attention to social and economic justice and adopted universal religions. Why?

Turchin’s surprising answer: “Horses”. That is, warfare from the back of horses was perfected on steppes of Asia in the centuries prior to 1000 BC and reigned supreme all the way to the spread of guns and cannon around 1500 AD. Even much later Napoleon was defeated by Russia due to the superiority of the Russian light cavalry. Key factors included both the fearsome cavalry charge and the logistical mobility of horses. Archaic states were no match, even after upgrading their defenses. “The state’s survival now depended on being able to produce large armies of armed commoners” (p. 204). That is, too few subjugated commoners were willing to die for their despotic rulers, even with all their impressive titles and threats. Hence the rise during the Axial Age of Confucianism, Zoroastrianism, Greek philosophy, Buddhism, Judaism, and more, with prophets denouncing injustice. Later Christianity and Islam emerged as more successful religions of empire, working “as a glue that holds together multiethnic groups in empires” (p. 207).

Note that Turchin, having grown up in Russia, is not religious himself, nor inclined to glorify war. In particular, he is careful to spell out the downside of multilevel cultural evolution - between group competition increases in tandem along with within group cooperation. Historically this has meant holy wars, imperial wars, world wars, cold wars, terrorism, and more. Yet per capita violence has declined dramatically, from a third of all men dying by violence in New Guinea to 1 in a 1000 in modern Denmark. Thus, despite present turmoil, there is hope over the long haul if we succeed in expanding “the circle of cooperation to encompass all of humanity” (p. 224). The key will be to continue to “develop the science of cooperation” (p. 230), noting that “all forms of inequality increase violence” (p. 222) by undermining cooperation and morale. So, speaks one of today’s foremost interdisciplinary scholars.

[Dick Burkhardt, UUEC General Assembly Committee Chair]