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Goldstone, Jack A
Korotayev, Andrey V

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Peter Turchin's The Great Holocene Transformation: A Review Symposium

Jack A. Goldstone¹, Andrey Korotayev^{2,3}

¹*George Mason University*

²*HSE University*

³*Institute of Oriental Studies, Russian Academy of Sciences*

It is a significant event when a leading world historian and cliodynamics theorist publishes a book claiming to offer the key to one of the great turning points in human history. As that scholar is the founder of this journal, Peter Turchin, we expect our readers will have a particular interest in that work. The editors have therefore commissioned a series of review essays by leading scholars in a diversity of fields to offer a critical perspective on Turchin's book.

For over a decade, Turchin and his colleagues have been assembling a vast dataset, dubbed "SESHAT", on the world's civilizations from their earliest emergence. Their goal has been to have the data to settle critical questions about the emergence of civilization itself, and its key aspects: systemic agriculture and manufacturing, energy use, social hierarchy, organized religion, and political structures. In his new book, *The Great Holocene Transformation* (Beresta Books, 2025), Turchin lays out what he believes are the critical findings from SESHAT regarding the transition of human societies from small nomadic bands to settled communities and states. He draws on cultural evolution and complexity science to frame his thesis regarding the drivers of long-term human history at this crucial transition.

Much of the difficulty in disentangling the threads of human social development lies in the paradoxes that saturate human history. Human civilization depends on cooperation, but the history of all civilization is rife with warfare and civil conflicts. Human civilization has been stabilized by attachment to traditions, but its advance has depended on innovation. Settled agriculture and the development of urban centers and long-distance trade was essential to raising output per capita and lifting human societies from subsistence to the long-term accumulation of capital; yet such societies are indelibly marked by poverty, inequality, sharp status differences and often by harsh authoritarian coercion and various forms of systemic discrimination including slavery. Some of humanity's greatest intellectual accomplishments are the emergence of rich moral philosophies in the Axial Age that held both ordinary people and great rulers to be subject to principles of moral

Corresponding author's e-mail: akorotayev@gmail.com

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behavior, and the emergence of scientific theories in the modern era that enabled greater control of nature for human benefit. Yet even as human societies built on those accomplishments to create complex and far-reaching legal systems and technologies that raised living standards by orders of magnitude, they were also characterized by continued chronic incidence of criminality, fraud and corruption, and uses of those technologies to create weapons of mass destruction and in ways that despoiled the environment. The paradoxes of human civilization are so great that philosophers and social activists often disagree on whether civilization itself is a blessing or a curse.

Turchin tries to avoid those normative debates and focus on identifying the factors that enabled and promoted the course of human evolution toward more complex societies. As can be imagined for a task that large, every aspect of his argument, from his data to his deductions, are going to be challenged.

Our contributors to this symposium approach this task from a variety of perspectives. In this issue, we set the stage for the symposium with an independent essay by Oded Galor (2026), presenting his theory of the evolution of human cooperation through successive phases of cooperation, conflict, and stratification. This is followed by three essays analyzing Turchin's book. Gary Feinman (2026) begins by voicing some concerns about the SESHAT data and its use to create causal explanations of civilizational development; Feinberg cites evidence suggesting that such development is perhaps more heterogenous, contingent, and follows multiple pathways rather than a dominant broad process. Nikolay Kradin (2026) focuses on the development of military technology through successive "revolutions," as an underestimated cause of civilizational advance. Walter Scheidel (2026) then offers a more optimistic take on the possibility that new data analyses such as Turchin's may open a door to evidence-based "universal history." However, he also notes that doing so will require mainstream historians to become much more open to this kind of data-driven historical analysis, as a complement to their archival-based research (although archeologists have already made the transition to combining traditional document-based research with data-driven analyses).

Because Turchin's book is so rich and raises so many interesting questions, we continue the symposium in our next issue that will feature essays by Tim Kohler, Clair Yang, Peter Richerson and Motohiro Kumagai. Kohler takes a deep dive into Turchin's concepts of "cultural multi-level selection," and questions whether modeling human evolution should focus on a causal path to complexity or instead pay more attention to the variability of social development. Yang welcomes Turchin's causal analysis and highlights its findings that agricultural development and competition among societies are the prime drivers of human social evolution. But she also raises questions about the temporal scale used by Turchin to capture causal processes and suggests alternative conceptualizations of social complexity.

Richerson draws on his expertise in human evolution to ask why the Great Holocene Transformation arose only in the last interglacial, and not in any of the 7 previous interglacial periods of the last 800,000 years. Then Kumagai considers ways to go forward building on Turchin's analysis, suggesting that identification-based causal designs, greater transparency regarding mechanisms, and ways to make the evidence for within-polity selection more explicit will enrich and improve the basic causal framework that Turchin's book provides.

These issues are at the very heart of cliodynamics. We are delighted to have such a diverse and richly talented group of authors, prompted by Turchin's book, addressing them for our readers.

References

- Feinman, Gary. 2026. Battling Conceptual Inertia: Decoupling Pathways from Process across the Holocene. A Review Essay on The Great Holocene Transformation by Peter Turchin (Beresta Books, Chaplin, CT USA, 2025). *Cliodynamics* 17(1): 149 – 158 <https://doi.org/10.21237/C7clio.66477> (this issue).
- Galor, Oded. 2026. Cultural Evolution and the Deep Roots of Cooperation: A Unified Perspective. *Cliodynamics* 17(1): 129– 146 <https://doi.org/10.21237/C7clio.66476> (this issue).
- Kradin, Nikolay. 2026. Cliodynamics and State Origins Theory. A Review Essay on The Great Holocene Transformation by Peter Turchin (Beresta Books, Chaplin, CT USA, 2025). *Cliodynamics* 17 (1): 159 – 170 <https://doi.org/10.21237/C7clio.66478> (this issue).
- Scheidel, Walter. 2026. Toward a new universal history? A Review Essay on The Great Holocene Transformation by Peter Turchin (Beresta Books, Chaplin, CT USA, 2025). *Cliodynamics* 17 (1): 171 – 180 <https://doi.org/10.21237/C7clio.66479> (this issue).
- Turchin, Peter. 2025. *The Great Holocene Transformation*. Chaplin : Beresta Books.