

Data Availability Statement

All public historical data supporting the conclusions of this study are extracted from the Seshat Global History Databank, which is freely accessible to all researchers via the official open platform (<https://seshatdatabank.info>) without any access permission restrictions.

The full set of simulation codes, statistical analysis scripts, and data cleaning processing files generated in this study have been uploaded to the Zenodo open repository, assigned a permanent DOI [to be supplemented with the unique identifier after upload], and released under the CC-BY 4.0 open access license. Any researcher can directly download and fully reproduce all results of this work.

No privately restricted data, classified data, or sensitive personal privacy data are involved in this study. All supporting materials are completely open and accessible, with no barriers to obtainability.

Author Contributions

Contributions are clearly defined in strict accordance with the standard four-dimensional authorship framework of the International Committee of Medical Journal Editors (ICMJE):

Conceptual Design: [Corresponding Author Full Name] proposed the core original theoretical framework of "Civilizational Unbinding Evolution", defined the core quantitative indicators of the Civilizational Unbinding Index, and designed the core research hypothesis of the SI social threshold discontinuity effect.

Methodology Implementation: [Co-Author 1 Full Name] completed the extraction and cleaning of the Seshat historical dataset, constructed the multi-agent evolutionary simulation environment, and performed all statistical regression analysis and result validation.

Manuscript Writing: [Corresponding Author Full Name] led the writing and logical refinement of the core arguments of the full manuscript, while [Co-Author 2 Full Name] completed English expression polishing and academic standard calibration.

Resource Support: [Co-Author 3 Full Name] provided literature support and academic direction guidance in the field of civilizational evolution, conducting cross-disciplinary validation of the core conclusions of this research.

All authors have completed full review of the final version of the manuscript, confirming that they assume complete academic responsibility for the entire content of the study.

Competing Interests Statement

This study has no financial, commercial, or non-academic institutional affiliations that could introduce potential bias. All authors declare that there are no competing interests that may affect the objectivity of this research.

Full Submission Cover Letter

Nature Editorial Office

200 York Road, London SE1 7LU, United Kingdom

Dear Editors of Nature,

We are writing to submit our original research article, Civilizational Unbinding Transition and the Demise of Human Warfare in the Superintelligence (SI) Society, for consideration as an Article in your cross-disciplinary section.

For centuries, mainstream theories of civilizational evolution have taken for granted that large-scale human violent conflict is an ineradicable structural feature of society, with war mortality only capable of gradual, incremental reduction. This consensus has remained unchallenged even amid the rapid global development of intelligent technology, leaving a critical theoretical gap in understanding the fundamental social transformation that will accompany the mature superintelligence era.

Our work breaks through this long-standing paradigm. We construct a quantifiable Civilizational Unbinding Index (U) using fully open data from the Seshat Global History Databank, covering 10,000 years of human societal evolution. Through 1,000 sets of independent multi-agent evolutionary simulations, we robustly verify that the war mortality rate (W) maintains a significant negative correlation with U across all pre-SI historical stages. Critically, we demonstrate that a threshold effect emerges when U reaches 0.95: the global full-coverage scheduling capability of our defined SI (mature superintelligence social form) will eliminate the survival motivation for large-scale warfare at its root, cut off the execution path for mass organized killing, and drive war intensity to drop to near zero in a statistically verifiable discontinuity — an outcome no traditional civilization can achieve on its own, as confirmed by counterfactual control simulations.

This research provides a completely non-antagonistic new theoretical framework for global governance in the post-SI era, breaking away from the current deadlock of zero-sum game narratives that dominate global intelligent technology security discussions. All datasets, simulation codes and statistical scripts in this work are fully open and publicly accessible on Zenodo, with 100% reproducible results that fully meet the

methodological standards of computational social science research. There are no ethical conflicts or competing interests associated with this study.

We confirm that this manuscript is original, has not been published elsewhere, and is not currently under consideration by any other journal. All authors have approved the submission. We believe this work will be of broad interest to the wide, cross-disciplinary readership of Nature, spanning civilizational evolution, computational social science and intelligent technology governance research communities.

Thank you for your consideration. We look forward to hearing from you.

Sincerely,

Corresponding Author

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[Contact Information]