

Global Disasters and World Society

Introduction to the Special Section on Global Disasters and World Society, Part I

Chris Chase-Dunn

Institute for Research on World-Systems; University of California-Riverside

chriscd@ucr.edu

Fábio Pádua dos Santos

Federal University of Santa Catarina

fabio.padua@ufsc.br

In March of 2024 an International Conference on Global Disasters and World Society was held at the University of Santa Catarina in Florianopolis, Brazil with linked hubs at the University of Witwatersrand in Johannesburg, South Africa and at the University of California-Riverside (see dos Santos, F. P. 2024).¹ The purpose of the conference was to bring scholars, activists, and policy analysts together to learn from one another about what is happening and to consider strategies for dealing with the contemporary polycrises. Remote access was provided via the Zoom Platform to speakers and audiences from South America, Africa, Europe, North America, South and East Asia, and Oceania. The hybrid conference was supported by the World Society Foundation (Zurich). The *Journal of World-Systems Research (JWSR)* is publishing two special sections that contain articles that were produced by scholars who made presentations at the conference. This is the introduction to the *JWSR* Special Section on Global Disasters and World Society, Part I.

¹ Zoom technology made it possible for the hubs to connect with the main live conference in Brazil in hybrid formation that combined live and online participation. This conference configuration reduces the carbon costs of transportation, allowing attendees to travel to local live hubs instead of using intercontinental air travel.



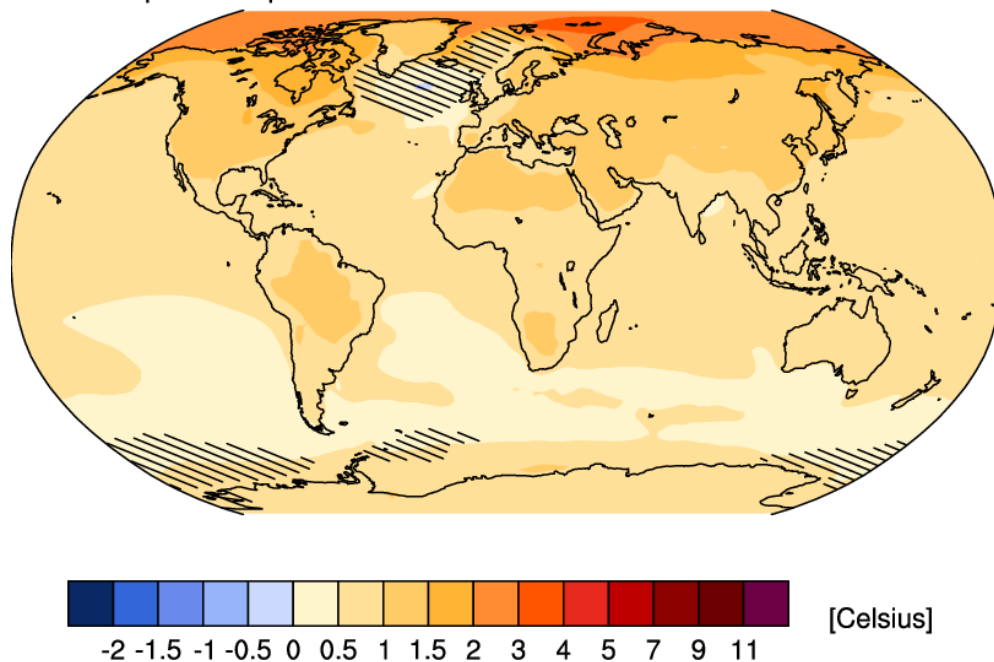
New articles in this journal are licensed under a Creative Commons Attribution 4.0 United States License.

This journal is published by [Pitt Open Library Publishing](https://open.library.pitt.edu/).

Natural disasters have been important causes of massive extinction events and drivers of biological evolution since life emerged on Earth (Abbott 2017), and both natural and human-caused disasters have had huge impacts on human sociocultural evolution since *homo sapiens* came out of Africa. Biological and geological theories have gone through waves of catastrophism and uniformitarianism in the nineteenth and twentieth centuries (Huggett 1997; Gould 2002). Natural and human-caused disasters have operated as selection mechanisms in the evolution of within-polity and inter-polity sociocultural systems by destroying lives and the human-built environment, and they have provoked a challenge and response dynamic that sometimes causes human polities to invent and to implement innovations that resulted in increases in complexity and hierarchy. Individuals, households, communities, settlements, and polities and interpolity systems that were most prepared for, and resilient to, these selection mechanisms survived and prevailed. Others were set back and either became extinct or were absorbed by more resilient neighbors.² The contemporary global situation has entered another time of troubles in which concurrent crises of governance and anthropogenic climate change are converging.

Figure 1: KNMI Climate Explorer predicted temperature changes

mean ssp585 temperature 2030-2040 minus 2000-2025 Jan-Dec CMIP6



As in the past, catastrophes will be fatal for some but will also be opportunities for others. Some regions have already been experiencing large increases in temperature and unusually big

² Robert Carneiro (1978) called this the principle of competitive exclusion to explain why small-scale polities were extinguished or incorporated into larger, more complex, and more hierarchical polities.

storms while others experience only mild changes, and the different regional effects also vary by how much and how rapidly the average global temperature changes (see Figure 1). For some regions the temperature changes will improve habitability for humans, but for other regions, those that are already hot, the temperature rise will make the locations uninhabitable. Global warming is also causing unusually frequent and extreme storms, whiplash between droughts and floods, and wildfires. And the effects are likely to increase migrations from areas that are becoming uninhabitable, especially from those near the equator (Xu, et al. 2020). These disruptions are also likely to cause economic crises and to increase conflicts, including civil and interstate wars (Kemp, et al. 2022).

Seven articles are included in Part 1 of the *JWSR* Special Section on Global Disasters and World Society.³ The first is by **Andrey Korotayev**, a Russian anthropologist and historian, who examines how the rise of Islamic civilization in the sixth century CE was partly caused by volcanic eruptions and droughts in Arabia that led to famines and the collapse of kingdoms. Korotayev contends that this crisis led to the dismantling of rigid supra-tribal political structures among the Arabs, creating fertile ground for the rise of a new form of authority. The venture of Islam drove the rise of new large empires and intensified trade and communications networks in a more connected West Asian, European, and North African world-system.

Leonid Grinin, a Russian philosopher of history, sociologist, and political anthropologist, and his brother **Anton Grinin**, a Russian scholar of modern technological trends and future studies, discuss the deepening crisis of the contemporary world-system and its potential impact on environmental degradation. Their paper explores the negative environmental consequences of political and economic crises. They analyze geopolitical and economic crises, differences between the global North and the global South, and the influences of military conflicts on the environment with attention of the warfare in Eastern Europe.

Paola Huwe de Paoli is a Brazilian graduate student in the Program in International Relations at the Federal University of Santa Catarina. Her essay, which *JWSR* is publishing in both Portuguese and English, examines the governance of climate change within the framework of the Anthropocene, focusing on the inadequacy of mitigation strategies proposed by current global climate governance. She criticizes the anthropocentric nature of these strategies, arguing that they prioritize sustainable development within the constraining framework of global capitalism. De Paoli contends that this approach will be insufficient for effective mitigation and fails to address the root causes of the contemporary environmental crises.

William K. Carroll is a Canadian critical sociologist who studies global class formation, corporate power, and social movements. His essay provides a theoretical-historical analysis of fossil capitalism and the climate crisis, as well as an assessment of potential alternatives. He periodizes the development of fossil capitalism and identifies key moments in its evolution, including the post-World War II boom and the current systemic crisis. Carroll examines various

³ Other publications coming from the Global Disasters conference include a forthcoming book containing chapters based on presentations and a special issue of *Social Sciences on Disasters, Social Movements, Policy Responses and Sociocultural Evolution*. (See Chase-Dunn n.d.).

alternatives to fossil capitalism, critiquing market-based green capitalist solutions and exploring proposals for democratic eco-socialism.

David W. Schwartzman is a biogeochemist and environmental scientist who is a Professor Emeritus at Howard University (Washington DC, United States). His essay proposes the use of science, especially thermodynamics and climate science, for constructing a transition strategy toward an ecosocialist Global Green New Deal. He argues against the idea of degrowth in favor of a program of sustainable and just development and addresses important issues about potential allies in the coming confrontation with fossil capital. He is also optimistic about the role that the Peoples Republic of China could play in the transition to ecosocialism (see also Schwartzman and Schwartzman 2024).

Roberto J. Ortiz is an Assistant Professor of Sociology at California State University, Long Beach who studies uneven development and globalization processes in Latin America. His essay⁴ examines the rise and decline of fossil-fueled development in capitalist (Puerto Rico) and state-socialist (Cuba) contexts from a world-ecological perspective. He highlights the contradictions inherent in oil-fueled accumulation and development, showing how oil dependency has shaped economic, social, and environmental histories. He emphasizes the role of oil in both driving and contradicting current trajectories, especially in the context of the unfolding global ecological crisis.

Giacomo Otavio Tixiliski is a PhD Student in International Relations at the Federal University of Bahia in Brazil and member of the Research Group on Political Economy of World-Systems at the Federal University of Santa Catarina. His essay, published in English and Portuguese, compares and explores the overlaps between concepts from world-ecology, mainly the post-humanist Marxism of Jason Moore, and shamanic Yanomami philosophy as presented by Davi Kopenawa, that have been used to describe the ongoing global socio-environmental crisis. Tixiliski uses these concepts to propose a multispecies model of extraction and collapse (falling from the sky) and to motivate a project of convergence between indigenous and ecological ontologies. Tixiliski is also exploring the implications that indigenous world views have for international relations theory.

Lauren Langman is a sociologist who studies the evolution of human character in advanced capitalist societies. Langman's article employs the world-system perspective (WST) and the Frankfurt School Critical Theory (FSCT) to examine how the generational aspects of character evolution might play a role in constructing a post-capitalism sustainable society. He follows the inspiration of Herbert Marcuse in seeing Generation Z, the Zoomers, as the bearers of a social character that prioritizes cooperation, equality, and tolerance and that will produce leadership and organizations that will empower the transition to a Net Zero world society.

⁴ In addition to being featured in this issue of *JWSR*, an interview with Ortiz about this article will be featured on an upcoming ASA Podcast, which will be available online at <https://www.asanet.org/publications/podcasts/>

Disclosure Statement: Any conflicts of interest are reported in the acknowledgments section of the article's text. Otherwise, authors have indicated that they have no conflict of interests upon submission of the article to the journal.

References

- Abbott, Patrick L. 2017 *Natural Disasters*. New York: McGraw-Hill.
- Carneiro, Robert L. 1978 "Political expansion as an expression of the principle of competitive exclusion," Pp. 205-223 in *Origins of the State: The Anthropology of Political Evolution*. Philadelphia: Institute for the Study of Human Issues, edited by Ronald Cohen and Elman R. Service.
- Chase-Dunn, Christopher, guest editor. Forthcoming. "Special Issue on Disasters, Social Movements, Policy Responses and Sociocultural Evolution." *Social Sciences* https://www.mdpi.com/journal/socsci/special_issues/WA160H4TGW
- dos Santos, F. P. 2024 "Global Disasters and World Society: The Ecological Dimension of Modern World-System Crises" *Social Evolution and History*, 23 (2): 190–200. DOI: [10.30884/seh/2024.02.08](https://doi.org/10.30884/seh/2024.02.08)
- Gould, Stephen J. 2002. *The Structure of Evolutionary Theory*. Cambridge, MA: Harvard University Press
- Heim, Jacob L and Benjamin M. Miller. 2020. *Measuring Power, Power Cycles, and the Risk of Great-Power War in the 21st Century*. Santa Monica, CA: Rand Corporation https://www.rand.org/pubs/research_reports/RR2989.html.
- Huggett, Richard J. 1997. *Catastrophism: Asteroids, comets and other dynamic events in earth history*. London: Verso. https://www.google.com/books/edition/Catastrophism/fDZ_Sq47FBwC?hl=en&gbpv=1&dq=richard+huggett+catastrophism&pg=PR9&printsec=frontcover
- Kemp, Luke, Chi Xu, Joanna Depledge, Kristie L. Ebi, Goodwin Gibbins, Timothy A. Kohler, Johan Rockström, et al. 2022 "Climate endgame: Exploring Catastrophic Climate Change Scenarios. *Proceedings of the National Academy of Sciences*, 119(34), e2108146119.
- Koninklijk Nederlands Meteorologisch Instituut. N.d. "KNMI Climate Explorer" database, http://climexp.knmi.nl/plot_atlas_form.py
- Schwartzman, David and Peter Schwartzman 2024 "Scenarios for combating global warming: China's critical role as a leader in the energy transition." *AIMS Energy*, 12(4) DOI: 10.3934/energy.2024038
- Xu, C., Kohler, T. A., Lenton, T. M., Svenning, J. C., & Scheffer, M. 2020 "Future of the human climate niche" *Proceedings of the National Academy of Sciences*, 117(21): 11350–11355.