

Review - Global Crisis: War, Climate Change & Catastrophe in the 17th Century

Written by Dagomar Degroot

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Global Crisis: War, Climate Change & Catastrophe in the Seventeenth Century

By Geoffrey Parker

New Haven: Yale University Press, 2013 (in paperback: 2014).

Geoffrey Parker's *Global Crisis* represents a coming of age for the increasingly dynamic study of past climate change and its human consequences. Such "climate history" has a proud academic lineage, but it has long lingered in the margins of serious historical study. With *Global Crisis*, Parker, among the most eminent historians of the early modern period, brings climate history into the mainstream of his profession. Not a moment too soon, for past relationships between humans and climate change can inform how we adapt to global warming today. *Global Crisis* is therefore essential reading for anyone interested in international relations in a warming world.

Parker argues that early modern cooling – known today as a "Little Ice Age" – coincided with political, economic, and demographic conditions that left contemporary societies vulnerable to environmental disruption. This "fatal synergy" triggered a "global crisis" that was overcome not when the climate warmed, but rather as new intellectual movements, changing attitudes among elites, and massive depopulation yielded societies more resilient to climate change.

Global Crisis unfolds in five parts. Parker begins by outlining the complex human mechanisms that allowed climate change to trigger disaster across diverse seventeenth-century societies. He then examines relationships between climate and crisis in no fewer than twelve Eurasian states, before exploring exceptional regions where the influence of climate change was ambiguous, or where most people emerged "relatively unscathed." He continues with an engrossing survey of common denominators in early modern responses to climate change, before describing social responses that ironically lifted societies from crisis during the coldest decade of the Little Ice Age.

Writing world history, Parker reminds us, is tricky business, particularly as our gaze lengthens to consider the distant past. In the seventeenth century, it requires rare skill to translate texts in many languages, written in arcane dialects, from cultural contexts that seem alien today. Parker is one of very few historians who could have comfortably overcome this challenge. He has unearthed a vast trove of documentary evidence collected from across the early modern world, examined in ways that gracefully transcend historical genres and disciplinary boundaries.

The broad outlines of Parker's narrative echo Brian Fagan's *The Little Ice Age: How Climate Made History, 1300-1850* (2001), Neville Brown's *History and Climate Change: A Eurocentric Perspective* (2001), passages in Hubert Lamb's *Climate, History and the Modern World* (second edition, 1995), and a host of articles written by scientists and historians since the 1950s. Nevertheless, the depth of Parker's research, the elegant structure of his narrative, and the global scope of his analysis distinguish *Global Crisis* from previous studies. Moreover, Parker includes a detailed analysis of social resilience in the face of climate change, and he largely avoids the environmental determinism that has undermined previous climate histories.

Unlike many other histories of the Little Ice Age, *Global Crisis* explicitly appeals to policymakers. This comes as no

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surprise: after all, Parker's earlier popularization of an early modern "military revolution" influenced the development of American military policy in today's Middle East. In a brilliant epilogue to *Global Crisis*, Parker bridges his analysis of the Little Ice Age with modern climate issues, ranging from the development of insurance policy to imbalances in disaster spending. He persuasively argues that past catastrophes should persuade policymakers to support climate change adaptation, even if they remain unconvinced by the scientific consensus about anthropogenic warming.

In the historical discipline, "grand narratives" like the one presented by Parker are usually easy targets for fastidious criticism, because history is rife with exceptions to every trend. Nevertheless, the most provocative and, for policymakers, useful arguments usually require some generalization, and Parker masterfully links diverse regional stories into a single narrative. Still, his descriptions of straightforward, synchronous decline can ignore new scholarship that identifies different or more nuanced trends. In particular, there is an odd dichotomy between most climate histories of the Little Ice Age – which focus on crisis – and broader environmental histories of the early modern world, which usually consider its expansion (Crosby, 1986; Richards, 2003). In many sixteenth and seventeenth-century societies, crisis and prosperity were linked, evolving together in ways we might find recognizable today. The only hints of such "creative destruction" come towards the end of *Global Crisis*, in descriptions of the late seventeenth century. However, it was certainly an essential element of the entire early modern period, and its omission is a missed opportunity that jeopardizes some of Parker's claims. For instance, Parker describes three political crises weathered by the seventeenth-century Dutch Republic, yet largely ignores the economic prosperity and cultural dynamism of its Golden Age.

Scientists might also question the "historical climatology" of *Global Crisis*. Parker occasionally presents climate reconstructions with no citations, no mention of methodology, and no hint as to geographic scope. (15) Such context is critical, because scientists routinely publish articles that apply diverse methodologies to an array of natural sources in ways that slightly, but to a climate historian significantly, revise our understanding of past climates. Parker argues that average global temperatures in the sixteenth century were relatively warm, that cooling began in the second decade of the seventeenth century, and that this cooling reached its nadir in the final decade of that century. It is a controversial narrative that is difficult to sustain in light of the most current climate reconstructions.

These demonstrate that temperatures across most of the northern hemisphere actually cooled dramatically in the later decades of the sixteenth century, during what is now known as the "Grindelwald Fluctuation," before rebounding slightly in the 1630s. Cooling certainly resumed later in the century, but fluctuations in decadal temperatures were an important part of the Little Ice Age. Warming, as well as cooling, affected early modern societies. Moreover, serious crises accompanied the onset of the Grindelwald Fluctuation in the sixteenth century. Why not begin *Global Crisis* by exploring them?

Well-known climatologist Michael Mann has argued that, for most scientists, "the notion of the Little Ice Age as a globally synchronous cold period has all but been dismissed," (Mann, 2002), which calls into question a narrative dedicated to the worldwide ramifications of early modern cooling. Certainly, cooling episodes happened in diverse places, and Parker acknowledges that cooling marched to a different step in different regions. However, at times *Global Crisis* appears to assume that the cooling trend during the Little Ice Age was more homogenous than recent climate science now suggests.

For instance, Parker claims that "from Newfoundland to Patagonia, the Americas experienced notably colder winters and cooler summers" during the middle decades of the seventeenth century. (446) This striking assertion is supported by tree ring measurements from Patagonia, and similar data that apparently "show much the same pattern" across North America. (763) Undoubtedly, the seventeenth century was colder across much of the continent. However, documentary evidence and recently analyzed paleoclimatic data derived from the Chesapeake Bay itself indicate that early American colonists likely enjoyed relatively mild weather for most of the seventeenth century. (Cronin et al., 2003) For them, the real nadir of the Little Ice Age occurred in the nineteenth century. Climate reconstructions are notoriously treacherous in this way: often the global or even the regional trend disappears at the local level that mattered most for human beings.

As the controversies surrounding hurricanes Katrina and Sandy have made abundantly clear, it can be challenging to

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link gradual climate change to short-term weather, and in turn to human consequences. Climate historians must carefully untangle these relationships, while holding to consistent definitions of “climate” and “weather.” This is where *Global Crisis* occasionally falls short. For example, the “culprit” of the Great Fire of London in 1666 is identified as “climate,” yet we learn that warm, dry conditions had left London a tinderbox (62). Such weather would, in fact, have been less likely during a climatic regime that was generally cold and rainy. Hence, on the basis of precipitation and temperature, the fire cannot be linked to climate change.

Ultimately, *Global Crisis* is a tremendously stimulating book. Its potential shortcomings – perhaps inevitable in a work of such size and scope – are as valuable as its impressive strengths. Both will no doubt encourage interdisciplinary research in a topic that has become invaluable for our understanding of the future. Students and policymakers in international relations will gain a clearer understanding of the ways in which climate change shapes conflict and requires adaptation. In an age of renewed global crisis, we would do well to learn from the past.

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