CLIMATE WITHOUT NATURE

This book offers a critical reading of the Anthropocene that draws on archaeological, ecological, geological, and ethnographic evidence to argue that the concept reproduces the modernist binary between Society and Nature and forecloses a more inclusive politics around climate change. The authors challenge the divisions between humans as biological and geophysical agents that constitute the ontological foundations of the period. Building on contemporary critiques of capitalism, they examine different conceptions of human–environment relationships derived from anthropology to engage with the pressing problem of global warming.

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Climate without Nature

A Critical Anthropology of the Anthropocene

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Preface

On Wednesday, January 21, 2015, the United States Senate voted 98–1 to approve a resolution that stated, "[I]t is the sense of the Senate that climate change is real and not a hoax."[1] Shortly afterward, the Senate rejected a follow-up resolution that linked the reality of climate change with human activities: "[C]limate change is real and human activity significantly contributes to climate change."[2] That the Senate could acknowledge that climate change was real and not acknowledge the role of humans in it serves as a fitting reminder of the politics of global warming in the United States as well as in many other parts of the globe, especially as it pertains to questions of human activities and responsibility. On one hand, it demonstrates that many people are reticent to accept (or at least are politically motivated to deny) the overwhelming scientific evidence that points to the role of human fossil fuel consumption in changing the planet's atmosphere and climate. Yet, on the other hand, it also highlights the increasing difficulty of ignoring what many senators and many of their constituents are beginning to experience and perceive: record-setting temperatures, more frequent heat waves, earlier spring agricultural planting seasons, the increasing difficulty of ice fishing on thin ice, and "white" Christmases that are now romanticized visions of a former time in some places. Alarmingly for many concerned citizens and scientists, it seems that the process of global warming is intensifying to the degree that it is becoming perceptible to human experience. The number of times that TV meteorologists speak of conditions that are "unseasonably warm" or "Mother Nature's" ruse of raining instead of snowing during a Midwestern January event is increasingly difficult to ignore. And yet there is still a sizable population, both among politicians

[1] "Climate change is real and not a hoax, Senate overwhelmingly decides". LA Times, 1/21/2015.
[2] "Senate Votes 98–1 That Climate Change 'Is Not a Hoax.'" NBC News, 1/21/15.

and the public, who deny the role humans are playing in warming the planet. As Oklahoma senator Jim Inhofe stressed in his rejection of the second resolution, "[T]he hoax is that there are some people that are so arrogant to think that they are so powerful that they can change climate."[3]

Given this political context, the "Anthropocene" – a proposed designation to formally acknowledge the "recent age of humankind" on the geological timescale of earth's approximately 4.5 billion year stratigraphic record of rock chemistry, species evolution, and climate change – is a much needed scientific and public call to foreground the actions of humans in altering the planet's ecology, surface materials, and broader systemic functioning. And yet, at the same time that the Anthropocene highlights human action in shaping earth's climatic trajectory, the designation also continues to hold people apart from Nature while overlooking the vast differences that characterize the human species. As a proposed new geological or historiographical period, most scholars place its beginning around either 1800 or 1950 – marking the time when humans became a "geophysical force" following the advent of the steam engine and their subsequent reliance on fossil fuels in the case of the former, or the "great acceleration" in the consumption of fossil fuels and many other human activities that affect the earth system in the case of the latter. The Anthropocene periodization, for many of its proponents, identifies a time when the earth system has "left its natural geological epoch" (e.g., Stefen et al. 2007) as a consequence of human activities. In short, prior to the onset of this new period, earth's climate operated in a "natural" state. After the beginning of this period, humans have "replaced nature as the dominant environmental force on Earth" (Ruddiman et al. 2015). Paradoxically, while earth systems scientists recognize human actions as constitutive elements of the earth system, in their common characterization of the Anthropocene they continue to hold humanity and Nature apart.

Ironically, it is arguably the perpetuation of this dichotomy that impedes a progressive politics of global warming. Is it not precisely an ideology of Nature that exists without human influence, either now or in the past, that is mobilized by those who are no longer global warming naysayers but refuse to see the ways human interventions (undoubtedly some more than others) *have* and *could* contribute to climate change? As we demonstrate in this book, humans have long been embedded in the material workings of the earth system, and many of its environments and its planetary conditions have not been unaffected by humans for at least thousands of years. This

[3] "Climate change is real and not a hoax, Senate overwhelmingly decides". LA Times, 1/21/2015.

recognition, we suggest, might potentially provide the basis for a more progressive politics of climate change in which representations of the global environment or climatic system as stable or natural, whether now or in the past, are replaced with a historically informed view on the complexity of how the environments that humans inhabit have always been constituted, not in some pure domain that stands apart from human society but instead through differentiated and place-based human–nonhuman relationships that articulate with climatic conditions. Would that not open up debate about what configurations of people and other-than-human inhabitants of particular places are desirable, for whom, and how those might be achieved, constituted, or disrupted? While these might very well be the political goals and implications for advocating the designation "Anthropocene," the concept, as first and foremost a new period in which humans have replaced "nature," may largely work against them by reifying Nature's very existence as separate from Society.

To address the questions above requires a temporally much deeper historical understanding of how humans have been differentially embedded in the material workings of the earth system than what most proponents of the Anthropocene have hitherto stressed. The Anthropocene's emphasis on the emergence of humans as a "geophysical force" within the last 50 or 200 years – or, in some arguments that have linked the Anthropocene period to the development of a capitalist and colonial world system, the last 500 years – has hardly begun to underscore how humans began contributing to much of what is considered to be natural about the planet's atmospheric conditions and environmental systems prior to the onset of this proposed new epoch. To do so necessarily requires archaeology and the detailed studies of human land use and technological and social practices over the long term. Yet despite a considerable emphasis among archaeologists on studying human responses to climate change in the past, archaeologists themselves have been largely silent on questions of the Anthropocene until very recently.

In this book we review material on long-term and contemporary relationships between humans and the planet's ecology and atmosphere to examine the historicity and the political implications of the Anthropocene designation. Doing the latter, however, also means addressing the role of political economic forces as well as actors differentiated by class, race, gender, or location in shaping the current climate crisis. To be clear, the Anthropocene has hardly been produced equally by a singular *Anthropos*. If we recognize that many formulations of the Anthropocene fail to account for both the differentiated responsibilities and vulnerabilities of humans, it

is also imperative to ask how, and under what conditions, are such inequalities produced and intensified. Given this context, we are faced with a critical question: How might letting go of Nature, not just in the present but also in the past, disrupt the foundational premise of the Anthropocene and yet be cognizant of the ways in which systems of production, human inequalities, and differentiated social contexts have contributed significantly to ongoing global warming, particularly over the last few hundred years? At the same time, how might we account for human experiences of a changing climate, which necessarily differ across social, economic, and geographical divisions? The US Senate has now belatedly acknowledged what nearly all of the world's scientists and many of its citizens have long known: Climate change is "real." This means that addressing the politics and implications of global warming also requires addressing how people conceive, experience, and perceive their relationships with their changing environments, a task that is best suited for cultural anthropology. A critical anthropology of the Anthropocene thus requires collaboration that draws on the strengths of the discipline's different methods and the domain expertise of its various subfields. In the pages that follow we combine archaeology and sociocultural anthropology to consider the empirical basis and the philosophical and political implications of the Anthropocene.

The idea for this collaboration began during a conversation in 2011 about how the combined insights from archeology and cultural anthropology could be used to counter climate's "abstractness," which has arguably greatly impeded wider policy and public support against mitigating global warming and its devastating consequences for human and nonhuman populations of the world. How could anthropology, with its deep commitment to historical understanding and social and political justice, use the experiences of people to build a politics that is mindful of large-scale climatic shifts while also being attentive to the ways people engage with houses, cars, soil, sand, sediments, mountains, trees, animals, and glaciers? It was clear to us that, as anthropologists, we had to address the category of "weather" to rethink and reimagine a politics of global warming that privileged people's everyday experiences, rather than rely solely on rendering concrete abstract data from atmospheric and climate scientists. At the same time, however, we also recognized what many earth system scientists have demonstrated for a long time: that earth's climate is a dynamic assemblage of interactions among a multitude of different things and materials, ranging from the gravitational pull of massive celestial bodies that impact earth's orbit around the sun to the production of atmospheric methane by microscopic bacteria in waterlogged soils on

earth's surface. Thus, *materializing climate* – by which we mean foregrounding how humans are embedded in a broader materiality that is constitutive of social, environmental, and climatic conditions – was a common point of departure to both assess how humans participate in climatic production over the long term and also how they perceive and experience their lives and welfare within this broader materiality. This seemed especially important within the context of shifting weather patterns, which are increasingly becoming the norm for populations across the globe with consequences for people's lives and livelihoods, their cultures, and modes of engaging multiple social and material worlds. Indeed, as we detail in this book, the rapid and profound transformations in people's sociomaterial lives are taking place within the context of large-scale infrastructural interventions and the intense commodification of environmental resources such as land and water, which are dramatically altering the relationship between humans and nonhumans and shaping people's perceptions and experiences of weather.

Since our conversation in 2011 we have both conducted multiple field seasons of anthropological research in South Asia (Figure 1.1), an area of the planet that is highly vulnerable to climate change. Bauer conducts research in South India on periods during which inhabitants of the Southern Deccan began differentially reshaping environmental conditions and simultaneously contributing to atmospheric greenhouse gas concentrations, all in the context of developing social inequalities thousands of years ago. Bhan conducts research among contemporary mountain communities in the heavily militarized and war-torn border provinces of Jammu and Kashmir. These communities are currently experiencing massive ecological catastrophes that include an unprecedented number of floods associated with melting glaciers and extensive infrastructural development that is limiting people's access to resources and disrupting their networks of kin and family. The critical understanding of the Anthropocene and the intervention that we offer in the following pages could not have been written with just one of these research settings and methods. By bringing together insights from archeology and cultural anthropology we thus hope to shed critical light on the Anthropocene concept and some of the most pressing issues of environmental and social justice of our times, the politics of which most of our politicians are just beginning to confront.

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