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Environmental Displacement in the Anthropocene

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This intervention invites more substantial scholarly attention to human displacement in and of the Anthropocene—this current epoch in which humans have become the primary drivers of global environmental change—and sets out an initial framework for its study. The framework is organized around three interrelated contributions. First is the recognition that displacement is driven not just by climate change but also broader forms of environmental change defining the Anthropocene, including biodiversity loss, changes to land and water resources, and the buildup of nuclear debris, along with their intersections. Second, the framework parses out three distinct moments of displacement in the Anthropocene: displacement as a consequence of, prerequisite to, and active response to environmental change. Third, the framework rejects environmental (neo)determinism by showing how displacement across these distinct moments and drivers is more than environmental: It is the articulation of environmental and sociopolitical-economic factors, which are routinely shaped by inequality and play out within a broader series of crises and crisis narratives that drive displacement and hinder viable solutions. We ground these interventions in examples of political conflict, anti-immigrant politics, the posttruth and colonial politics of knowledge production, and the Anthropocene itself as crisis requiring displacement to clean up its mess. Although each example is quite distinct, a common thread stitched across them is colonialism, highlighting a recurring extra-environmental driver of displacement. Taken together, these dynamics underscore that displacement is not an unfortunate by-product of the Anthropocene but woven into its very fabric. *Key Words:* Anthropocene, biodiversity loss/conservation, climate change, colonialism, displacement/migration, global environmental change, nuclear contamination.

As the summer of 2021 comes to a close, the North American West has been experiencing a concerningly destructive wildfire season. For many of us who inhabit the Global North, the fires have brought the Anthropocene into our lives in a more visceral way than before and provided a harrowing glimpse into a new wave of “climate refugees” closer to home. Other displaces of the Anthropocene remain more hidden, including those displaced by biodiversity loss, broader forms of land-use change, and nuclear fallout, along with measures aimed at responding to these changes. The biophysical changes characterizing the Anthropocene, however, cannot fully explain these displacements: It is often how these changes emerge from, are integrated into, and exacerbate a broader series of crises that shape displacement and response, reinforcing that environmental displacement is more than environmental.

This intervention is designed to invite more substantial attention to the study of displacement in and of the Anthropocene. Rather than providing an overview, we set out an initial framework for its

study defined by three interrelated contributions: (1) The framework includes but also extends beyond climate change to include a broader range of biophysical changes fueling displacement along with their intersections. (2) It highlights three distinct moments of displacement in the Anthropocene: displacement as a consequence of, prerequisite to, and active response to environmental change. (3) Steering clear of environmental (neo)determinism, the framework underscores how across these moments these biophysical processes become drivers of displacement but only within a broader socioeconomic-political context, one routinely defined by crisis and inequality. These dynamics highlight the diversity of displacement in the Anthropocene, diversity of its drivers, and its complex temporality. Together, these factors underscore that displacement is an inherent feature of this new epoch rather than an unfortunate consequence.

We begin by defining the Anthropocene, reviewing critical readings of the concept, and examining various ways in which the epoch’s defining

environmental changes are linked to displacement across different moments. We then turn to a series of examples that ground how socioeconomic-political crises and related narratives articulate with anthropogenic biophysical changes, including but expanding beyond climate change, to shape different moments of displacement. Highlighting the common thread of colonialism, these crises include the juncture of political conflict and environmental change, anti-immigrant politics, post-truth and settler-colonial crises of knowledge production, and the Anthropocene itself as a crisis that provokes displacement to clean up its trail of destruction.

The Anthropocene

In the early 2000s, Nobel Laureate in chemistry Paul Crutzen coined the term *Anthropocene* to describe how human activity has so expansively transformed the Earth's system that we have entered a new geologic epoch in which humans are the primary drivers of global environmental change (Crutzen 2002). Although geologists debate whether there is sufficient evidence to pronounce this new epoch (Lewis and Maslin 2018), the term has been widely adopted in scholarly and popular circles. More than capturing the sum of global environmental change, the Anthropocene is an epochal concept that highlights how humans have become geographers—Earth writers or terraformers—to such an extent that these changes are irreversible (Castree 2014). We are on the cusp of a tipping point that moves us out of the relative Holocene stability of the last 11,000 years and into an epoch of rapid change defined by greater biophysical variability and extremes (Lewis and Maslin 2018). The Anthropocene, moreover, embodies how these changes reflect “the magnitude of human-caused planetary violence” (DeBoom 2021, 900).

Although provocative, the Anthropocene concept is equally controversial. Derived from *Anthropos* (human) plus *scene* (recent), the Anthropocene embraces within its name a defining lie. It is not a generic humanity that has ushered in these changes but rather particular humans with particular interests, with others who have neither driven nor fairly benefited from these changes left more vulnerable to experiencing their impacts (Malm and Hornborg 2014). The roots of the Anthropocene, moreover, rest in power-laden and racialized political-economic

systems like colonialism and capitalism. Hand in hand, these have circled and radically transformed the Earth in search of raw materials and territory for rationalized agricultural production, mineral extraction, and settlement. Lewis and Maslin (2015, 2018) hence influentially locate the beginning of the Anthropocene in the early seventeenth-century Orbis Spike, which saw a globally significant decline in atmospheric carbon dioxide resulting from the genocide of Indigenous peoples in the Americas as their farms were overtaken by carbon-absorbing vegetation. H. Davis and Todd (2017) add that the Anthropocene has unfolded through the ripple effects from these changes and coincident expansion of terraforming emerging at the intersection of capitalism and colonialism. Reflecting this, scholars suggest replacing the Anthropocene concept with more accurate monikers like the Capitalocene or Plantationocene (Haraway 2015; Moore 2017; J. Davis et al. 2019).

Although receiving less attention, both popular and scholarly writing on the Anthropocene has been myopic in privileging climate change. The Anthropocene, however, is characterized by a much broader collection of indicators that together with climate change pose existential threats to human and nonhuman life. This includes the loss of biodiversity at a rate unprecedented in human history, with predictions that we are on the cusp of a sixth mass extinction (Lewis and Maslin 2018). Drivers of biodiversity decline include habitat loss, primarily to make space for agriculture and urbanization, and resource overexploitation, as well as climate change (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services 2019; World Wildlife Fund 2020). Additional and often overlapping indicators of the Anthropocene include land-use and land-cover change tied to urbanization, deforestation, mining, and agriculture; changes in water resource cycling including the damming and diversion of water systems; and the proliferation of plastics and nuclear debris (Steffen et al. 2011). Although the latter might seem an outlier, globally expansive evidence of nuclear isotopes in the Earth's upper crust resulting from nuclear fallout is frequently cited as proof that we have entered a new geologic era (Steffen et al. 2011). It is only in viewing these forms of environmental change together along with broader themes of inequality and origin that we can grasp the extent and gravity of the Anthropocene.

Environmental Displacement in and of the Anthropocene

Building from here, how do we begin to conceptualize the links between the Anthropocene and displacement? The Anthropocene has paralleled an unprecedented increase in human mobility—from temporary to permanent, voluntary to forced—enabled by technological developments in energy and transportation and the underlying global expansion of capital, with these inseparable from the Anthropocene. Today's human-dominated world is provoking new forms of mobility such as labor migration tied to fossil fuel extraction (Baldwin, Fröhlich, and Rothe 2019) but also *displacement*; that is, mobility that falls closer to the nonvoluntary end of the migration continuum. The last twenty years have seen substantial scholarly interest in environmental displacement as the effects of anthropogenic change become more widely and deeply experienced, albeit acutely disproportionately by poorer and racialized populations. Whereas much of this earlier work aimed to quantify numbers of environmental displaces (e.g., Black 2001), more recent work explores the particular displacing impacts of climate change from rising seas to mounting extreme weather events (e.g., Wennersten and Robbins 2017).

As debates on the Anthropocene and environmental displacement converge, even exceptional interventions framed explicitly around the Anthropocene overly privilege climate change (e.g., Gemenne 2017; Baldwin, Fröhlich, and Rothe 2019). This clouds the fact that other indicators of the Anthropocene also provoke displacement and, although they might overlap with climate change, they are not reducible to it. This begins with the Anthropocene's massive land-use changes where terrestrial (forests, grasslands) and aquatic (especially river) systems are radically transformed to enable farms and ranches, urban areas, and mineral extraction. Such projects repeatedly displace communities, as detailed in the literatures on land grabs and development- and environment-induced displacement (e.g., Borras et al. 2011; Penz, Drydyk, and Bose 2011; Lunstrum, Bose, and Zalik 2016). One possible reason these are elided in discussions of the Anthropocene and displacement is that here displacement is a *prerequisite* to rather than consequence of the environmental or land-use change: people must be moved so their lands and waterways can then be terraformed. Inseparable from land-use conversion,

biodiversity decline also displaces communities when livelihood resources are lost even when ecosystems are not entirely transformed, a process exacerbated by climate change (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services 2019). Arguably rooted in how climate change has overshadowed concern for biodiversity loss (Veríssimo et al. 2014), we have a far more anemic understanding of the dynamics of displacement provoked by the latter. Finally, nuclear testing and the proliferation of radioactive waste have caused displacement as environments become too dangerous for habitation (Simon 1997; Kuletz 1998; Meybatyan 2014). Although this might be on a smaller spatial scale, these displacements could prove more permanent, reflecting the incomprehensible timelines of nuclear decay (Brunnengräber and Görg 2017). These displacements, moreover, can be planned (e.g., nuclear testing in the U.S. Southwest and Bikini Atoll) or happen retroactively in response to nuclear accidents (e.g., Chernobyl and Fukushima).

Chernobyl and Fukushima additionally underscore that responses to the environmental changes of the Anthropocene can generate their own displacements. A robust body of literature has chronicled how climate mitigation and adaptation, as responses to climate change, have similarly authorized evictions (e.g., Beymer-Farris and Bassett 2012; Kansanga and Luginaah 2019; DeBoom 2021). At times these map onto biodiversity protection measures as we see with United Nations REDD+ (reducing emissions from deforestation and forest degradation/forest conservation) initiatives, which are largely market-based projects in which polluters offset emissions by paying others to protect or expand forests elsewhere to capture carbon and protect biodiversity (Beymer-Farris and Bassett 2012; Kansanga and Luginaah 2019). Efforts aimed at biodiversity protection have also generated a recurring history of evictions captured in the figure of the conservation refugee (Dowie 2009).

How do these insights help shape an initial framework for conceptualizing displacement in the Anthropocene? First, they show that the Anthropocene's displacements encompass but must also extend beyond climate change to include this more expansive collection of biophysical changes including how they overlap. Second, these insights underscore the complex temporality of displacement in the Anthropocene. Here, we see three distinct

moments: (1) Most straightforwardly, displacement is a consequence of anthropocentric environmental change such as sea-level rise, extreme weather events, and biodiversity loss. (2) Broader practices like land use and water resource conversion (e.g., transformation of forests into farms, alteration of riverways) and nuclear testing provoke displacement, but it is not the ecological processes doing so; here displacement is a prerequisite to rather than impact of environmental change. (3) Displacement can be incited by responses aimed at addressing the biophysical changes of the Anthropocene, from climate change adaptation and mitigation and biodiversity protection to addressing nuclear accidents. Spanning the latter, displacement can emerge as a means of cleaning up the Anthropocene's mess. In bringing these factors together, we see that displacement is not an unfortunate by-product of the Anthropocene but woven into its very fabric. To live in a world in which (certain) humans are the primary drivers of environmental change is to live in a world in which this change is inseparable from displacement.

The third facet of the framework builds from critical geographic scholarship that confronts the lingering specter of environmental determinism or reductionism that haunts the trope of the climate refugee and related readings of climate migration (e.g., Baldwin and Bettini 2017). Mainstream analyses today mostly reject crude environmental determinism by acknowledging migration is shaped by a multitude of factors. Yet more critical interventions show that these analyses nonetheless largely treat climate as a "dominant predictor variable" while downplaying equally important socioeconomic-political variables, what amounts to neo-determinism or climate reductionism (Hulme 2011, 247). This poses problems for understanding what drives climate-related displacement and generating adequate responses (Hulme 2011; Baldwin and Bettini 2017; Meyer and Guss 2017). These additional variables, moreover, are not random but are tied to larger structures of inequality including race, class, gender, and the broader systems of capitalism and colonialism (*ibid*; also see above), which is core to understanding why those already vulnerable are most vulnerable to climate change including displacement (Intergovernmental Panel on Climate Change [IPCC] 2014).

Bringing these insights into our framework, the wide-ranging environmental drivers of displacement in the Anthropocene—climate change but also

biodiversity decline, land conversion, nuclear debris, and so on—are never exclusively environmental, because they are intricately shaped by more-than-environmental processes. We see these processes as inseparable from a broader series of crises, both political and epistemological, that are often rooted in inequality. These crises, moreover, include shock events but more typically longer term patterns and structures of intense difficulty or uncertainty and also include discourses of crisis, that is, how the crisis is narrated and with what impact. These crises, in short, articulate with these diverse biophysical changes to shape, provoke, and authorize displacement and hinder appropriate response.

To ground the framework and its contributions, we turn to four examples of displacement in and of the Anthropocene. Designed to be illustrative rather than exhaustive, we draw from examples, both general and specific, across geographic locations to give a sense of their variability. The examples highlight how forms of environmental change including but extending beyond climate change shape displacement, how environmental displacement unfolds across distinct moments, and how displacement across these cases and moments is shaped by more-than-environmental forms of crisis and crisis narratives, especially as they are rooted in inequality and ongoing forms of colonialism. Taken together, these examples complicate in multiple directions assumptions that displacement is simply a consequence of climate and biophysical change and equally offer a glimpse into the diversity the Anthropocene's displacements.

The Anthropocene's Displacements in Practice

Displacement's Nexus Dynamics: Articulations of Political Conflict and Environmental Change

The concept of nexus dynamics, employed by organizations like the United Nations High Commissioner for Refugees (UNHCR), importantly challenges crude environmental determinism by showing how climate change and extreme weather events often articulate with long-simmering political tensions to incite forced migration (UNHCR 2021). The recent displacements in Syria and Myanmar reflect these dynamics and equally reinforce how the conflict and hence displacement itself are shaped by

ongoing colonial histories, as well as how these displacements are inseparable from multiple forms of environmental change and their intersections. The roots of the Syrian civil war, which has generated one of the largest displaced populations in the world, rest in a complex mixing of geopolitical meddling from the country's neighbors and transnational actors, the rise of extremist movements, and the machinations of a dictatorial regime, with these shaped by an underlying architecture of colonialism that has long suffused the region, shaping its borders, fractures, and struggles (Culcasi 2017). Yet a popular and persistent alternative narrative arose in some quarters to suggest that the war was driven by climate change, namely, intense drought conditions between 2006 and 2011 that caused widespread crop failures (for analysis and critique, see Selby 2019). Although debate continues as to where to place blame—political failure or drought—it is also important to recognize how both of these corresponded with the end of agricultural subsidies that further impoverished rural communities and the fact that water pollution and waste mismanagement—and hence forms of water resource and land-use change—have been rampant and endemic throughout the Assad regime's rule. These factors, in turn, led to increased rural-to-urban migration, itself another land-use change, to feed unrest in many of Syria's cities (De Châtel 2014). There is no straight line from drought, other forms of environmental change, or colonialism, for that matter, to civil war and mass displacement, but certainly there are connections across these and broader dynamics, both political and environmental (also see Selby 2019).

We see similar dynamics of political–environmental crisis driving the forced dislocation of nearly a million Rohingya from Myanmar. In 2017 the Myanmar army and nationalist militias began brutalizing Rohingya populations, including razing entire villages. The region in which they mainly reside—Rakhine state—was already seething with tensions with roots that reach back to British colonial rule when imperial labor migration and land regulation policies brought new populations into conflict (Thawngmung 2016). In 2010 Rakhine state experienced Cyclone Giri, which displaced 260,000 people, and in 2015 the area experienced severe flooding, as Rakhine state itself a low-lying, deltaic region already susceptible to flooding and hurricanes (Johnson et al. 2019). It is within this politically

and ecologically vulnerable landscape that, despite generations of residency in the state, long-standing suspicions regarding the position of the Rohingya as interlopers because of their religion, language, and ethnicity have resurged to authorize displacement and justify inadequate response to environmental disaster, including displacement. What is often acutely overlooked is how the violence has also been motivated by the Myanmar government's perception of the Rohingya as an obstacle to opening up Rakhine and its natural resources to new forms of land-based development—and hence land-use change—tied to a liberalizing economy (Miklian 2017). To reduce the environmental drivers of displacement to extreme weather events misses this important point and the ways in which displacement can be a prerequisite to new forms of environmental change, ones that are welcome by the political and economic elite.

Anti-Immigrant Politics and Fears of Environmental Refugees

Fears of the racialized environmental refugee shift our focus from political conflict to how discourses of crisis, both political and environmental, also characterize displacement in the Anthropocene. This point is detailed in the critical literature on climate and migration (e.g., Baldwin and Bettini 2017), but we extend this to the Anthropocene and its broader collection of biophysical changes. Anxieties regarding racialized displacees, including what their arrival in countries of refuge might portend, coincide with the very real crises of toxic, nativist, masculinist, and xenophobic nationalism rooted in colonial histories that are ascendant in so many parts of the world (McCarthy 2019). Such populist movements have different grievances (Miller-Idriss 2019), yet at their core they trade on similar anxieties: a perceived loss of sovereignty, the supposed cultural fragmentation caused by multiracial postcolonial societies, a nostalgic yearning for imagined pasts, and a defense of parochial privilege, with fear of the impacts of environmental migrants overlaid atop these anxieties (Gökariksel, Neubert, and Smith 2019). White nationalists in Europe and North America often reference anti-Semitic and xenophobic conspiracy theories about demographic replacement by racialized others motivated in part by displacement due to ecological collapse elsewhere. Thus, it is not only the long-standing neo-Malthusian concern regarding overpopulation straining

the Earth's resources that animates nativist beliefs but a specific fear of Black and Brown (environmental) refugee bodies arriving en masse in the Global North. Such fear is captured quite explicitly in the influential 2010 documentary *Climate Refugees*, where ominous red arrows circle the earth to indicate the path of largely Black and Brown climate refugees, a reverse-colonial path that begins in the Global South and ends concerningly in the Global North.

The marriage between ecological and nativist concerns, however, has a long history that predates concern with climate change. Populist movements have long railed against the supposed poor environmental behavior of immigrants, with anti-immigrant sentiment reflecting racist beliefs and policies stretching from Madison Grant, Theodore Roosevelt, and John Muir through Paul Ehrlich's "population bomb" (Mix 2009; Pellow and Park 2017). Today, these concerns linking migration and ecological degradation shape the ideology of self-described eco-fascists who committed mass shootings in New Zealand, Texas, and California but also influential anti-immigration think tanks like the Federation for American Immigration Reform and Center for Immigration Studies (Pellow and Park 2017; Ross and Bevensee 2020).

In the current moment of our multilayered environmental crisis, a new opportunity for playing on the anxieties of many in the Global North has emerged. Images of raging fires, rising waters, and parched lands but equally denuded forests, polluted lumbering cities, and large-scale biodiversity decline surround us. The questions that accompany such scenes, both stated aloud and unspoken, spin on these anxieties of mass movements of racialized environmental refugees, often from former colonies, who do not belong "here." Where will those affected go? Will they come to my country, city, neighborhood, or home? What is my responsibility to them? How will they and their potentially environmentally irresponsible behaviors affect me, my family, my community, and my country? The Anthropocene is hence an epochal event of diverse and overlapping forms of environmental change but also a discourse of such change, one that links fear, displacement, and blame in consequential ways.

Environmental Displacement in a Post-truth, Settler Colonial Era: A Crisis of Knowledge

The recent wildfires sweeping the Western United States and Australia have created what

media outlets have labeled a new wave of climate displacees, ones living in the Global North (e.g., Domash 2020). A crisis for communities losing their homes, this displacement is engulfed and provoked both by a deeper crisis of knowledge playing out in a post-truth, settler colonial context and by overlapping forms of environmental change. With the 2020 fires impossible to ignore, former U.S. President Donald Trump laid blame not on climate change but rather forest mismanagement, especially decades of failing to remove underbrush and putting out smaller fires rather than letting them burn to reduce biomass (Braun 2020; Kaplan and Eilperin 2020). Although mismanagement indeed played a role, this framing overlooks the fact that climate change has made weather conditions hotter and drier, making wildfires more likely and severe (IPCC 2021). This is compounded by urban expansion—and hence land-use and land-cover change—into the wildland–urban interface where homes are built in wildfire-prone areas (Burke et al. 2021), which makes displacement more likely. This is precisely what post-truth climate denialism, one read through a pro-growth lens, fails to understand. This was complemented by an online populist misinformation campaign that accused "Antifa" of setting fires to draw attention to climate change, a pattern repeated in Australia (Braun 2020). This larger crisis of posttruth climate denialism is fueling displacement by failing to fully diagnose the broader root of the problem—from climate change to land-use change—and develop more comprehensive responses to prevent and respond to fire, including climate change mitigation, limits on urban development in fire-prone areas, and the quelling of social media conspiracy theories.

This crisis of knowledge fueling displacement is equally rooted in settler colonialism. Although not by design, Trump's focus on mismanagement reinforced the importance of Indigenous practices of prescribed burning as seen across North America, Australia, and elsewhere (Nikolakis et al. 2020; Taylor 2020). Yet as Ckiri/Chahta journalist Taylor (2020) notes, there is a hypocrisy of settler colonial regimes embracing Indigenous knowledge to curb wildfires while failing to acknowledge their colonial pasts and environmental injustices and how these created the conditions for wildfire to spread in the first place. Such injustices include the failure to understand prescribed burning as part of a reciprocal relationship between Indigenous peoples and the

environment as well as large-scale Indigenous genocide, dispossession, slavery, and relocation onto reservations. Across these, Indigenous displacement has, in fact, been a prerequisite to the fire-inviting environmental changes in question, including overdevelopment and missteps of modern forestry. Here, contemporary displacement due to the fires is inseparable from the earlier dislocation and containment of Indigenous peoples and subsequent land-use changes, with these practices ironically disrupting long-standing traditions of Indigenous environmental migration (Whyte, Talley, and Gibson 2019). Adding to the framework for conceptualizing the Anthropocene's displacements, this environmental and epistemological disaster fueling wildfire and displacement and impeding response is one of the epoch's defining crises. This crisis—one rooted in Indigenous dispossession yet requiring Indigenous guidance—is made more vexing in the context of post-truth climate denialism, as these intersect across an increasingly hot, dry, and incendiary landscape.

Anthropocene as Crisis Authorizing Displacement to Clean Up Its Mess

A core intervention of this framework is that the Anthropocene is characterized by different moments of displacement. These range from the more obvious environmental-change-provokes-displacement to the more discreet displacement as a prerequisite and active response to environmental change. Straddling the latter is the fact that displacement is routinely deployed as a means of cleaning up the mess of the Anthropocene both proactively and retroactively. Here we see once more that the Anthropocene is both an actual crisis and crisis narrative, one that privileges certain responses—such as displacement—over others. More explicitly, displacement is seen as either necessary for human safety, as with nuclear testing and fallout, or else a legitimate trade-off to stem ecological–existential decline, as with climate change and biodiversity loss. The trade-off's utilitarian logic is typically that “those people over there” can be evicted so that environmental change can take place or else be adapted to, slowed, or reversed for the benefit of many, human and at times nonhuman, a point both implicit and explicit across relevant literatures (e.g., Kuletz 1998; Lyons and Westoby 2014). In short, displacement across these

cases is seen as a necessity of mopping up the Anthropocene's wake of environmental destruction.

Here, too, understanding the dynamics of these displacements and especially who gets displaced requires closer attention to inequality and colonial power structures. Colonialism itself is an ongoing crisis in which (neo)colonial powers sacrifice certain spaces, ways of life, and connections with place of the less powerful (H. Davis and Todd 2017; Simpson 2017; DeBoom 2021). One of the most trenchant critiques of REDD+ projects is that their displacements of local and Indigenous communities are effectively colonial acts in which climate change mitigation and biodiversity protection are outsourced to foreign countries, particularly in the Global South (Lyons and Westoby 2014). This allows richer countries and corporations, largely in the Global North, to continue to pollute and exploit resources as the poorest and least politically connected are asked to move. Similar patterns of green grabbing (Fairhead, Leach, and Scoones 2012) are found with conservation-induced displacement. Here, communities, often standing in ongoing colonial relationships with their home countries and conservation nongovernmental organizations, are evicted to protect biodiversity but also generate profit, a practice that is becoming increasingly militarized in places (Dowie 2009; Lunstrum 2016). Similarly, many of the forced removals and related curtailment of access due to nuclear testing have been enabled by prior rounds of colonization. Stretching from the U.S. Southwest to the Marshall Islands (Simon 1997; Kuletz 1998), this process has been labeled “nuclear colonialism” by Kuletz (1998).

The irony across these cases is that it is primarily countries, corporations, and populations typically in more industrialized corners of the world that are primarily responsible for the environmental change in question, whether nuclear testing, biodiversity decline, or climate change (see earlier). It is those with less power, though, who must sacrifice their lands and livelihoods to address this wake of environmental destruction. Stated differently, we know that colonization and related inequality are crises that leave the less powerful more vulnerable to environmental change (IPCC 2014). We can add that ongoing histories of colonialism also leave these communities more vulnerable to attempts to respond to such change and address the Anthropocene's larger path of environmental ruin.

Conclusion

In this intervention, we have laid out an initial framework for the study of displacement in and of the Anthropocene. The framework takes climate change seriously but expands to encompass other forms of biophysical change constituting this era, from biodiversity decline and land-use and water systems change to the accumulation of nuclear debris. It also highlights the complex temporality of the Anthropocene's displacements by charting three moments of displacement: displacement as a consequence of, prerequisite to, and response to environmental change. Also core to the framework is recognition that the Anthropocene's displacements across these different moments and types of environmental change are never solely environmental. Sociopolitical-economic factors—which often materialize in the form of crises, crisis narratives, and the lingering impacts of colonialism—both drive displacement and obstruct viable solutions. Taken together, these dynamics underscore that displacement is not an accident of this human-dominated epoch but a defining feature. We offer this initial framework in hopes of inviting further study of these complex and deeply uneven environment–displacement relationships constituting the Anthropocene.

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