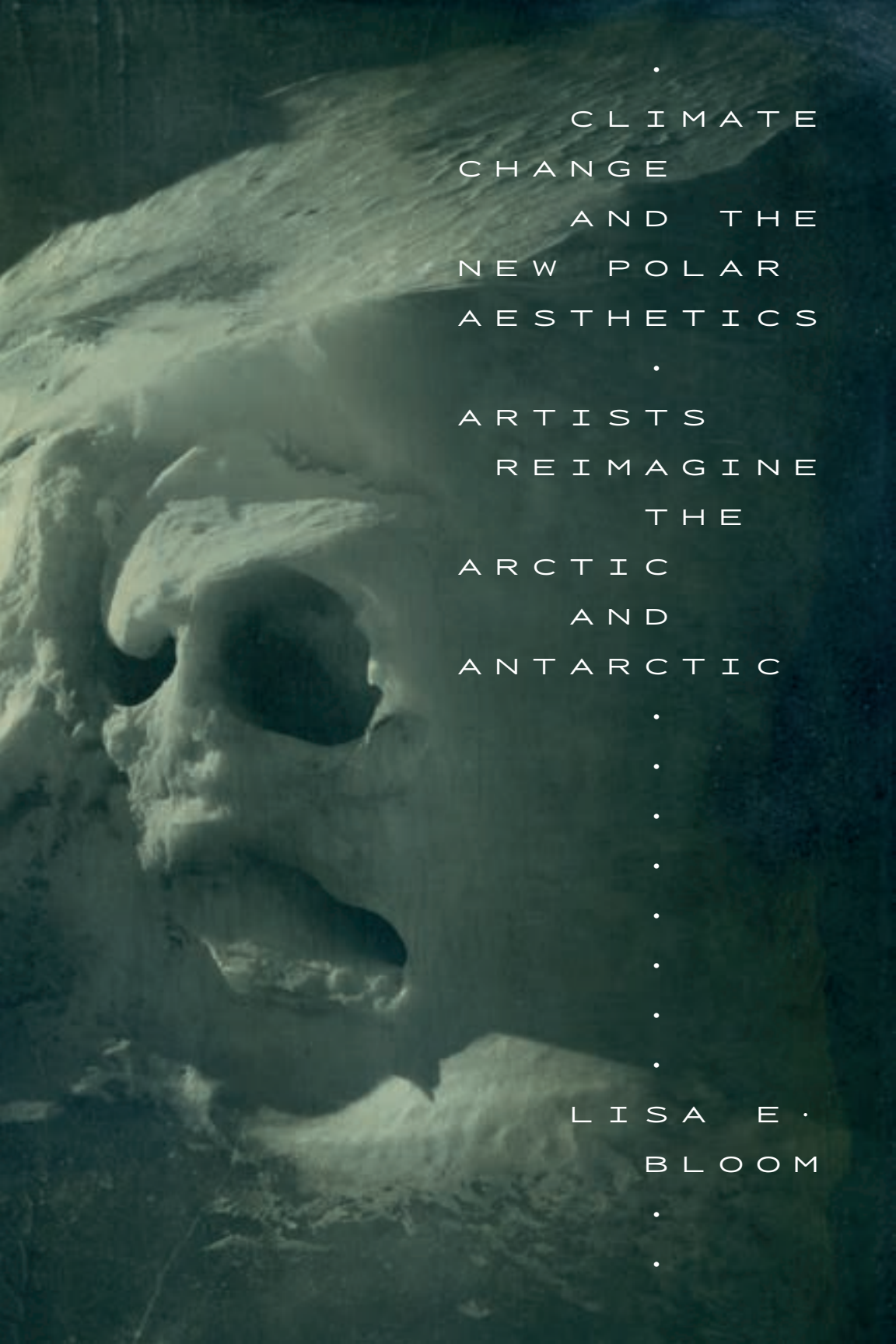

CLIMATE CHANGE AND THE NEW POLAR AESTHETICS

ARTISTS REIMAGINE THE ARCTIC AND ANTARCTIC

LISA E. BLOOM

CLIMATE CHANGE AND THE NEW POLAR AESTHETICS

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For Roddey Reid, who supported me intellectually, emotionally, and more throughout this long process but especially during the difficult pandemic years when I completed my manuscript

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INTRODUCTION

FROM THE HEROIC SUBLIME TO ENVIRONMENTS OF GLOBAL DECLINE

The climate crisis is also a crisis of culture, and thus of the imagination.

Amitav Ghosh, *The Great Derangement*, 2016

[Inuit] rights to life, health, property and a means of subsistence [are] being violated by a dramatically changing climate.

Sheila Watt-Cloutier, *The Right to Be Cold*, 2018

As the climate crisis becomes increasingly severe, the Indian writer Amitav Ghosh reminds us that the planet risks becoming utterly unrecognizable, a world we cannot even imagine.[1] Imagination is central to *Climate Change and the New Polar Aesthetics*, for expressing the strangeness unfolding around us in the Arctic and Antarctic and creating art and scholarship that can orient us toward a more just and resilient world in the era of the so-called Anthropocene.[2] In what follows, the book brings art into conversation with new scholarship in these regions, connecting debates on science and the environment with gender, sexuality, race, and the relations of the human to the nonhuman.[3] It takes into account resurgent nationalisms, empire, and globalizing capitalism as these forces intertwine in the polar regions. *Climate Change and the New Polar Aesthetics* insists on linking racial, sexual, and gendered discriminatory violence to wider environmental destruction. This approach brings together areas too often kept separate to question and complicate entrenchments that limit

our imagination and to mobilize and address the ways that socially and environmentally destructive practices intersect and interact.[4] Absent an intersectional feminist perspective and an environmental justice framework, addressing the monumental changes wrought in our environment and perception will remain beyond our grasp.

The book presents art practices that address climate change science, climate violence, extractivism, and Indigenous survival in the Arctic (understood here as the circumpolar region around and north of the Arctic Circle) and Antarctic. It extends current visual culture and environmental humanities scholarship on climate change that is rewriting and expanding the scope of art history. It focuses on feminist, queer, postcolonial, and activist artists, as well as on Inuit filmmakers and artists who inhabit the volatile landscapes of extreme climate change and who stand on the front lines of the climate crisis. *Climate Change and the New Polar Aesthetics* investigates the way contemporary artists and activists are devising a new polar aesthetics that challenges the dominant narrative of mainstream media, which equates climate change with apocalyptic spectacles of melting ice and desperate polar bears, and green capitalism with masculinist imagery of sublime wilderness and imperial heroics.[5] Instead, this new aesthetic brings different and more capacious aspects of the crises to the public's attention through a wide range of contemporary art, photography, and film. Such a critical approach to polar aesthetics makes climate degradation more legible and politically urgent and brings newly relevant resources to the study of climate change in art history, visual culture, and the environmental humanities.

The artwork and films discussed here detail these intersecting crises to link climate change (melting ice and permafrost, sea-level rise, and ocean acidification) to its social roots in colonialism and capitalism. They use strategies borrowed from speculative fiction while incorporating scientific fact to make us question routine assumptions about the natural world and its future development as the earth's climate is changing faster than expected. I explore such work that engages the reality and severity of the climate crisis from feminist, Black, Indigenous, and non-Western perspectives at a moment when the Arctic has shattered all heat records (2020 rivaled 2016 for the hottest year on record). Major fires, droughts, floods, monsoons, and hurricanes all around the world, including in major cities, are creating a dangerous world that is becoming unrecognizable and that more and more resembles scenes from science fiction than the world we once knew.[6]

The uncanniness and feelings of estrangement caused by the climate crisis pervade the circumstances of my own life. On September 9, 2020, in

Berkeley, California, where I live, I woke up to orange skies due to never-before-seen rapidly spreading wildfires during the West Coast's worst fire season.[7] I immediately took a photograph to document my direct sense of emotional distress that morning (plate 1). The ominous dark orange sky that day closely resembled a scene from the 2017 science fiction film *Blade Runner 2049* (plate 2). Or, as one reporter put it, the orange glow seemed more "like a scene from Mars" than from the world that is familiar to us.[8]

As the science fiction writer Kim Stanley Robinson put it, "We are now living in a science-fiction novel that we are all writing together."[9] The present feels dangerous and volatile, but just how quickly the world will become permanently unrecognizable is not yet clear. The ongoing degradation caused by extreme climate change as it unfolds in the Arctic and Antarctic remains important to the representational politics of the accelerating climate crisis as we grapple with this strange breadth of possible futures. Throughout this book artists reimagine polar art to help conceptualize our current moment and think about different possible futures, including one where we treat the climate crisis as an immediate emergency so future humans can survive and share an interdependent biosphere. Part of having a more hopeful future includes seeing ourselves and our planet in a different way and contemplating what is essential in life. It also entails counteracting potentially reactionary styles of climate discourse, especially those that are fear based and often come wrapped in uncritical imperial and nationalist assumptions. Though the climate crisis in the polar regions reminds us of science fiction and can feel postapocalyptic, *Climate Change and the New Polar Aesthetics* does more than simply present remote places undergoing extreme climate change. Instead, it suggests ways that imagination in the here and now might engage these new dangerous realities to force us to recognize our own political agency, which is central to constructing a better world.

An Aesthetics of Finitude

In *Climate Change and the New Polar Aesthetics*, global warming is no longer simply an Arctic or Antarctic story that is unfolding remotely or in uninhabited so-called wastelands of little importance to the world. Rather, it is a crisis of both the human and natural world, and the disasters unfolding in the Arctic and Antarctic might start there but will not be confined there. Contemporary discussions of present-day Arctic and Antarctic "anthropogenic landscapes" are not any longer about contemplating from a safe remove the destruction nature might wreak in inaccessible

Figure I.1 • Andrew Lovesy, *What Happens in the Arctic Does Not Stay in the Arctic*, photograph, 2018. Source: Andrew Lovesy/*Canadian Geographic*.

parts of the world. The melting of the polar ice caps will have significant repercussions for the globe as a whole, especially the continued existence of the world's coastal cities—New York, Miami, Houston, Amsterdam, Mumbai, Shanghai, and many others.[10] Yet this earlier traditional sense of distance and remoteness contributed to the fascination of the polar regions and helped shape the globalist and colonialist Western histories and fantasies that in turn drove polar expeditions in the nineteenth and twentieth centuries. My study refuses that distance and the sense of safety the faraway polar regions once afforded by confronting the evidence that this polar ice has been affected by rising temperatures and that these changes in ice in turn contribute to the climate-related crises growing all over the world.

In light of the urgency of the global crisis, this book explores the challenge facing artists articulating a specifically critical polar aesthetics that uncovers some of the forms and shapes of life in the Arctic and Antarctic under late capitalism at a moment of accelerated climate change. *Climate Change and the New Polar Aesthetics* describes the new

art as an aesthetic and sensorial phenomenon that refuses the physical spectacle afforded by the old flag-planting heroism of explorations to "the ends of the earth." It rethinks ecology and aesthetic practice together to challenge the political and social assumptions of an earlier epoch promoting imperial entitlements and unbridled capitalism. The artists and filmmakers discussed here create works that counter colonial fantasies of endless exploration and escape and instead find solace and even hope in more modest local phenomena. This is especially the case for the Inuit artists and filmmakers who inhabit parts of the Circumpolar North, who best understand an aesthetics of finitude and are experts on the question of how to survive and what it means to live in environmental conditions that are gradually becoming increasingly degraded (chapters 3 and 4).

Throughout the book I highlight democratic and collective art projects from around the world in order to build a new cultural commons from the perspective of women, queer, postcolonial, and Indigenous artists and filmmakers who acknowledge and celebrate human interdependence with the nonhuman world. Some artists in this book collaborate with scientists and present their work outside the gallery or the laboratory, and others who work in the Arctic collaborate with Indigenous communities. A good number do fieldwork on-site or make work that documents the changing environment in their Arctic home. Still others do creative activism in the museum or in the streets and join collective environmental social movements around the world. These artists and filmmakers emphasize the role of an artistic and literary imagination to question routine assumptions about the natural world and its future, simultaneously challenging the political and social assumptions of European and Western masculinist colonial practices. Much of the work discussed in this book is embodied, situated, and earthbound: literally "down to earth," as Bruno Latour puts it, addressing earthly, even lowly or humble materials such as water, ice, dirt, and microscopic marine life that artists nevertheless treat with care and imagination through reuse and recycling.[11] The book foregrounds justice-attentive aesthetic research practices that artists incorporate into art to explore conceptions of beauty, troubling environmental truths, and ethical challenges that come with living in an unstable and contingent, finite world.

As the planet is proving more and more uninhabitable, the heroic ethos has returned with a vengeance to overcome planetary catastrophe. The heroic is understood as reactionary political and cultural stances that seek to claim lost wilderness and to reassert control over nature, often in league with modern techno-fix fantasies linked to further industry deregulation

of environmental protection and the belief in an infinite horizon. Some of the ideas from the heroic legacy of polar exploration—notions of sublime wilderness, imperial conquest and geographic extremes, massive resource extraction, scientific adventure, and the renewal of masculine selfhood tested against a so-called hostile environment—have returned in our current ideas, which also include new fantasies. These include space exploration as colonization by some of the world's richest men, such as Jeff Bezos, Richard Branson, and Elon Musk, who dream of escaping to Mars to start a settlement-colony from Earth.[12]

The science makes it clear that there is no escape to the heavens, "no Planet B," as the activists say, and the book very much focuses on this world that we actually inhabit, even though polar exploration was, for an earlier time, the equivalent of space exploration. In both cases, the fantasy of ever-expanding resources and territory stemmed from a vividly colonialist imagination and a compulsion to repeat and discover: more territory, more resources, more products for consumption, more profits. Musk's interests are about capitalist exploitation in asteroid resource mining, terraforming, and even the extension of property claims far into the galaxy.[13]

Climate Change and the New Polar Aesthetics connects nascent and resurgent imperialist heroism and conquest in the polar regions to artistic responses to climate changes and the earth's finitude. In doing so, this book concerns art that creates a new kind of imagination and seeks to find new footing within the earth's limits, grounded in existing social reality rather than starry-eyed fantasies of plundering or occupying other planets outside our solar system.[14]

Gender on Ice: Revisited and Extended

This book reprises and extends significant postcolonial and feminist scholarship from the past three decades on the visual culture of the Arctic and Antarctic.[15] My 1993 book, *Gender on Ice: American Ideologies of Polar Expeditions*, described how American and British explorers in the early twentieth century perceived the poles as a proving ground for a colonial masculinity and as an empty imperial frontier to plunder, "a tabula rasa where people, history, and culture vanish."[16] *Gender on Ice* was one of the first books to bring Arctic studies and, to a lesser extent, Antarctic studies into conversation with critical intersectional feminist scholarship on gender, race, science, art, colonialism, and nationalism. Much of my feminist and postcolonial writing on the art of the Arctic and Antarctic since then has built on this initial foray, including the international con-

ference and online journal issue of the *Scholar and Feminist* on gender and the polar regions that I collaborated on with Elena Glasberg and Laura Kay in 2008, as well as my more recent articles on feminism, colonialism, art, and ecology, which I develop further in this book.[17] Chapters 4 and 5 of this book continue the collaboration with Elena Glasberg, whose book *Antarctica as Cultural Critique: The Gendered Politics of Scientific Exploration and Climate Change* (2012) argues that Antarctica is the most mediated place on the earth, endlessly available to a range of nationalist and corporate projects, despite its official designation as an international science-managed site.

While the new interconnections provided by the polar regions for concepts such as empire, gender, and nation—so central to cultural and national studies in the humanities—continue to generate attention and insight, little did I know that many years after the writing of *Gender on Ice* the impending catastrophe of climate change would force me to return to the topic with a new sense of urgency and to join once more the growing feminist and postcolonial scholarship and writing on the polar regions in the context of the climate crisis. Though at first glance climate art and film on the polar regions might seem gender and race neutral, a feminist intersectional analysis of representation of the Arctic and Antarctic suggests that this welcome reemergence of interest in polar narratives and art often comes wrapped in a colonial nostalgia for white male heroism.[18] Countering such an approach, the artwork in this book focuses on feminist, queer, and Indigenous engagements with a newly exposed past, even as they challenge and engage older narratives and material histories that have shaped the regions.

Some artists address the climate crisis in these regions by seeking to recover the history of women's, the Inuit's, and African American men's involvement in polar exploration, using fictional approaches that imagine alternate histories. They revitalize these older heroic narratives from the perspective of subjects who were historically excluded or whose involvement was ignored. Sherril Grace reintroduced the Canadian woman Arctic explorer Mina Benson Hubbard, author of *A Woman's Way through Unknown Labrador* (1908), to polar historiography in 2007, examining how Hubbard changed her identity through her writing and created different discursive selves.[19] For Grace, Hubbard's story is a crucial part of a women's place in the narrative of northern exploration. By telling Hubbard's story and bringing her classic book back into circulation, Grace inserted what she calls "*my invention of [Hubbard]* into this continuous narrative.[20] Grace's work and Ursula K. Le Guin's speculative utopian short story

"Sur" (1982) influenced other artists discussed in this book, including Judit Hersko (chapter 1), who complicates official exploration narratives by creating plausible, yet fictional, accounts based on the historical record to address the climate crisis. Isaac Julien's reformulation of the African American polar explorer Matthew Henson (1866–1955) (chapter 2) not only makes Henson's accomplishments part of northern polar exploration but creates a new fictional persona for him that challenges mainstream homophobic narratives of imperial heroics. Swedish artist Katja Aglert, in her conceptual project *Winter Event—Antifreeze*, uses a variety of media and aesthetic techniques to unsettle colonialist and nationalist masculinist history as the major mode of engagement in the Arctic till this day.

While science has opened the Antarctic to women, it has also been a somewhat ambivalent force. In the 2008 special issue of the *Scholar and Feminist*, we pointedly included pieces by women working in and exploring the polar regions, where "the challenge to traditional gender roles of women working as scientists and adventurers under extreme conditions is still not as common as feminists might advocate."[21] Many of the women artists and writers included in the book notably visited Antarctica through grants from the US National Science Foundation (NSF) Antarctic Artists and Writers Program during a time of progressive leadership from 1982–2005 under Guy Guthridge, who offered a more open environment for women artists and writers.[22] The NSF-funded artists and scholars in chapter 1 insist that art in Antarctica should not be solely in the service of science. In the context of the Arctic, artists and filmmakers (see chapters 2 through 5) reconnect Indigenous perspectives with scientific research but challenge Western traditions of discipline separation. In chapters 3 and 4, Inuit filmmakers and artists (and those who collaborate with the Inuit or Sámi) who are concerned with preventing the escalation of global environmental catastrophes call for Indigenous values and perspectives to be integral to scientific investigations. For example, in chapter 3 I discuss films about northern Indigenous communities that are most affected by climate change. Some of the Inuit interviewees in the documentary film *Qapirangajuq: Inuit Knowledge and Climate Change*, who are dedicated to creating just relations between human and nonhuman worlds, are critical of conventional scientific practices that they see as producing a science that is oblivious to, or even destructive of, their culture.[23]

Since coediting the special issue of the *Scholar and Feminist* in 2008, I have been influenced by a wide range of Indigenous and postcolonial artists, geographers, art historians, and film and cultural studies scholars whose work on the Arctic and Antarctic connects the regions' colonial past to

extractive capitalism and to Indigenous rights, such as Anna Westerståhl Stenport, Scott MacKenzie, Michael Bravo, Adriana Craciun, Klaus Dodds, Subhankar Banerjee, and Imre Szeman, among others.[24] Also important are the curators, museum directors, art historians, and visual cultural studies scholars such as T. J. Demos, Emily Eliza Scott, Lucy Lippard, Julie Decker, Nick Mirzoeff, Kirsten Thirsted, Yates McKee, whose writings and exhibitions have set the stage for my critical engagement with art and video representations of climate crisis compatible with my earthbound approach.[25] Even though the poles were at times presented through a more traditional Western aesthetics of landscape painting and photography that represented these regions as beyond the calculable and measurable in the appeal to the sublime and wilderness, I and a growing group of scholars and artists point out how such a romantic view of pristine nature in these regions has proved counterproductive. Such an idealization of wilderness is not merely a myth but in the case of the Arctic continues to be used to justify Indigenous absence rather than presence and even extends such older aesthetic strategies in art, film, and visual culture in this new era.[26]

Climate Change and the New Polar Aesthetics critiques an older style of masculinist colonial representations of sublime wilderness that has nevertheless reemerged in more modern forms to justify the imperial expansion that is accelerating the extraction of oil, gas, coal, and rare earth materials. I draw specifically on the feminist projects of Donna Haraway, who insists on interlinking human politics and colonial injustices with those of the more-than-human and the geological (chapters 1 and 6). Finally, I have been inspired throughout by intersectional environmental postcolonial scholars and writers such as Naomi Klein, Stephanie LeMenager, and Macarena Gómez-Barris, who connect climate and extractive capitalism to factors such as gender, race, nationhood, and the politics of imperialism and science.[27]

The book has also been influenced by Klaus Dodds and Mark Nuttall's groundbreaking book *The Scramble for the Poles: The Geopolitics of the Arctic and Antarctic*, which reveals how international competition for polar territory has taken place against a backdrop of climate change politics, resource extraction, and a changing geopolitical order. Their book ties the history of polar exploration directly to the pursuit of fuels, beginning with whaling and continuing with the drive for fossil fuel extraction in the twentieth and twenty-first centuries. The postcolonial and ecocritical scholarship of Rob Nixon's *Slow Violence and the Environmentalism of the Poor*, on the Global South, has also been important to understanding

the Arctic's accelerated climate change, permafrost melt, and oil spills as they pertain to the slow violence against the environment.

Throughout the book, the notion of slow violence as it applies to climate change helps to describe many processes, including eroded Indigenous rights, degradation of Indigenous land, extinction of almost invisible species, and slow or indirect forms of psychological violence. In his book, Nixon shows how victims of slow violence are pioneering new forms of environmental justice work in their resistance, and this, too, applies to Arctic Inuit women activists discussed in this book, such as Sheila Watt-Cloutier (quoted in the epigraph), who movingly demanded "the right to be cold." Like the activist-writers in Nixon's book, Watt-Cloutier has been instrumental in shaping an environmental justice campaign and has been widely recognized for suggesting that climate change is a matter of both Indigenous and multispecies survival (see chapter 3).

The Polar Regions as Critical Geographies

Climate Change and the New Polar Aesthetics encompasses a wide range of artwork from different regions, including the geographic poles (the North and South Poles), the earth's polar ice caps, and also the more populated zones of Antarctica (including the continental edges) and various inhabited areas in the circumpolar region (such as Cape Dorset (now Kinngait), Cambridge Bay, and Alberta in Canada; the island of Kivalina and the Alaskan National Wildlife Refuge in Alaska; the Shetland Islands; Iceland; and Svalbard in Norway). The earth's temperature rise is paradoxically more pronounced and profound at the poles. Consequently, the cultural awareness of climate catastrophe is more acute in these areas. With the worsening climate crisis, these regions are the privileged sites of and vehicles for grasping the unsettling environment undergoing global warming that spells the end of the very project of modernity to which the late nineteenth and early twentieth century's so-called discovery of these once blank regions belonged. It is remarkable how these spaces that in the past once served as eternal and invincible aspects of our planet's architecture are now viewed as vulnerable, fragile, and subject to destruction. Moreover, these geographic regions not only have become the first legible territories of global decline but now operate in turn as actual drivers of global climate change. The impacts of a warming Arctic and Antarctic—the feedbacks of rapid melting of sea ice, ice sheets, permafrost, and the release of methane—are already being felt planet-wide.

Although I write about the polar regions collectively at times, it is important to be aware of their divergent histories. Though combined in the popular Western imagination and in art through more recent reports on their shrinking ice masses, these geographic spaces are nevertheless very distinct areas of the earth. The Arctic is the northernmost region of the earth and has a long history of human habitation and settlement by the eight Arctic nations that all have colonial legacies: Canada, Denmark (Greenland/Kalaallit Nunaat and the Faroe Islands), Finland, Iceland, Norway, Sweden, Russia, and the United States. These nations are all members of the Arctic Council, as are organizations representing Indigenous populations, including the Sámi, whose traditional settlement areas lie in Norway, Sweden, Russia, and Finland.[28]

In the Arctic, warming has created an open polar sea for the first time in recorded history—and with the open seas, a new level of globalization is accelerating extraction of oil, gas, coal, and rare earth materials (already on the order of hundreds of billions of dollars); mass tourism; and shipping.[29] Russia planted a flag under the ice at the North Pole in 2007, declaring that "the Arctic is Russian," and so triggered a new scramble for resources beneath the thawing ice.[30] Now that the Arctic is sometimes ice-free, the international race to claim the vast wealth of resources believed to lie beneath the ice is continuing to further despoil the Arctic, accelerate global warming, and increase the potential for competition and conflict between nations, leading to the Arctic's growing militarization. The imperialist heroism and international competition associated with older explorer culture has resurfaced, making formerly well-known US polar explorer Robert Peary relevant again in some unexpected ways. His image and famous imperial motto "I will find a way or make one!" from 1907 reappear in a 2021 US Department of the Navy report titled *A Blue Arctic: A Strategic Blueprint for the Arctic* to justify the reemergence of the United States' older style of imperialism in this new context (see chapter 2).[31]

The Antarctic continent has never had an Indigenous population and remains the only place in the world without a stable or permanent human population. It has dozens of research stations, some year-round and others seasonal, that operate under the guidance of around thirty individual countries. It is governed by an international agreement known as the Antarctic Treaty System that has remained in effect since 1961 (when the Antarctic Treaty entered into force), designating the continent as a "frozen laboratory" for science and deferring competing national claims

into the future (at least until some, if not all, of the parties agree to a treaty review conference).[32]

While the Arctic is one of the more polluted places on earth owing to the operations of the extractive industries (whether directly or in the form of long-range pollutants), the Antarctic has not suffered the same hydrocarbon exploitation as the Arctic. Though it is one of the most protected parts of the planet (through legal instruments including the 1991 Protocol on Environmental Protection), it is nevertheless embedded in the same global economic and political system as the rest of the world, and industrial and commercial activities such as fishing and tourism contribute to its carbon output.

Politics of the Anthropocene

The book considers ways that the art and visual culture of the polar regions has both shaped and been shaped by ideas and debates about white masculinity, settler colonialism, and capitalism from the explorer culture of the eighteenth and nineteenth centuries to the present. This in turn influences in unexpected ways how we think of nature, landscape, and the environment in the era of the Anthropocene—or the Capitalocene, as some might prefer—within which we now find ourselves. Throughout the book I mostly use the term *Anthropocene*, which refers to a new geological period characterized by ecosystem failures, rising sea levels, and climate-led migrations; but I place the term within a discourse of the environmental humanities and arts rather than the natural and social sciences. First developed by the late Eugene F. Stoermer, a pioneer in the field of freshwater ecology, and refined by the late Paul J. Crutzen, Nobel laureate and chemist, the concept of the Anthropocene was introduced in 2000 to name the earth's new geological epoch, which they identified by its unprecedented human environmental impact on a global scale. They cited evidence of how human activity became climatic and geological forces behind planetary changes, including the warming of Earth's climate since the industrial revolution that has contributed to the melting of the polar ice caps and the rising of the oceans.[33]

Though the overall meaning of the term Anthropocene is clear enough—that the surface of the earth has been indelibly changed by humans, and the rate of change is speeding up alarmingly—there is wide disagreement among scholars in the environmental humanities on when it began and whether it should be named the Age of "Man," among other issues. As many others have pointed out, the term Anthropocene itself is prob-

lematic because it fails to challenge the inequality and injustice of universalized projects of a seemingly homogeneous Humanity/Man. Therefore, the term has been heavily critiqued for perpetuating such notions. For example, Indigenous scholars Zoe Todd and Heather Davis argue "that the Anthropocene is a continuation of dispossession and genocide coupled with a transformation of the environment and . . . should be dated from the time of colonization to provide a basis for the possibility of decolonization within this framework."[34] For many Indigenous peoples, "climate injustice does not involve simply an 'age of the human' dated to industrial development. . . . [It] emerges as an issue more recently that is part of a cyclical history of disruptive anthropogenic environmental change caused by settler and other colonial institutions that paved the way for extractive industries and deforestation."[35] Feminist scholars such as Anna L. Tsing rightly rebuke the progressivist narrative of Man's cognitive ascent, pointing out that "women and men from around the world have clamored to be included in the status once given to Man. Our riotous presence undermines the moral intentionality of Man's Christian masculinity, which separated Man from Nature."[36]

Climate Change and the New Polar Aesthetics is not meant to simply critique the reactionary masculinist culture of right-wing nationalism. Rather, throughout my book I write that feminist, queer, postcolonial, and Indigenous artists and filmmakers articulate ways of responding to the climate crisis that differ quite markedly from those of their Western masculinist counterparts. I argue that, moving forward, there remains a need to include these alternative imaginative aesthetic efforts that take into account the interdependency of the human and the nonhuman world, and the lives of humans of different races and diverse gender identifications, in order to decenter universal concepts such as the Anthropocene.[37] In certain ways, my book and the work of chosen artists in this book foreground the enmeshment of the social and the environmental.

While this book implicitly accords with these critiques of the term Anthropocene, I and other scholars in the environmental humanities use it simply for the way it sets the goal of discussing climate change and humans' role therein, and for the way it situates humans as part of nature and not separate from it. I look beyond conventional art and humanities frameworks to reframe our understanding of human agency not only toward our own species but toward the whole planet, and to challenge commonsense understandings of contemporary art and culture.[38] Throughout the book I use the term *anthropogenic landscapes* to refer to the influence of global climate change in the Arctic and Antarctic, where ecological processes have been altered by pollution in the Arctic and by the nearly global, yet

unevenly distributed, addiction to fossil fuels.[39] But in the context of my book, such anthropogenic landscapes not only are being shaped by the inception of the Anthropocene but are also socially constructed entities. Thus, instead of *anthropogenic landscape*, I sometimes use the broader term *environment*, especially when writing about Indigenous Arctic communities, to take into account Indigenous vernacular maps that are alive to ecological and geological features devised over generations by local communities. The book also complicates the term *nature* and the simple notion of a clear nature/culture divide, since it is no longer possible to separate nature from culture, or human from environmental systems, in the era of the Anthropocene or Capitalocene.[40] Nature is discussed at times as a category that is expanded to include both humans and nonhumans as targets for exploitation and extractive energy; conversely, nature is also likened to a sentient living assemblage that recognizes the interdependency of the human and the nonhuman.[41]

Although I use the terms *Anthropocene* and *anthropogenic landscapes*, I also find the various alternatives that have been suggested are useful in thinking specifically about Arctic territorial corporate expansion and the ongoing competition over natural resources. Andreas Malm's concept of the Capitalocene, which was further developed by Jason W. Moore and Donna J. Haraway, is a more pointed supplement to the term Anthropocene.[42] Moore's notion of "cheap nature" is an important economics-based concept that describes the vision of nature as both produced by and underlying the drive to despoil the Arctic for endless profit.[43] Whereas the term Capitalocene replaces the Anthropocene's focus on human-based activities as the central driver of the earth's natural systems with a focus on political economy, Haraway, in her use of the term *Chthulucene*, extends both terms to address the nonhuman and reframe the crisis. She thus widens our purview to think of the entangled ecological dimensions of the Arctic, drawing on traditional Indigenous knowledges and on more experimental speculative approaches (including science fiction) to bring into being an inclusive cultural engagement with a changing multispecies world and realms beyond the human.[44]

Much of the artwork I discuss embodies different human and multispecies relationships to nature and the environment not as something to be conquered, transformed, or turned to our advantage but as part of an older form of nature that situates humans as part of nature, to prompt us to think about these regions differently and to better understand the consequences of environmental breakdown that threatens life on earth, including our own. This new art also reveals how we used to think and,

looking forward, how we now can reimagine the way we relate to these extreme anthropogenic landscapes that are being used by large corporations and nations to reap profits from climate chaos through projects such as high-risk deepwater Arctic drilling.[45]

Organization and Critical Trajectory of the Book

Climate Change and the New Polar Aesthetics is developed in three stages to foreground how artists are creating a new polar aesthetics.

Part I. Disappearing Landscapes: Feminist, Inuit, and Black Viewpoints

Part I draws on a range of representations within visual culture and contemporary art to rethink the visuality of the polar regions' shift from the heroic sublime to environments of global decline. In chapter 1, "Antarctica and the Contemporary Sublime in Intersectional Feminist Art Practices," I address Antarctica exclusively and focus on four women artists: Judit Hersko (California State University, San Marcos, United States), Anne Noble (Massey University, Wellington, New Zealand), Connie Samaras (University of California, Irvine, United States), and Joyce Campbell (University of Auckland, New Zealand). In a region that lacks a native human population and that excluded all women until the 1960s, these artists link regional climate change to gender, the relation of the human to the nonhuman, questions of territory, knowledge production, and empire. They shake viewers out of routine assumptions about the natural world and invert the tourist gaze using strategies borrowed from postmodernist art, speculative fiction, and the gothic horror genre. The intersectional framework in this chapter goes beyond naming categories to understanding the complex entanglement of nature and culture in the context of a modern visual tradition still influenced by the masculinist imagery of the Antarctic sublime wilderness from the Heroic Age of exploration (1897–1922).

The chapter provides a way to understand the Anthropocene and Capitalocene within the context of speculative fiction. For instance, in Judit Hersko's *From the Pages of the Unknown Explorer*, the artist introduces fictional elements to the historically real world to rewrite themes of gender, science, exploration, and Jewishness in the time of World War II and to shift our understanding of our interconnected dependence on the nonhuman world in the present. By contrast, Anne Noble's photography reworks contemporary images of Antarctica to examine the way gender is implicated in how tourists see modern Antarctica as narrated through the lens of white

male polar exploration and photography, which represented a relatively narrow range of traumatic events from the Heroic Age of exploration. Her photographs address how this masculinist rhetoric and imagery survive as Antarctica, widely known within the tourist industry as Earth's last great wilderness, has been repackaged into a universal commercial and aesthetic product, calling attention away from the more terrifying material ways that Antarctica reveals itself as an anthropogenic landscape.

If Noble takes on how the race to explore the far extremes of the planet from the late nineteenth century has since been commercialized in neoliberal capitalism, Connie Samaras and Joyce Campbell use science fiction and horror to examine Antarctica as an alien space created by the melting of the ice and permafrost. Campbell's gothic daguerreotypes of icescapes in Antarctica from her series *Last Light: Antarctica* do not display the grandiosity and the potential destructiveness we find in the polar sublime, exemplified by Western photographs and paintings of untrammeled nature from the nineteenth and early twentieth centuries. Instead, she reworks our perceptual apparatus to document this new terror of climate change through her anachronistic daguerreotypes and the gothic horror genre (see the cover of this book and plate 9). Samaras's photographs of the Buckminster Fuller Dome sinking into the permafrost also shift the way we perceive and inhabit environmental time. Her work draws from science fiction but makes us think about unexpected disappearances and anxieties that permeate everyday life and the ways that the Anthropocene also resists science fiction, as it is precisely not an "imagined" other world apart from ours, now that the polar regions are no longer seen as located in another time or dimension.

Chapter 2, "Reclaiming the Arctic through Feminist and Black Aesthetic Perspectives," focuses on the art practices in the Arctic of British artist Isaac Julien (University of California, Santa Cruz, United States) and Swedish artist Katja Aglert (Linköping University, Sweden). The failure of imperialist heroism is the subject of Julien's epic multiscreen immersive installation project *True North* (2004–2008), which returns us to US heroic Arctic exploration narratives and their myths more than a hundred years after Robert Peary's expedition. It is told from the vantage point of the African American polar explorer Matthew Henson, whose own witnessing authority and claims to the 1909 "discovery" of the North Pole were consistently written out of the script by white polar explorer Robert Peary. Julien's *True North* takes poetic license, restructuring Henson's story to dismantle the homophobic regimes of imperial masculinities. It draws from the documentary genre, historical documents, and nonfic-

tion material and is heavily research based. Drawing in part on Henson's later writings and a larger visual culture of the Arctic, Julien explores the relation between aesthetics and politics as well as the Peary expedition's complex politics of exclusion.

Katja Aglert's multimedia installation project *Winter Event—Antifreeze* also explores white heroic masculinity and nationalist failure in the past and its recuperation and rehabilitation in the present not as a source of admiration or esteem but as a destructive act. Inspired by feminist scholarship and the work of Fluxus, her work (which was also turned into an experimental opera) draws on the photographic and media history of Svalbard but also uses repetition, performativity, and dark humor as strategies. Both Julien's and Aglert's innovative installations respond to a larger visual culture of the Arctic by exploring the relations among nationalism, aesthetics, and politics to challenge a kind of human relationship to landscapes (nature). They rethink and revisualize these beautiful and extraordinary spaces in the context of accelerated warming and the reemergence of the excesses of an earlier colonialism.

Chapter 3, "At Memory's Edge: Collaborative Perspectives on Climate Trauma in Arctic Cinema," broadens the work on aesthetics to address questions of memory and what it means to make art and film about a warming Arctic without sentimentalizing or spectacularizing Indigenous suffering. I draw on the writings of Indigenous literary theorist Gerald Vizenor both for his questioning of the representation of Indigenous peoples through a modernist aesthetics of tragedy, victimhood, and nostalgia steeped in notions of absence rather than presence and for his term *aesthetics of survivance*.[46] Though this term was intended to think about modes of Indigenous survival and resistance through storytelling, I argue it is also applicable to the articulation of climate trauma in contemporary Indigenous cinema. Here I discuss three innovative short films on the Arctic that call forth new representations of the climate crisis that focus on a world beset by uncertainty.

An online documentary by Zacharias Kunuk and Ian Munro, titled *Qapirangajuq: Inuit Knowledge and Climate Change* (2010), takes the perspective of an Igloolik community highly affected by climate change. It puts front and center communities from Canada's Circumpolar North, who craft a decolonial method of knowledge production through filmmaking. The second film, *Attutauniujuk Nunami/Lament for the Land* (2013), made in collaboration with the local Inuit communities of Nunatsiavut by Ashlee Cunsolo Willox, a community-engaged social science and health researcher and professor at Memorial University in Newfoundland,

provides a striking example of how recognizing suffering can serve as a necessary first step toward the amelioration of that suffering; community video networks can break the isolation imposed on both individuals and communities in local and regional contexts. The third film is by Japanese American filmmaker Kimi Takesue, a professor in the video program at Rutgers University. Her film *That Which Once Was* is an experimental science-fictional film set in 2032 in which millions of people are driven from their homes by the effects of climate change. All three films include and are made by Indigenous and marginalized peoples, who have begun to take up a range of media to create a sense of possibilities for themselves amid the ongoing destruction of their environment by anthropogenic climate change.

Part II. Archives of Knowledge and Loss

In part II (chapters 4 and 5), cowritten with Elena Glasberg, we suggest that the category of art continues to change as artists create new aesthetic arrangements of visibility capable of comprehending the material and representational aspects of climate breakdown. In so doing, the artists in this section focus on some of these new aesthetic practices and the way they sensitize us to the unfolding process of climate breakdown These new practices redefine art against nonart: how it is pursued (methods, artists, institutions) and how it makes meaning (culture, politics). This section points to these new shifts not just in art but also in politics and the earth as a material ecosystem that contributes to an essentially reimagined art.

This section also considers the temporal politics of the Anthropocene and the Capitalocene in order to focus on how environmental art creates alternative data about the world connected to the sense of dread about the climate emergency. It is a data-supported doom (as opposed to biblical eschatologies of apocalypse) that has put pressure on the traditional relation of art and life. We touch on this in the section of chapter 4 on Annie Pootoogook: art preserving ephemeral life was once a comforting frame, but now that large-scale earthly disaster impends and environmental degradation escalates, we need to rethink art's role. Its extension into the future beyond the limited human scale of a life or even a generation no longer suits the emergency of planetary disaster, which is also then an end to a future into which art may be imagined to extend ephemeral life. This shift in reality contributes to the ontological reordering of art we refer to in this section.

Chapter 4, "What Is Unseen and Missing in the Circumpolar North: Contemporary Art and Indigenous and Collaborative Approaches," co-

written with Elena Glasberg, is not only about how new polar art practices have begun to change our perceptions of the slowly unfolding catastrophes of melting ice and thawing permafrost but also about how artists work with Indigenous communities to make collective interventions that shift the very boundaries of art and visual representation. That makes us focus more on what forms they might take, what effect they might have, and how they unexpectedly might be read as meaningful "alternative" environmental data. Subhankar Banerjee's landscape photography centers Indigenous presence and philosophies of the land in his images of animal and bird migration patterns in the Arctic National Wildlife Refuge, challenging assumptions about the Arctic. The late Annie Pootoogook also created a visual archive of Indigenous land but one largely focused on inanimate objects and small groups or lone human subjects within built environments. Yet her depictions underscore how colonial dispossession can reveal itself through the way climate-led social disruption enters the sphere of subjective life of Indigenous peoples. Andrea Bowers's 2009 work *Mercy Mercy Me* rememorializes the struggle over the *Exxon Valdez* oil spill in 1989 and its incomplete cleanup, not from a scientific perspective, but from the point of view of both local Indigenous and white community members who have had to live with the damage over generations. Her work is a dark commentary on how ephemeral demonstrations and protests are and how work for social change is often forgotten and erased by the inevitable next catastrophe. She is interested in representing what Banerjee calls "long environmentalism," in the case of an environmental engagement that has lasted a quarter century and the way it has created a culture and history of its own.[47] Lillian Ball marks that longer historical frame by compiling and analyzing data on the dwindling Arctic ice cap from 1990 to 2040, drawing on already available data and extensive research that includes collaboration with scientists and conversations with local Indigenous Sámi peoples.

Chapter 5, also cowritten with Elena Glasberg, is titled "Viewers as Citizen Scientists: Archiving Detritus." We discuss how the work of artists Amy Balkin and Roni Horn creates meaningful environmental data by engaging the political agency of audiences. Horn's installation *Vatnasafn/Library of Water* leads visitors to understand themselves as enmeshed in new and altered landscapes and to see ice as imbued with agency. Balkin, in her conceptual archive *A People's Archive of Sinking and Melting*, which focuses on how to represent environmental damage yet to come, emphasizes the agency of citizen scientists who document, analyze, and archive everyday occurrences that are often dismissed from memory and that do

not figure as significant in official policy planning. In recuperating material excess or reconstituted material that might be overlooked or abandoned (including water and ice) or considered unworthy as documentation and making it the centerpiece, Balkin's and Horn's archives transform everyday unseen or unwanted materials into illuminating, active climate data that also reposition the viewer as a citizen scientist with powerful potential.

Part III: Climate Art and the Future of Art and Dissent

In part III (chapters 6 and 7), I focus on works of art that take disappearing ice and industrial pollution as their subjects. But these are deliberately concealed or even restricted landscapes, such as the tar sands in the Circumpolar North, which is off-limits to journalists and photographers on the ground and can be photographed only from the air.[48] In this final section, I underline that it's not so much that the Circumpolar North is new territory (for the oil, gas, and coal industries) or a new subject for writers in the environmental humanities and artists but that new polar aesthetics, changing territory, and the legacy of industrial histories now apply to the rest of the world. What has changed is that with less ice the Arctic Ocean is open for more of the year and available for drilling—when it wasn't previously. Climate change and consequent ice melting have made it so. These chapters are concerned with how the Circumpolar North is becoming more like the rest of the world. Here we witness what Elena Glasberg, in their book *Antarctica as Cultural Critique*, calls "becoming polar," that is, how the rest of the world will become more like the poles—fragile, abject, deserted, exploited—as warming accelerates and the resultant rising sea levels disrupt ecosystems and urban environments worldwide.[49] At that point the Arctic will have become an intimation of a global future as Indigenous people become "the first climate change relocation survivors," as discussed in chapter 3.

In chapter 6, "The Logic of Oil and Ice: Reimagining Documentary Cinema in the Capitalocene," I focus on innovative new-media films that take into account increased development by the oil industry, local knowledge, and the resilience of Indigenous communities. Combining strategies from documentary and speculative fiction genres, while incorporating scientific fact, these films demonstrate the challenges of representing the built-in invisibilities of climate change as well as the corporate obfuscations of the damage caused by extractivism. The chapter discusses experimental projects by the Swiss video artist Ursula Biemann and the Canadian filmmaker Brenda Longfellow to bring awareness to what is not otherwise fully

visible by creating new forms of perception and representational framings that capture the intricacies of visibility.

My angle of vision is again largely through filmmakers and artists who have affiliated themselves with environmental social movements that engage visual and verbal languages to connect separate localities across different continents and address how certain temporal and spatial orders are more visible than others in the Anthropocene and Capitalocene. Brenda Longfellow, a Canadian filmmaker and professor (York University, Canada), focuses on representing the tar sands but as Indigenous land. She uses opera and animation in her film *Dead Ducks* to satirize the challenge of dealing with the ecological devastation that is happening at the tar sands without a human point of view. Her later works *Offshore*, *Offshore International*, and *Offshore Interactive* are engaging pieces of new media that consider the Web as an interactive site for progressive political ecology. Longfellow's work is activist in the sense that it engages active participants in our near future and provides an example of how extreme industrial practices of resource extraction once associated with nonpolar territories such as the Gulf of Mexico are now connected to the frequently invisible and remote far north.

Ursula Biemann's film *Deep Weather* (2013) focuses on the dynamic political geography of climate change and the impact of the carbon released from the tar sands in Alberta, Canada, on postcolonial South Asia, with the poor and marginalized in Bangladesh as its most violently affected victims. Whereas the destruction in *Deep Weather* appears as the product of several long centuries of carbon burning, I'm interested in the radically transformative changes taking place in her film *Subatlantic* (2015) because the work brings together the current climate crisis with the temporal scale of the earth's deep time to add a long historical dimension in timescales measured not in decades or centuries but in millions of years. *Subatlantic* departs from *Deep Weather* by combining science fiction and documentary to focus more on nonhuman life during the last ice melt twelve thousand years ago, when the world was significantly warmer and the seas were eighty feet higher.

In chapter 7, "Critical Polar Art Leads to Social Activism: Beyond the Disengaged Gaze," I bring together issues in critical climate change scholarship to examine aspects of feminist and environmentalist media art, photography, and performance work as activism. I cite the work of the well-known and influential Canadian photographer and filmmaker Edward Burtynsky, who has produced photographs of the Capitalocene for twenty

years to document how mining and oil extraction have fundamentally changed the world's landscapes, with an emphasis on the Canadian tar sands. Burtynsky's photographs and Peter Mettler's video *Petropolis*, made for Greenpeace, help us visualize the monstrous scale of the oil industry, its haunting presence, and its perverse beauty.

The chapter focuses on the growing environmental social movement of art activism in North America and the United Kingdom, building on the galvanizing effect of continuing concern over past oil spills and imminent climate emergencies. Through their performance events, activist artists such as Liberate Tate, the British Platform collective, Not an Alternative, and the Yes Men express a desire for change within the museum system of sponsorship, governance, and finance. Their work aims at holding Western art, natural history, and science museums to account for their complicity, through the solicitation and acceptance of corporate sponsorship, in enabling climate change and perpetuating the colonial narratives that underlie it. Activist artists use humor to maintain a sense of possibility and purpose while facing overwhelming challenges; they criticize the way oil companies use art institutions in metropolitan centers and seek to revoke their "social license to pollute."[50] In including activist groups like Idle No More and sHell No!, the chapter also highlights the ongoing structural transformation of artistic work from outside conventional art institutions in relation to climate justice politics.

The epilogue, "Seeing from the Future" (written mostly in the winter of 2021), extends the book's thesis, stating that the world continues to remain off track to avoid catastrophic unraveling. To inspire us to interrogate the future we are creating, the epilogue connects the failure to slow rising temperatures to the significance of more recent climate art activism that challenges established forms of collective thinking and acting. The book ends with an alternative vision of the future proposed in a short climate fiction film by artist Molly Crabapple and collaborators, *Message from the Future with Alexandria Ocasio-Cortez* (2019) and links it to the works of artists and activists discussed in the book who treat the climate crisis as an immediate emergency of the future. It concludes by asking what other future for the world might be possible by recognizing the polar now made perceptible through the new polar aesthetics.

Introduction: From the Heroic Sublime to Environments of Global Decline

1 Ghosh argues that the climate crisis asks us to imagine other forms of existence. See Ghosh, *Great Derangement*, 1–84. Note that throughout the book I alternate between using more conventional terminology such as *climate change* to reach a wider audience and phrases such as *climate breakdown* and *climate crisis* that are less passive and more accurately describe the magnitude and seriousness of what we are facing.

2 In March 2022, extreme heatwaves at both the North and South Poles caused alarm among climate scientists, who warned the "unprecedented" events could signal fast and abrupt climate breakdown. See Fiona Harvey, "Heatwaves at Both Poles Alarm Climate Scientists," *Guardian*, March 20, 2022, https://www.theguardian.com/environment/2022/mar/20/heatwaves-at-both-of-earth-poles-alarm-climate-scientists. In the Arctic, sea ice has declined rapidly since modern recordkeeping started in the 1970s; this is not the case in Antarctica, with the exception of the Antarctic Peninsula, but this may be changing. See Tosin Thompson, "Antarctic Sea Ice Hits Lowest Minimum on Record," *Nature*, March 11, 2022, https://www.nature.com/articles/d41586-022-00550-4. A sweeping study on the state of the Arctic's ice sheets led by glaciologist Jason E. Box found that ice in various forms is melting so rapidly that "the Arctic biophysical system is now clearly trending away from its previous state and into a period of unprecedented change, with implications not only within but also beyond the Arctic." See Box et al., "Key Indicators," 13. The melting of the Greenland ice cap has become so severe that on August 12, 2020, one of Box's colleagues, Konrad Steffen, a renowned Arctic climate scientist, fell into a deep crevasse on the same Greenland ice sheet that he had been studying for thirty years. See Wyatte Grantham-Phillips, "Renowned Climate Scientist Konrad Steffen Dies after Falling through Ice in Greenland," *USA Today*, August 13, 2020, https://eu.usatoday.com/story/news/nation/2020/08/13/konrad-steffen-death-climate-change-scientist-dies-greenland/3362486001/. Ryan R. Neely II, a climate scientist, wrote about Steffen's death, "In the end, it looks like climate change actually claimed him as a victim." Quoted in John Schwartz, "Konrad Steffen, Who

Sounded Alarm on Greenland Ice, Dies at 68," *New York Times*, August 13, 2020, https://www.nytimes.com/2020/08/13/climate/konrad-steffen-dead.html.

3 For anthologies that address intersectional feminism, the Anthropocene, and the climate crisis more broadly, see MacGregor, *Routledge Handbook*; Grusin, *Anthropocene Feminism*; Dankelman, *Gender and Climate Change*; and Adamson, Evans, and Stein, *Environmental Justice Reader*. Also see the following single-authored works: Alaimo, *Bodily Natures*; Alaimo, *Exposed*; Bennett, *Vibrant Matter*; Colebrook, *Death of the Post-Human*; Povinelli, "Acts of Life;" and Neimanis, *Bodies of Water*.

4 Intersectionality has also been important to the formulation of this book, which draws on decades of work by feminists of color like the Combahee River Collective ("The Combahee River Collective Statement"), Kimberlé W. Crenshaw ("Demarginalizing the Intersection"), bell hooks ("Feminist Theory"), and Chandra Talpade Mohanty (*Feminism without Borders*); Indigenous and postcolonial scholars, activists, and writers from the Arctic like Sheila Watt-Cloutier (*Right to Be Cold*), Subhankar Banerjee (*Arctic Voices*), Bathsheba Demuth (*Floating Coast*), Shari M. Huhndorf (see Huhndorf et al., *Indigenous Women and Feminism*), Mary Simon ("Sovereignty of the North"), and Zoe Todd ("Indigenizing the Anthropocene"); feminist and queer environmental justice scholars and writers such as Vandana Shiva and Maria Mies (*Ecofeminism*), Macarena Gómez-Barris (*The Extractive Zone*), Stephanie LeMenager (*Living Oil*), and Julie Sze (*Environmental Justice*); feminist science studies and postcolonial scholars such as Carolyn Merchant (*The Death of Nature*), and Anne McClintock ("Monster"); and a new feminist scholarship that emerged in the late 2000s that engages with both the human and nonhuman world (see Donna J. Haraway, *Staying with the Trouble*; Stacy Alaimo, *Bodily Natures* and *Exposed*; Rosi Braidotti, *Posthuman Knowledge*; Karen Barad, "Troubling Time/s"; Astrida Neimanis, *Bodies of Water*; Anna Lowenhaupt Tsing, *Mushroom*; and Jane Bennett, *Vibrant Matter*).

5 For more on why undifferentiated catastrophist discourse that presumes apocalyptical warnings fails to lead to political action, see Lilley, McNally, Yuen, and Davis, *Catastrophism*.

6 Andrea Thompson, "NASA Says 2020 Tied for Hottest Year on Record," *Scientific American*, January 14, 2021, https://www.scientificamerican.com/article/2020-will-rival-2016-for-hottest-year-on-record/. Another warmest year on record is expected for the planet in 2022. See Jeff Masters, "February 2022: Earth's 7th-warmest February on record," *Yale Climate Connections*, March 14, 2022, https://yaleclimateconnections.org/2022/03/february-2022-earths-7th-warmest-february-on-record/.

7 Blacki Migliozzi, Scott Renhard, Nadja Popovich, Tim Wallace and Allison McCann, "Record Wildfires on the West Coast Are Capping a Disastrous Decade," *New York Times*, September 24, 2020, https://www.nytimes.com/interactive/2020/09/24/climate/fires-worst-year-california-oregon-washington.html.

8 The full caption reads: "'Like a scene from Mars': Skies in parts of California turn orange as wildfires continue." David Ingran and Mohammed Syed, "Like a Scene from Mars," September 9, 2020, https://www.nbcnews.com/news/us-news/scene-mars-skies-parts-california-turn-orange-wildfires-continue-n1239659.

9 In Beukes et al., "Science Fiction."

10 Wallace-Wells, *Uninhabitable Earth*, 59–69.

11 Latour, *Down to Earth*. Also see Haraway, "Tentacular Thinking," 30–57.

12 Demos, *Beyond the World's End*, 151–57.

13 For more on why colonizing Mars will be much harder than originally envisioned by Musk and the NASA planners in the post-Apollo period, see the following article on how NASA probes have discovered that the red planet is carpeted in a soil containing toxic perchlorates: Ian Sample, "Mars Covered in Toxic Chemicals That Can Wipe Out Living Organisms, Tests Reveal," *Guardian*, July 6, 2017, https://www.theguardian.com/science/2017/jul/06/mars-covered-in-toxic-chemicals-that-can-wipe-out-living-organisms-tests-reveal. For more on other obstacles that make interstellar space travel outside the solar system unlikely in the near future, see also Paul Sutter, "Is Interstellar Travel Really Possible?," Space, September 10, 2019, https://www.space.com/is-interstellar-travel-possible.html. Musk's focus departs somewhat from the 2021 scientific mission to Mars by NASA's Mars Perseverance rover, which acknowledges that Mars is a dead and toxic planet in the present but strangely claims to be focused on determining Mars's deep geological past when it was once alive. Such a fascination seems connected to a projection of our own grim future onto Mars and connected with the hope of bringing our own planet back to life at a moment when it is being extinguished. For more on the ways in which contemporary fantasies of off-Earth futures are bound up with patterns of colonial thinking and capitalist accumulation, see Rowan, "Beyond Colonial Futurism."

14 The science fiction writer Octavia E. Butler in her 1993 novel *Parable of the Sower* in her Earthseed series writes about the danger of fantasizing about space travel by creating a Trump-like political figure, Christopher Donner, who uses space travel as a bread-and-circus show to distract the poor residents on Earth away from dealing with the existential crisis that climate change has clearly become on Earth. Also see Abby Aguirre, "Octavia Butler's Prescient Vision of a Zealot Elected to 'Make America Great Again,'" *New Yorker*, July 26, 2017, https://www.newyorker.com/books/second-read/octavia-butlers-prescient-vision-of-a-zealot-elected-to-make-america-great-again; and Shelley Streeby's chapter on Butler in her book *Imagining the Future of Climate Change*, 69–100.

15 See, among others, the following works for a wide-ranging and comprehensive overview of some of the leading interdisciplinary social science, humanities, and art scholarship on the Arctic and Antarctic: Dodds, Hemmings, and Roberts, *Politics of Antarctica*; Dodds and Nuttall, *Scramble*

for the Poles; Körber, MacKenzie, and Stenport, *Arctic Environmental Modernities*; MacKenzie and Stenport, *Films on Ice*; Marsching and Polli, *Far Field*; Frank and Jakobsen, *Arctic Archives*; Jørgensen and Sörlin, *Northscapes*; Ryall, Schimanski, and Wærp, *Arctic Discourses*; Banerjee, *Arctic Voices*; Bravo and Sörlin, *Narrating the Arctic*; Bravo and Triscott, *Arctic Geopolitics and Autonomy*; Buckland, *Burning Ice*; and Yusoff, *Bipolar*.

16 Bloom, *Gender on Ice*, 2.

17 These articles include Bloom, "Antarctica," "At Memory's Edge," "Connie Samaras' Futures," "Hauntological Art," "Invisible Landscapes," "Planetary Precarity," and "Polar Fantasies and Aesthetics"; Bloom and Glasberg, "Disappearing Ice"; Bloom, Morrell, and Hoag, "Forest Law." See the special issue of the online journal *Scholar and Feminist*, made at Barnard College, which was the starting point for some of my current research (Bloom, Glasberg, and Kay, "Gender on Ice"). For the long and varied list of articles and books that have cited my earlier works, see "Lisa Bloom," Google Scholar, https://scholar.google.com/citations?user=a9FKgScAAAAJ&hl=en (accessed October 27, 2021). For links and downloads to my articles, see my website (lisaebloom.com).

18 This surge of interest in colonial nostalgia since the late 1990s is exemplified by reprintings of original accounts, new biographies of nineteenth- and early twentieth-century explorers, and even reality TV's simulated reenactments of explorers' journeys. See Alvarez, "S&M at the Poles," 14; Barczewski, *Antarctic Destinies*; and Farley, "By Endurance We Conquer."

19 See Hubbard, *Woman's Way*; Grace, "Inventing Mina Benson Hubbard" and *Idea of North*.

20 See Grace, "Inventing Mina Benson Hubbard."

21 Bloom, Glasberg, and Kay, "Introduction." See Lim, "At the Bottom of the World" and "On Thick Ice"; and Hillary, "What It Takes to Get There."

22 Feminist artists and scholars discussed in this book who have been supported by the NSF include Judit Hersko, Anne Noble, Connie Samaras, and Elena Glasberg. All were brought to Antarctica thanks to Guthridge, who spent thirty-five years of his life with the NSF to create its unique Antarctica Artists and Writers Program, which ran from 1982 to 2005. For a more contemporary view, see Jackson, "Changing Cultural Climate." Sadly, the entire NSF program was suspended in 2020 during the Trump administration.

23 The film *Qapirangajuq: Inuit Knowledge and Climate Change* is connected to Isuma, an electronic-media art collective working with a preliterate oral language in the still-colonized territory of Nunavut. In 2019 Isuma represented Canada at the fifty-eighth Venice Biennale. For background on Isuma and video archives since 1985, see IsumaTV Live!, http://www.isuma.tv/live (accessed October 27, 2021).

24 Their influential published writings include Banerjee, *Arctic National Wildlife Refuge*; Banerjee, "Land-as-Home"; Banerjee, *Arctic Voices*;

Banerjee, "Warming Arctic Seas"; Banerjee, "Long Environmentalism"; Banerjee, "Terra Incognita"; Subhankar Banerjee, "The Last Oil: Gathering to Resist Trump's Reckless Arctic Energy Policy," *Common Dreams*, January 15, 2018, https://www.commondreams.org/views/2018/01/15/last-oil-gathering-resist-trumps-reckless-arctic-energy-policy; Demos, Scott, and Banerjee, *Routledge Companion*; MacKenzie and Stenport, *Films on Ice*; MacKenzie and Stenport, "Arnait Video Productions"; Körber, MacKenzie, and Stenport, *Arctic Environmental Modernities*; MacKenzie and Stenport, "Polarities and Hybridities"; and Szeman, *On Petrocultures*.

25 See the work of the art historians, artists, geographers, and curators who have put together fairly expansive exhibition catalogs of contemporary art that address the Arctic and Antarctic and the climate crisis: Decker, *True North*; Decker and Andersen, *Up Here*; Matilsky, *Vanishing Ice*; Buckland, *Burning Ice*; Buckland and Mitchell, *Carbon 12*; Lippard, *Undermining*; Holm, Seeberg, and Tøjner, *ARCTIC*; Bravo and Triscott, *Arctic Geopolitics and Autonomy*; Aglert and Hessler, *Winter Event*; Lundström and Hansson, *Looking North*; Kusserow and Braddock, *Nature's Nation*; Yusoff, *Bipolar*; Gabrys and Yusoff, "Arts, Sciences"; and Fabijanska, "Ecofeminism(s)." Also influential have been anthologies and single-authored books on art and ecology: Weintraub, *To Life!*; Mirzoeff, *How to See*; Demos, *Decolonizing Nature*; Demos, *Against the Anthropocene*; McLagan and McKee, *Sensible Politics*; Demos, *Beyond the World's End*; Demos, Scott, and Banerjee, *Routledge Companion*; Patrizio, *Ecological Eye*; E. Scott and Swenson, *Critical Landscapes*; and Davis and Turpin, *Art in the Anthropocene*.

26 See Craciun, "Scramble for the Arctic"; Craciun, *Writing Arctic Disaster*; Bravo, *North Pole*; Bravo and Triscott, *Arctic Geopolitics and Autonomy*; Hill, *White Horizon*; Grace, "Inventing Mina Benson Hubbard"; Huhndorf, "Nanook and His Contemporaries"; Huhndorf et al., *Indigenous Women and Feminism*; M. Robinson, *Coldest Crucible*; Dodds and Nuttall, *Scramble for the Poles*; Yusoff, *Bipolar*; Chisholm, "Enduring Afterlife"; Chisholm, "Shaping an Ear"; Collis, "Australian Antarctic Territory"; Collis, "Walking in Your Footsteps"; Glasberg, "Virtual Antarctica"; Glasberg, "Camera Artists in Antarctica"; Glasberg, "Blankness"; Glasberg, *Antarctica as Cultural Critique*; Ryall, Schimanski, and Wærp, *Arctic Discourses*; Bravo and Sörlin, *Narrating the Arctic*; Jørgensen and Sörlin, *Northscapes*; Pálsson, *Travelling Passions*; Pálsson, "Hot Bodies"; Leane, "Placing Women"; Leane, *Antarctica in Fiction*; Dodds, Hemmings, and Roberts, *Politics of Antarctica*; Körber, MacKenzie, and Stenport, *Arctic Environmental Modernities*; MacKenzie and Stenport, *Films on Ice*; and Blum, *News*, among others.

27 See Ghosh, Great *Derangement*; Klein, *This Changes Everything*; Klein, *On Fire*; Gómez-Barris, *Extractive Zone*; LeMenager, *Living Oil*; Bravo and Triscott, *Arctic Geopolitics and Autonomy*; Dodds and Nuttall, *Scramble for the Poles*; and Körber, MacKenzie, and Stenport, *Arctic Environmental Modernities*.

28 For the Indigenous place-names of some of these areas, please see "Endonyms of the World's Landmasses," Decolonial Atlas, February 23, 2015, https://decolonialatlas.wordpress.com/2015/02/23/endonyms-of-the-worlds-landmasses/. See also Native Land, https://native-land.ca/.

29 Dodds and Nuttall, *Scramble for the Poles*, 33; and Heininen, "Impacts of Globalization," 91. For more on how Russia's war on Ukraine is reshaping our energy future and the climate emergency, see Naomi Klein,"Toxic Nostalgia, from Putin to Trump to the Trucker Convoys," *The Intercept*, March 1, 2022, https://naomiklein.org/toxic-nostalgia-from-putin-to-trump-to-trucker-convoys/.

30 "New Soil Samples Prove the Arctic Is Ours: Russia," *Reuters*, September 20, 2007, https://www.reuters.com/article/us-russia-arctic-idUSL2082113920070920. As climate change opens up the Arctic for transit and exploration, Russia has increasingly militarized the region since 2007. For more on the US response, see Mike Baker, "With Eyes on Russia, the U.S. Military Prepares for an Arctic Future," *New York Times*, March 27, 2022, https://www.nytimes.com/2022/03/27/us/army-alaska-arctic-russia.html.

31 US Department of the Navy, *Blue Arctic*, 9.

32 Although the treaty defends territorial claims, scientific activity has long been understood as their stand-in. And station building, ever on the rise (literally, in the case of Japan's new highest-base achievement), attracts little questioning.

33 Crutzen and Stoermer, "'Anthropocene.'"

34 Davis and Todd, "Importance of a Date."

35 Whyte, "Is It Colonial Déjà Vu?," 19.

36 Tsing, *Mushroom*, vii.

37 See Haraway, *Staying with the Trouble*. Also see Rose, Gibson, and Fincher, *Manifesto for Living*; Yusoff, "Anthropogenesis," 10–11; Cohen, Colebrook, and Miller, *Twilight*, 11–12; Zylinska, *End of Man*; Grusin, *Anthropocene Feminism*; and Todd, "Indigenizing the Anthropocene."

38 See Zalasiewicz, Williams, and Waters, "Anthropocene."

39 *Anthropogenic landscapes* is widely used to link the growth of landscapes to the inception of the Anthropocene. Many of the articles on this topic have to do with landscape changes resulting from global climate change.

40 What I propose is similar to what Haraway calls *naturalcultural*, a term she uses to signal the false binary that separates these otherwise inseparable contact zones of origins and becoming. See Haraway, *When Species Meet*.

41 See Castree, "Nature."

42 The term *Capitalocene* was first used by Malm and then further developed by Moore and Haraway. See Malm, *Fossil Capital*; Moore, *Capitalism*; and Haraway, *Staying with the Trouble*.

43 Moore, "Rise of Cheap Nature." Joshua Clover's provocative formulation of the Capitalocene is even more broadly descriptive of the role of economic

systems: "Ecological despoliation of humans is a consequence not of *humans* . . . as the name Anthropocene suggests, but of Capital . . . with its compulsion to produce at a lower cost than competitors for profit." See Clover, "Rise and Fall of Biopolitics."

44 Haraway, "Anthropocene, Capitalocene, Plantationocene, Chthulucene"; and Haraway, *Staying with the Trouble*.

45 Dodds and Nuttall, *Scramble for the Poles*, 31–58. For more on how Russia, in its war on Ukraine in 2022, is using control of Arctic oil and gas supplies as its main weapon alongside its military machine, see Bill McKibben, "This Is How We Defeat Putin and Other Petrostate Autocrats," *Guardian*, February 25, 2022, https://www.theguardian.com/commentisfree/2022/feb/25/this-is-how-we-defeat-putin-and-other-petrostate-autocrats.

46 See both Vizenor, *Fugitive Poses*; and Vizenor, *Survivance*.

47 Banerjee, "Long Environmentalism."

48 A similar restriction exists with Russian-owned oil platforms in the Pechora Sea, as Greenpeace discovered in September 2013 when the Greenpeace ship *Arctic Sunrise* attempted to travel close to a platform and its crew were arrested by Russian security forces on charges of piracy. See Dodds and Nuttall, *Scramble for the Poles*, 41–57.

49 Glasberg, *Antarctica as Cultural Critique*, xxvii, 131–33.

50 On humor and irony in environmental art activism, see Seymour, *Bad Environmentalism*. Also, on how this kind of activism has spilled over to (largely student-led) divestment campaigns, see Grady-Benson and Sarathy, "Fossil Fuel Divestment"; and Bratman et al., "Justice Is the Goal." See also Bill McKibben, "The Movement to Divest from Fossil Fuels Gains Momentum," *New Yorker*, December 21, 2017, https://www.newyorker.com/news/daily-comment/the-movement-to-divest-from-fossil-fuels-gains-momentum.

Chapter 1. Antarctica and the Contemporary Sublime in Intersectional Feminist Art Practices

Portions of chapter 1 first appeared as "Antarctica: Feminist Art Practices and Disappearing Polar Landscapes," in the *Handbook on the Politics of Antarctica*, edited by Klaus Dodds, Alan J. Hemmings, and Peder Roberts (2017); and as "Planetary Precarity and Feminist Environmental Art Practices in Antarctica" in a special issue of the *Journal of Postcolonial Writing* 56, no. 4, edited by Janet Wilson (2020).

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