CLIMATE

CHANGE

AND THE

NEW POLAR

AESTHETICS

ARTISTS

REIMAGINE

THE

ARCTIC

AND

ANTARCTIC

LISA E. BLOOM

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LISA E ·

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INTRODUCTION

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FROM THE HEROIC

SUBLIME TO

ENVIRONMENTS

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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. 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. 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. 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 neverbefore-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



When it comes to climate change, what happens in the Arctic does not stay in the Arctic. (Photo: Andrew Lovesey/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

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

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-eved 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 conference 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

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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-

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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. 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. 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," cow-

ritten 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.

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DISAPPEARING

LANDSCAPES

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FEMINIST,

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ANTARCTICA
AND THE
CONTEMPORARY
SUBLIME IN
INTERSECTIONAL
FEMINIST
ART PRACTICES

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Unlike the permafrost and ice, myths are less amenable to climate change.

Sherrill Grace, "From the 'Hand of Franklin' to *Frobisher*: Opera in the Canadian North," 2010

Our sensorial and perceptive systems are being refashioned at rates that we can barely keep up with as the world around us changes so rapidly.... These terms and parameters of perception are not limited to humans: as we are shaping the world around us, significant among these shifts are the effects to our companion... animals.

Heather Davis and Etienne Turpin, Art in the Anthropocene, 2015

This chapter addresses Antarctica exclusively. In it, I discuss four contemporary women artists—Anne Noble, Judit Hersko, Connie Samaras, and Joyce Campbell—whose work collectively creates a specifically feminist critical aesthetics.¹ Drawing from postmodernism (Anne Noble), speculative fiction (Judit Hersko/Ursula K. Le Guin), science fiction (Connie Samaras/Philip Dick), and the gothic horror genre (Joyce Campbell), their artwork questions routine assumptions about the natural world and its future viewpoint. Their work does not present nature simply as existing in a vast uninhabited and empty wilderness either to serve the cause of Antarctic preservation devoted only to peace and a disinterested science (in

keeping with the 1959 Antarctic Treaty) or to further the myths of heroic masculinity from the Heroic Age of Antarctic Exploration (1897–1922). Rather, these artists complicate the nature/culture divide and are rethinking gender, sexuality, and the relation of the human to the nonhuman. Their work also reintroduces subjectivities that were disallowed during the Heroic Age of Antarctic Exploration when it lacked women.

In the absence of women and an Indigenous human population altogether, the human history of the Antarctic has largely been narrated through the lens of white male heroic polar and oceanic exploration from the eighteenth to the twentieth century.² Despite the southernmost continent's lack of Indigenous inhabitants to dominate, which made it unlike the colonial experiences of the Arctic, it has been uniquely imagined since the eighteenth century as a colonial frontier space with valuable maritime resources to exploit. Although challenged by its remoteness and harsh conditions, humans capitalized on the Southern Ocean beginning soon after James Cook reported an abundance of fur seals in 1775. Fur seals were hunted for their furs, followed by southern elephant seals; Southern Ocean whales and king penguins were taken for their oil; all were exploited to the brink of extinction.³ Adrian Howkins points out other ways that the US relationship with Antarctica was informed by a frontier imagination, led by explorers such as Richard E. Byrd who envisaged a colonializing network of "Little America[s]" in the 1930s. 4 Some of the more recent scholarship on gender and colonialism also focuses on how the contemporary peace-andscience era that followed the 1958 International Geophysical Year, often seen as distinct, has been in many ways informed by the same intertwined ideologies of masculinity, colonialism, and exploration as this earlier period of modernity.⁵ The exclusionary gender-segregated structures on the ice lasted up until the 1960s and 1970s. According to Elena Glasberg, "the language of achievement" in this new era "passed from imperial registers to those of science," which can be seen in the continuing politics and practices of maintaining exclusive claims: the flags planted, the maps drawn, and the bases built by framing colonization efforts as objectively scientific.⁶ Travel writer Sara Wheeler recalled the explanation of one male scientist in her Antarctic memoir: "They [British men] don't want the complication of women in such a pristine place," he said. "It's visceral."

This chapter turns a critical feminist lens on what is still often seen as a very heroic masculinist geographic site. Amelia Jones, a contemporary art historian, argues that the most important legacy of feminism is its politics of positionality. By this, Jones means the importance of emphasizing the situatedness of visuality and spectatorship rather than detachment and

distance. Rather than viewing Antarctica through a disembodied process of visual detachment, each artist places herself in a position of agency through a more embodied, subjective process. In this context, positionality extends to linking the region and issues of climate change to gender, the relation of the human to the nonhuman, and questions of territory, knowledge production, and empire. All four artists I discuss are interested in the social space of either taking photographs or making performance art and sculpture about Antarctica. Their performances behind the camera and through their art are committed to recording their relationship to Antarctica and to providing a more elaborate critique of the way heroic masculinist routines and stances from the Heroic Age continue in the "postheroic" era.

In the restricted context of Antarctica, mostly the domain of scientists, three of the four women artists created the artwork in this chapter through the Antarctic Artists and Writers Program, funded by the US National Science Foundation (NSF). Not only did these artists occupy a subordinate position to the scientists, but their artwork was seen as a kind of rebellion against the typical approach because it went beyond illustrating Antarctica as simply a "wilderness," as described in the Protocol on Environmental Protection of the Antarctic Treaty of 1991. ¹⁰ William L. Fox, the director of the Centre for Art and Environment at the Nevada Museum of Art, points out the limits of using the treaty to create a rationale for engaging artists through the NSF:

The primary purpose of the visiting artists and writers program ... remains to provide public outreach—images demonstrating to the American taxpayer that the funds spent on Antarctic research are worth it. Much of the science conducted there is far too abstruse to be of interest to laypeople, but the presentation of a sublime and pristine wilderness establishes an emotional loyalty to the continent that serves the cause. That means there is a strong bias of selecting artists whose work is pictorial, representational and conventional. The aim has been to document the physical form and conditions of the continent, and then make it comprehensible as a sublime landscape suitable for preservation as a stage for scientific inquiry. ¹¹

During these three women's tenure in the program, the Antarctic Artists and Writers Program was administered by Guy Guthridge, who insisted that art in Antarctica should not be in the service of science and regarded art, the humanities, and science as intellectual activities of equal value. The fourth artist, Joyce Campbell, visited through the Artists to Antarctica program sponsored by Creative New Zealand and Antarctica New Zealand.

Anne Noble's photographs exemplify the struggle with what she calls her own lack of belonging as a woman and nonscientist. She looks at the mechanisms of authority that condition the Antarctic imaginary and its images of heroic masculinity within the tourist industry, whether from the remote regions of American bases in Antarctica or in dioramas of Antarctica in entertainment centers in New Zealand, Japan, or elsewhere. Her photographs also question the popular image of Antarctica as an unrepresentable and unspoiled tabula rasa populated only by the penguins, dolphins, or sperm whales that the tourist industry promotes as a backdrop. Like Noble, Connie Samaras is also interested in how Antarctica has been commercialized in neoliberal capitalism. In her photographs of its built environment, she uses science fiction and horror narratives to examine the new anxieties that permeate everyday life and to think about how our worst nightmares edge toward reality.

Judit Hersko, by contrast, presents an alternative and unlikely photographic, performative, and cinematic history of exploration and climate science in Antarctica, writing a pointed, imaginative alternative history of a Jewish woman's presence in Antarctica. Her purpose is to shift our sensorial and perceptual view of the polar regions from the traditional (white male) polar explorers' perspective of remote wilderness and conquest to investigations of the intimate and hidden layers of this region, including microscopic species that were not studied or represented in the heroic era.

For both Samaras and Hersko, their more intimate encounters with the landscape mean bringing in the physical relationships of the human and nonhuman and the interconnection of natural systems to highlight the sense of dislocation involved in living in such an extreme environment that is already in a state of slow collapse. Hersko introduces the politics of nonhuman agential power through attention to microscopic creatures like the sea angel and the sea butterfly. This fascination with microscopic life-forms turns away from the traditional essentialist position of womanas-nature toward one that comes out of more recent feminist writing on new materialism and matter by Karen Barad, Stacy Alaimo, and others. ¹² That such small planktonic organisms can have so much power is at odds with a world where large mammals such as polar bears are preferred as the icons of anthropogenic climate change.

Campbell uses the gothic genre in her photographs to reinvigorate the sublime and create tension between traditional heroic landscape images and those of the present. There is terror but also rage in Campbell's photographs of Antarctica: while efforts at settler colonialism and science in Antarctica throughout the twentieth century have dented its icy surface,

the burning of fossil fuels, to which we are collectively addicted, has been the most invasive, gnawing deeply into the continent's glaciers and pressure ridges. The unintended effect is antiheroic and grubby, a compromised icescape completely devoid of humans and wildlife but full of individual cracks, crevasses, and pressure ridges, on the cusp of potential collapse.

All four artists bring together issues routinely kept apart in climate change debates, connecting discussions of science and the environment with issues of gender, race, and empire. But they also revisit the long-standing role of the polar regions as a space of fantasy, imagining possible futures through science fiction and speculative fiction. Their work searches for alternative narratives and aesthetics because these artists want to transform our affective and aesthetic responses to the continent in ways that challenge the dominant and narrow mainstream media approach that equates climate change with apocalyptic spectacles of melting ice and masculinist imagery of sublime wilderness and imperial heroics.

Anthropogenic Landscape Practices and the Sublime in Anne Noble's Photographs

Anne Noble, a well-known New Zealand artist, photographer, and professor at Massey University in Wellington, has been working on Antarctica since 2002, when she first traveled to the continent through the Antarctica New Zealand program; she later also participated in the US NSF Antarctic Artists and Writers Program. Noble's work interrogates the role of the sublime in the construction of visual knowledge of anthropogenic land-scape practices in Antarctica. She also addresses the historic exclusion of women altogether from the continent until the 1960s and 1970s and the way the visual tropes of Antarctica as the last great wilderness on earth contribute to maintaining the perception that Antarctica is still an all-male continent or a living memorial to this earlier moment, when only men could populate the continent.

A case in point is her photographic series, titled *Bitch in Slippers*, of transport vehicles at the US base at the South Pole. The title refers to the profane slang used by workers to complain about how difficult the vehicles were to maneuver over the ice. The artist named her series after finding one of the "old girls" of the Ross Sea vehicle fleet, a giant pneumatic drill named Bitch in Slippers. Her photographs track an Antarctic tradition of ascribing the names of "old girls" and absent girlfriends like Hazel, Patsy, and Brenda to the 250 trucks, tractors, cranes, and excavators that move cargo and carve out the ice highways. Such images evoke a strange form of anthro-

pomorphized vehicles, whose formidable presence might be more familiar from cartoons or horror films, where inanimate objects start talking back to the belligerent men who call them bitches. But such sexist practices of naming vehicles after women are also reminiscent of the twentieth-century penchant for naming bombs, ships, and hurricanes after girlfriends and wives in the twentieth century. Like the "old girls" and girlfriends they are meant to represent, many of the trucks in these images look as if they have not been treated well over the years. But they are still functioning, and some have more style than others. Misty is an attractive brunette, but her face is badly scratched; Basket Case is a tank and doesn't seem to have much humor; and Hot Lips (plate 3) has scratches and red lips but no curves. In this poetic catalog where the Antarctic vehicles are shown together as a group, Noble is refashioning a lurking fictitious female presence out of the remnants of these vehicles that are part of Antarctica's hidden industrial landscape (plate 4). One wonders if this is also her way of paying homage to the invisible labor of the maintenance workers of Antarctica, both men and women (though the latter are much fewer in number) who have lived and worked there in recent years but who are rarely acknowledged in representations of Antarctica. More recently, many of the workers on the New Zealand and Australian bases have been Maori Indigenous women.¹⁴

To examine how gender determines her tenuous connection to place, Noble uses irony to parody the commercialization of Antarctica and its landscape by the tourist industry. Substitution and humor are central to Noble's postmodern strategy, representing Antarctica and contemporary tourism in immersive environments such as in IMAX theaters and theme park-type exhibitions both outside and within Antarctica. In works such as *The Barne Glacier* (2004; figure 1.1), Noble presents two dummies dressed in NSF standard-issue extreme-weather gear standing before a panoramic photograph of the Barne Glacier in an Antarctic-themed indoor entertainment center in New Zealand. This image references wellknown Heroic Age documents such as Herbert Ponting's photograph of the Barne Glacier (figure 1.2), where the vast scale of the glacier dominates to such an extent that the figure in the landscape is tiny by comparison, easily engulfed by the vast icy landscape. Her work also references Frank Hurley's Blizzard at Cape Denison (figure 1.3), in which silhouetted figures struggling against the wind and cold are superimposed on a windy Antarctic landscape to illustrate the terror associated with the powerful, forbidding climate. In this way, Noble references and comments on these iconic images of sublime wilderness from the heroic era that show the inhospitable space of the Antarctic as a male testing ground in which isolation and physical danger combine with overwhelming beauty. Noble's photographs use beauty and space in less conventional ways by reversing Ponting's use of composition. Her images, in contrast to his, are tightly framed and almost claustrophobic, robbing the setting of its epic character. While the photographic beauty of her images is central to their meaning, she is also asking us to rethink the way the sublime can be experienced, as she presents the area as junky, filled with work vehicles. In her image of the Barne Glacier, her use of color and light emphasizes the artificially simulated landscape environment, creating an uncanny commentary about the contradictions between the Antarctica visualized in Hurley's and Ponting's photographs and the kitsch aesthetic of sublime wilderness now produced in indoor settings such as the Antarctic Center in New Zealand, where she took this photo.

Noble's critique of the contemporary representations of early Antarctic exploration is taken even further in Antarctic Storm (2002; plate 5), where we see another image of tourists at the Antarctic Center in New Zealand "experiencing" extreme Antarctic weather inside a diorama. The glaciers and ice appear as crucial props in the scene, as does the very large thermometer in the foreground, which quickly makes us understand that the Antarctic experience of surviving the cold might last only twenty minutes. Whereas Hurley's and Ponting's images emphasize the heroic travails of members of different early expeditions to Antarctica, Noble's work hyperaestheticizes these simulations to create a more jarring understanding of Antarctica that disrupts the "experience" of this once-remote continent, which is now made available to everyone through dioramas, videos, and entertainment centers. Photographs such as Antarctic Storm turn the conventions of photographic beauty and weather back upon the audience, and in so doing they express how Antarctica's now-lost heroic sublime is consumed uncritically by tourists who can afford a ticket to an Antarctica theme-park entertainment center but not a trip to Antarctica. Though this photograph reorients audiences away from sublime remoteness to visceral proximity, it does not alert them to the immediacy of climate change or the radical difference in the weather now compared to that of the earlier epoch. Her photograph of a thermometer in one of these dioramas is especially ironic given how Antarctica itself is characterized in the context of climate change by physicist Adriana Gulisano of Argentina's National Antarctic Directorate as a "thermometer that shows how the world is changing." 15

In another image, *Photo Spot, Petermann Island, 11 Spectacular Days Antarctic Tour* (figure 1.4), we see tourists snapping photos of penguins just as they might in one of Noble's photographs of dioramas or science





Figure 1.1 • (top) Anne Noble, The Barne Glacier, photograph, 2004. The display in the photograph taken by the artist at the International Antarctic Centre, Christchurch, New Zealand, features two mannequins dressed in extreme weather gear standing before a panoramic photograph of the Barne Glacier in the Antarctic-themed indoor entertainment center. Courtesy of the artist.

Figure 1.2 • (bottom) Herbert

Ponting, Barne Glacier, photograph,
1911. Anton Omelchencko stands at
the end of the Barne Glacier on Ross
Island, in the Ross Dependency of
Antarctica, during Captain Robert
Falcon Scott's Terra Nova Expedition
to the Antarctic, December 2, 1911.
Source: Scott Polar Research Institute,
University of Cambridge.



Figure 1.3 • Frank Hurley, Blizzard at Cape Denison, carbon print, 1912. Hurley's silhouetted figures struggle against the wind and cold in the Antarctic landscape at the main base at Cape Denison. Courtesy of Mitchell Library, State Library of New South Wales, Australia.

centers around the world. As Noble puts it, the Antarctic Peninsula is "the perfect place to take people to recapture that image of Antarctica they already have."16 This attitude leads to marginalizing and ultimately erasing the materiality of Antarctica's extreme nature by turning it into a prop in their photographs. Consequently, tourists can see neither how ice sometimes seems to take on a willful life of its own, often destructive, nor the more terrifying material ways Antarctica reveals itself as a damaged landscape. Noble, who works as a conceptual artist and traditional photographer visiting the real place (Antarctica) as well as the simulacra (the Antarctic discovery centers around the world), gives reality and representation equal weight in her work to point out that tourists cannot always differentiate between them. The point for Noble is that what

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is sold in these contemporary tourist images is not global warming or the threat of pollution but the promise of Antarctica's mythical past, in which icebergs, glaciers, penguins, and white male heroes dominate and define the horizon and (white) man's endurance. Antarctica's significance to climate change is absented not just from commercial images in entertainment centers but also from actual cruises that are crafted to entertain tourists within secure and relaxed frameworks (luxury ships, Wi-Fi, zodiac tours, selfies, and drones) free from worry.¹⁷

One of the most compelling and well-known sets of photographs that Noble took in Antarctica is entitled *Whiteout*. As the title suggests, her photographic images capture the shifting effect of light during a whiteout, showing us a landscape that is entirely abstract. Such images

Figure 1.4 • Anne Noble, Photo Spot, Petermann Island, 11 Spectacular Days Antarctic Tour, photograph, 2008. Courtesy of the artist.

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remind us that in the postheroic age, although the region is increasingly accessible, the anxieties about managing the forbidden climate remain but are less predictable because Antarctica is one of the most rapidly warming parts of the world.

Attachments in the Anthropocene: The Microscopic Pteropods in Judit Hersko's *From the Pages of the Unknown Explorer*

Judit Hersko has been working on Antarctica since 2008, when she first traveled there with the US NSF Antarctic Artists and Writers Program. She is an installation artist and professor at California State University, San Marcos, who works at the intersection of art and science. Like Noble, she searches for new ways to tell stories about women's historical absence from Antarctica; she connects this to the invisibility of the significant labor and herculean role of microorganisms in the Antarctic oceans. ¹⁸ In this way, her work brings together the nonhuman and the feminist question of the scale of the personal.

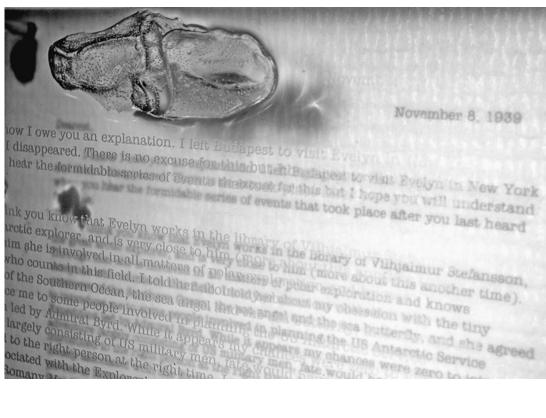
For her narrative, Hersko draws on a rich artistic and literary tradition, including Ursula K. Le Guin's short story "Sur," a utopian feminist fictional account of an exploration in which a party of South American women reaches the South Pole in 1909, two years before the official arrival of the real exploration teams of Roald Amundsen and Robert Falcon Scott. Hersko's work is influenced by the women characters in Le Guin's fantasy, who do not feel compelled to leave any record, or proof, of their presence at the South Pole, as evidenced by one of the character's activity of fashioning sculptures from ice. Like the disappearing ice sculptures in Le Guin's short story, Hersko's artwork and narrative can be preserved only as objects doomed to disappear. She achieves this by emphasizing the ephemeral as well as the minute in contrast to the concrete forms and heroic scale of male exploration narratives and images.

Pages from the Book of the Unknown Explorer (2008–2017) is both a narrative essay and a performative lecture about (and by) a fictional Jewish female explorer, photographer, and Antarctic biologist from the 1930s named Anna Schwartz, who passes as a man to participate in Richard E. Byrd's 1939–1942 United States Antarctic Expedition. In Hersko's narrative, Anna is the only woman to work before the 1960s as a biologist and photographer in Antarctica. In a series of transparent silicone objects that include Portrait of Anna Schwartz and Anna Schwartz: Letter Home, 1939 (in which Anna writes to her family to explain her sudden disappearance to Antarctica), Hersko has cast sculptural representations of pelagic snails (see



Figure 1.5 • (top) Judit
Hersko, Portrait of Anna
Schwartz, 2008. A silicone portrait of the fictional woman Antarctic explorer, Anna Schwartz, that includes a cast sculptural representation of pelagic snails.
Courtesy of the artist.

Figure 1.6 • (bottom) Judit
Hersko, Anna Schwartz: Letter
Home, 1939, silicone sculpture,
2008. The sculptural image of
the fictional Antarctic woman
explorer's letter explaining her
sudden disappearance to Antarctica includes a cast sculptural
representation of pelagic snails.
Courtesy of the artist.



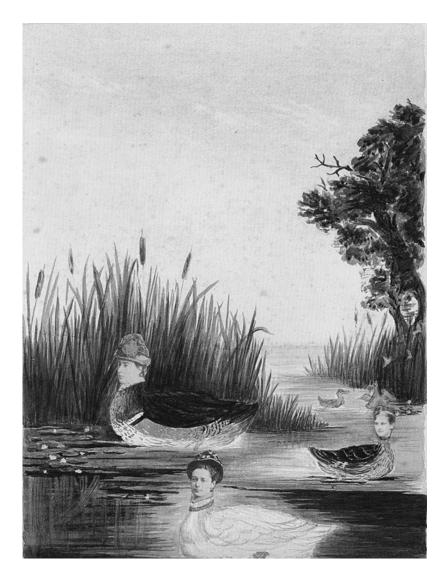


Figure 1.7 •
Kate Edith Gough,
untitled collage,
late 1870s. Protosurrealist collage by
a Victorian woman
who invented a
method of photo
collage later adopted by avant-garde
artists. Source:
Gough Album.

figures 1.5 and 1.6). These pieces underscore Anna's surprising obsession with studying pteropods—microscopic planktonic creatures that motivated her expedition and are so integral to her trip that they are incorporated into her portrait and letter. These sculptures that meld representations of humans with nonhuman microscopic creatures allow us to imagine a world in which the divisions between the human and the nonhuman are transcended.

Any suggestion of hope is undercut by the very choice of the date of Anna's trip to Antarctica: 1939, when Adolf Hitler invaded Poland. In this way, the presence of Anna, of Jewish Hungarian descent, connects the atrocities of eastern Europe, where Jews were sent to concentration camps and made to disappear, with the apocalyptic devastation of the accelerated climate crisis today.¹⁹

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Pages from the Book of the Unknown Explorer is also inspired by the proto-surrealist albums of Victorian women such as Kate Edith Gough, who invented a method of photo collage later adopted by avant-garde



artists (figure 1.7).20 Hersko borrows this aesthetic style to visually place people in circumstances they could not ordinarily inhabit. To reveal how visually out of place her fictional explorer, photographer, and Antarctic biologist from the 1930s is, Hersko reworks famous images related to Heroic Age photography to create her own compelling photo collages that illustrate women's exclusion from the masculine history of exploration. She places Anna in existing photographs of Scott's failed Antarctic expedition. One is a 1912 photograph, taken by Henry Robertson Bowers, of Captain Scott and his companions by Amundsen's tent at the South Pole, where Hersko adds a young Anna in the foreground, in place of Edgar Evans, who stands there in the original photograph (figure 1.8). In another photo collage, Hersko places Anna in a photograph by Frank Hurley depicting Ernest Shackleton's ship En-

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Figure 1.8 • Judit Hersko, Anna Schwartz: With Scott at the South Pole, 2010. A collage made from Henry Robertson Bowers's photograph of Captain Scott and his companions beside Amundsen's tent at the South Pole. Hersko's fictional explorer, Anna, replaces expedition member Edgar Evans in the foreground. Courtesy of the artist.



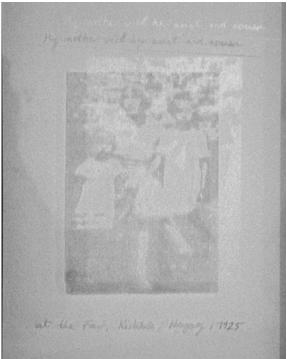


Figure 1.9 • Judit Hersko, Anna Schwartz: Self-Portrait with Diatoms, collage, 2010. The artist places the fictional explorer Anna in positive and negative photographs (by Frank Hurley, 1915) depicting Ernest Shackleton's ship Endurance trapped in the ice of the Weddell Sea. Courtesy of the artist.

durance trapped in the ice of the Weddell Sea (1915; figure 1.9).

Anna's presence in well-known Antarctic expeditions such as the failed Scott expedition creates an uncanny effect. This uncanniness is attached not just to the loss inherent in the Scott expedition but to the connection between that loss and the loss of Anna's own family members in the Holocaust. In a sculpture created for the exhibit and titled *Anna's Cabinet* (inspired by the objects from Scott's expedition that were left behind in the Terra Nova hut), Hersko makes a direct reference





to this (figure 1.10). The diaphanous objects include the candy jar of Anna's favorite aunt, who, Hersko informs us, died in the Holocaust.

Hersko also uses the narrative about Anna, including Anna's and her daughter's research into the pteropods that are now threatened with extinction, to suggest comparisons between the two genocides. While Schwartz's male counterparts are engaged in heroic conquest of the landscape, she is there to find and photograph minute pelagic organisms. Through her story and scientific documentation, Hersko highlights what otherwise is impossible to see—two transparent planktonic snails: the Clione antarctica (sea angel) and the microscopic Limacina helicina (sea butterfly), whose existence is currently threatened by climate change (plate 6). Moving between the historical narrative of the past and our present, Hersko makes clear that these pelagic snails were plentiful in the days of her "unknown" woman explorer, but now, owing

Figure 1.10 • Judit Hersko, Anna's Cabinet (details), sculpture, 2011. The featured objects include the candy jar of Anna's favorite aunt, who died in the Holocaust. Courtesy of the artist.

to ocean acidification, the shells of the *Limacina helicina* are dissolving, a key indicator of catastrophic climate change. Her highly aestheticized and sensuous photographic images of these elusive creatures introduce us to these pteropods that are unfamiliar and invisible to us. Her work addresses the importance of making these fluid and fragile creatures visible to further our understanding of how their decline is entangled with the violent changes in our environment that are connected to politics and that threaten the survival of the ocean's ecosystem.

The danger to the pteropods that interests Hersko is less spectacular and less familiar to the public than dramatic popular images of the contemporary sublime and of apocalyptic climate change, represented most iconically by images of polar bears in the Arctic and of penguins, dolphins, and sperm whales in Antarctica. Unlike these poster children of climate change, Hersko's creatures are microscopic, and her narrative draws our attention to the contrast between the size of these pteropods and their herculean role in the oceanic food chain. Owing to their special sensitivity to ocean acidification, they are also widely considered the canaries in the coal mine when it comes to the state of the oceans in the era of climate change.

As Hersko's art explores representations of these microscopic creatures at a moment when they are disappearing, she creates a melancholic aesthetic that engages with photographic materials from the past but gives them a new value that is different from when they were first made. The melancholia of her work asks us to think of these planktonic snails as having ceased to exist while we are presented with a fictional narrative and dreamlike images from the first time they were documented in the 1930s by the fictional biologist Anna Schwartz. As her work aesthetically activates these lost images, they begin to signify both moments in time, almost simultaneously. The transparent and ephemeral portrait of the "unknown explorer" emphasizes the contingent nature of Anna's heroism (figure 1.5). We never learn definitively whether the unknown explorer's reasons for her escape to the Antarctic are connected to the Holocaust, but the evocation of this possibility seems to foreshadow further catastrophe for her pteropods. Significantly, Hersko's reference to this history is tempered by her own personal relationship to this genocide: her own parents survived Nazi persecution. 21

Hersko's narrative and archive are symbolic of alternative histories and possibilities since they imagine what Jewish women's contribution to science, polar exploration, and cinematic history might have been in Antarctica's early history if women's relationship to Antarctica were not merely speculative during Anna Schwartz's era. For this reason, Hersko's fictional narrative insists that one must take into account the imaginative histories that run alongside real polar histories. Her archive of images on Antarctica includes projected cinematic images, etched photographic images on glass and silicone, and photomontages that deliberately draw on photographic tropes from the period to give the pictures a "reality effect." At the same time, her work disorients us since she puts people and organisms in an order and a location they would not normally inhabit, such as the unlikely inclusion of Anna and her study of pteropods in Antarctica at the time when Jews in Europe were fleeing the Nazis. In other words, by shifting the history of Antarctic exploration only slightly, Hersko alters our perception of the present and helps us understand how the rhetoric of both Antarctic exploration narratives and polar climate change connects to other intersectional human extinctions and extends to the nonhuman.

Hersko's work asks, How can we attune ourselves to the new ecological conditions that both humans and nonhumans face in Antarctica outside of the dramatic images of the sublime and apocalyptic climate change produced by popular culture and still bear witness to the transformation of the landscape caused by extreme climate change? Her work points to how the imagination of heroic polar aesthetics limits our ability to perceive an erasure in the landscape and oceanscape by limiting our perception to the obviously visible, such as penguins and whales. Our short-term culture does not enable us to notice and represent what is happening around us, especially when changes occur gradually and almost imperceptibly over time. Consequently, her work engages her subject in new ways by searching for alternative narratives and aesthetics and presenting a different sensibility, aesthetics, and subjectivity from what we expect.

Connie Samaras's Futures in Extreme Environments: Toward a New Aesthetics of Daily Life and Survival

Like Noble and Hersko, Connie Samaras approaches Antarctica from a deliberately antiheroic perspective through a focus on what it means to live in such an inhospitable environment. Samaras is a photographer, artist, and emeritus professor at the University of California, Irvine. She has been working on Antarctica and the South Pole since 2004–2005, when she first traveled to Antarctica with the US NSF Antarctic Artists and Writers Program. ²² As an artist, she is drawn to communities living in geographically extreme environments — Antarctica, Dubai, Las Vegas, and the US Southwest desert. Situated in the desert or on ice, these places

almost appear like a tabula rasa where various urban and community experiments are carried out—in both the past and the present.

Samaras's 2005 Antarctica project, entitled *V.A.L.I.S.* (vast active living intelligence system), consists of photographs and two videos she took while on an artist's residency at the Amundsen-Scott South Pole Station, one of three US Antarctic military bases. Samaras names her work after Philip K. Dick's semiautobiographical *VALIS* trilogy, based on his claim to have had paranormal experiences.²³ Dick's *VALIS* trilogy is a study of the invasion of technology from the future into the present, technology established by supernatural intelligence and breaking into the life of an ordinary, present-day man who is having a nervous breakdown. As Samaras indicates in her article "America Dreams," her photographic work, like Dick's novel, highlights some of the ways that scientific and technological rationality combats but fails to contain the forces of superstition and irrationality.

Samaras herself uses the phrase *built environment* rather than just *environment*. Adding the word *built* foregrounds the architectural and technological transformations of the environments that we tend to think of as our natural spaces. In her work at the South Pole station, Samaras rethinks a landscape that is on the verge of vanishing owing to anthropogenic pollution, whose built environment (as represented by the Buckminster Fuller geodesic dome at the South Pole) functions as a representation of Antarctica's utopian possibilities. A common idea in the 1950s was to have Antarctic cities enclosed under such glass domes, which would have made colonization of this continent possible. Samaras's photographs of a sinking Buckminster Fuller dome are metaphoric since they suggest an end to Antarctica's long history of being separate from the world and of being a place of both scientific and architectural uniqueness.

Fantasy as evoked by science fiction is key to understanding Samaras's work in these geographically extreme regions, as it is for Hersko. For example, Samaras evokes how alien the landscape is in Antarctica when she foregrounds in photographs of the Buckminster Fuller dome in *Dome and Tunnels* (plate 7) and *Buried Fifties Station* how the uncontrollable ice swallows up buildings and signs of life. Like the landscape, the photographed interiors are empty and deserted. Her attention to these alien-looking buildings, combined with her emphasis on the undomestic interiors and exteriors, as in the photograph taken underneath the new Amundsen-Scott South Pole Station when it was under construction (figure 1.11), has an uncanniness that is intermixed with ordinariness, creating a dissonance with the discourse of Antarctica as, on the one hand, an untouched sublime landscape and, on the other, a scientific utopia of



Figure 1.11 • Connie Samaras, *Underneath Amundsen-Scott Station*, from the series *V.A.L.I.S.*,
digital print, 2005. This photograph of the anonymous industrial building located in the US base at the South
Pole is part of a triptych. Courtesy of the artist.

the future. Neither characterization fits the Antarctica represented in her art. All of Samaras's images are found rather than staged, except for a sole photograph of a strange empty domestic interior inside the Buckminster Fuller dome at the South Pole, showing two rows of red sleeping quarters facing each other that she altered slightly by flipping the negative, making the sleeping quarters mirror each other. Although the photograph is only slightly changed, the interior looks, in the mind of the viewer, like a series of meat lockers, cells for monks, or, worse, a morgue (plate 8). The bright red sealed bunk spaces and the dome ceiling together are more easily imagined as occupied by a strange, organized cult in a science fiction film than as a real place where actual scientists live and work. Her slight digital manipulation of this space is done deliberately to make us wonder about social relations and subjectivity itself, whether male or female, in such a strange and unearthly interior.

In her Antarctic photographs, Samaras's aesthetic strategy combines the everyday with the uncanny to visualize settlements in extreme geographic regions in a manner that on one level evokes the rest of the world's major cities in terms of its built environment but at the same time remains incongruous and outside of nature because of its seeming artificiality. Her approach to the ordinary and every day is different from Noble's, since she injects something more unsettling and unearthly into otherwise neutral and objective images of Antarctica's built environment, with its mostly anonymous industrial structures, as in her photograph *Underneath Amundsen-Scott Station*.

Samaras understands these sites not as remote spaces that demand to be mapped but rather as spaces closely connected to globalized economic and geopolitical forces. Her work attempts to position Antarctica symbolically in the neoliberal order of the transposable postmodern architecture of new megacities. As one of its consequences, neoliberal capital imposes a certain degree of uniformity on all cities. Samaras herself has written on neoliberalism and the reasons these images of Antarctica belong in a larger series that includes photographs of the built environments in Dubai, Abu Dhabi, Los Angeles, and Las Vegas, among other sites.²⁴ Notably, this series features neoliberal built environments in desert environments that humans could otherwise inhabit only nomadically and not settle permanently—for lack of sustainable resourcing. The ecological hubris of globalizing capitalism stands out in these photos. Despite Antarctica's extreme climate, its built environment nevertheless exemplifies a relentless expanding capitalist logic, as evidenced by Samaras's photograph of the submerged Buckminster Fuller dome that makes it appear as if it has

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been abandoned or left to deteriorate—not because it cannot be used meaningfully, but because it cannot be used profitably.

Like Hersko and Noble, Samaras deliberately plays with the variable space between documentary and fiction. Her photographs represent a shift from the era of images of the polar regions as representative of the sublime to the present, in which the Antarctic is still visualized as a place of overwhelming beauty and terror but this time as a result of anthropogenic climate change and neoliberalism. Moreover, in Samaras's images the Antarctic is no longer seen as simply an unearthly place but also as a strangely fragile site, one where the ice itself becomes an important entity. The built environment seems vulnerable and unstable, as in her work Dome and Tunnels (plate 7), where the shifting pack ice will cover the Buckminster Fuller dome, which is already slowly sinking in the permafrost, or in her South Pole Antennae Field, an image of an empty Antarctic landscape that dwarfs tiny radio antennae standing as the only sign of human habitation (figure 1.12). Samaras's work is also not about heroic masculinity but about something much more displaced, related to both her positionality as a woman and the placelessness of the sites that she photographs. Her detailed focus on the everyday brings us back to our senses and, in its focus on Antarctic architecture (both new and old), counters romanticism and fantasies.

The two videos that Samaras made in Antarctica also move us away from narratives that erase or ignore the suffering, anxiety, and sense of vulnerability and entrapment that is part of negotiating this extreme environment. The first, titled *Untitled* (Ross Ice Shelf, Antarctica), is a single unedited static video, capturing a Weddell seal (average adult weight four hundred pounds) noisily coming up for air through a hole in the ice (figure 1.13). The other, Sleeping Worker in Cargo Plane, shows a male station hand asleep in the cargo bay of a transport plane traveling to Antarctica (figure 1.14). The seal jumps out at us at intervals and startles the viewer as she breaks through the icy surface just to breathe, reminding us of the effort it takes for all mammals, including humans, to breathe. The man on the transport plane is quiet; the only noise is the sound of the airplane's engine. However, as he sleeps and breathes quietly, he is vulnerable. This image in particular is meant to remind us of how dependent people, who are mostly absent from Samaras's other photographs, are on machines and the built environment simply to live in this extreme environment. While the videos evoke the dependence of human beings on their machines and buildings, her clinical images of this anonymous built environment make us wonder what kinds of human beings could inhabit this secluded, somewhat alien, nondomestic world. You might say that her video, with the

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mummy-like man sleeping in suspended animation, captures the ghosts moving through these spaces, even though this peaceful image seems to be the antithesis of the hardship and suffering that provided a heroic dimension to polar exploration in an earlier age. Samaras reminds us that in the postheroic age, while the region is increasingly accessible, the same anxieties about managing the forbidding climate remain.

The New Polar Gothic in Joyce Campbell's Last Light

Joyce Campbell is a well-known interdisciplinary artist working in photography, film, video, and sculpture who utilizes anachronistic photographic techniques that date back to the beginnings of photography in the nineteenth and early twentieth centuries to examine the relationships between natural and cultural systems. She lives and works in Auckland, New Zealand, and Los Angeles, California, and is a senior lecturer at the University of Auckland's Elam School of the Arts. Throughout her artistic practice, she uses outdated technologies to experiment with various media and to rethink the role of art in grappling with issues of the Anthropocene. Campbell describes her work on Antarctica as "driven by my own burgeoning horror at the effects of climate change on the earth's polar ice caps." 25

Her artwork on Antarctica dates from 2006, when she traveled to the Ross Sea region of Antarctica for two weeks with the Artists to Antarctica program sponsored by Creative New Zealand and Antarctica New Zealand. In the work she did during that period, titled *Last Light*—which consists of a series of vertical photographic scrolls, panoramic photographic murals, and five-by-seven-inch daguerreotypes and digital video loops—there is a lingering fascination with rethinking the tradition of the gothic sublime to articulate a shift in the human relationship to landscape in the context of the climate crisis (see figures 1.15 and plate 9). As she puts it, "My photographs borrow their gothic sublime aesthetic from nineteenth century romantic landscape painting and do so to point out a troubling shift in the human relationship to landscape. Edmund Burke regarded sublime nature as awesome, overwhelming, humbling and simultaneously invigorating in its offer of a mortality glimpsed but not actualized. The 21st century viewer has an altogether more disturbing relationship to the mountain, the thrashing ocean, the crevasse and the glacier. Now we look at Nature askance and with guilt, aware that its grandeur has become somewhat sullied by our modernity and privilege."26

One of the romantic paintings that she draws from is Caspar David Friedrich's 1823-1824 painting titled The Sea of Ice (plate 10), which conveys a



subjective, emotional response to the extreme nature of the Arctic; the painting almost appears apocalyptic in its depiction of a spectacular shipwreck in the middle of a broken ice sheet. With regard to the Friedrich painting, Campbell contemplates not the catastrophic aspect of extreme nature but the new variation in which the natural world has been not only rendered and contained but also irrevocably altered by anthropogenic climate change and neoliberal economics. In so doing her work erases the sense of distance and safety the older sublime afforded as we now understand that the climate crisis is not strictly a matter of sea level and coastlines but is an all-enveloping crisis that will spare no place and leave no life unchanged. However, that does not mean that this new polar gothic in Campbell's photographs of icescapes in Antarctica using the

Figure 1.12 • Connie
Samaras, South Pole
Antennae Field, digital print,
2005. Samaras's photograph captures a tiny radio
antennae, dwarfed by an
empty Antarctic landscape,
that stands as the only sign
of human habitation.
Courtesy of the artist.





Figure 1.13 • (*top*) Connie Samaras, video still from *Untitled* (Ross Ice Shelf, Antarctica), 2005. The image captures a Weddell seal coming up for air through a hole in the ice. Courtesy of the artist.

Figure 1.14 • (bottom) Connie Samaras, Sleeping Worker in Cargo Plane, inkjet print, 2005. Photograph of a station hand asleep in the cargo bay of a transport plane traveling to Antarctica. Courtesy of the artist.

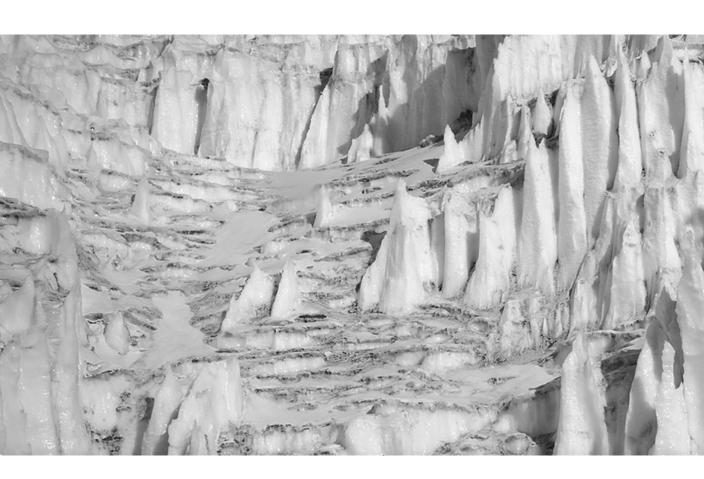




Figure 1.15 • Joyce Campbell, *Lower Wright Glacier*, from the series *Last Light*, photograph (silver gelatin negative), 2006. The photograph depicts the snow fissures, flaws, and melting of the glacier. Courtesy of the artist.

daguerreotype, an obsolete photographic process invented in 1839 (employing an iodine-sensitized silvered plate and mercury vapor), might not at times also display grandiosity and the spectacular destructiveness of an earlier sublime. But what has fundamentally changed in her work documenting this new terror is that the environmental instability provoked by these glaciers' accelerated melting is no longer viewed by the observer as a separate and remote phenomenon.

The source of dread in the twenty-first century is not the polar regions and the invigorating and overwhelming scale of this wild landscape but viz very disappearance owing to industrial pollution and the threat its vanishing poses to a fossil fuel-based society. Campbell draws attention to this more disturbing relation in her embodied and immersive visual approach to the signs of ice coming apart in the Ross Sea region of Antarctica viz her photographs and multiple-exposure photographic murals that reconstruct the contorted face of a glacier by drawing attention to the fissures, flaws, and even an ice ghoul (plate 9) with deep eye sockets and a screaming mouth. Campbell remarked that in her daguerreotype Ice Ghoul #1 (2006) she was pleased to find by chance "something in the landscape that would express its wild, prehuman savagery ... an embodiment of the furious ice."27 In a time of digitized mediation, she deliberately uses a nineteenth-century technology—the daguerreotype—to offer analog proof of place in order to present a subjective response from the site itself to the horror of the climate crisis. For her, the intervention of this new polar gothic into the seemingly tame and managed modern Antarctica of science revives an earlier era's close relation to terror. But, unlike the traditional sublime, her image also conveys the rage and dark humor of our current moment and is meant to be a wake-up call from climate apathy.

Rethinking Gender, Aesthetics, and Politics in the Anthropocene

If Hersko brings us back to the earlier days of polar explorers and the heroic era by inserting her unknown Jewish woman explorer into her fictionalized reenactment of the Byrd expedition, Samaras pulls us away, bringing us into a science-fiction fantasy space. By refusing the aesthetics of the sublime from the Heroic Age, Samaras highlights the unreality, as well as the drab ordinariness, of this landscape and built environment. By virtue of her photographs that situate banal architecture in a sublime landscape, she draws our attention to the contrast between the everyday and the heroic. This is also an important concern for Noble's photographs, in which she provides a more elaborate critique of the way heroic mascu-

linist routines and stances from the Heroic Age continue in the postheroic era of anthropogenic climate change. All the artists remind us that we are living through a devastating and unprecedented environmental crisis, but Campbell's art is the most forceful in bringing in the polar gothic to capture the current feeling of rage, dark humor, and horror (plate 9).

All four artists are telling stories about an absent subjectivity. Hersko uses this to make a statement about the invisibility of women in polar narratives and the way the Anthropocene has altered the terms and parameters of perception itself, forcing us to reorganize our knowledge and perceptions to register the world of microscopic matter. This includes questioning the popular image of the Antarctic as an unrepresentable and unspoiled tabula rasa populated only by penguins, dolphins, and sperm whales (promoted by the tourist industry as a backdrop) and also its representation as a neutral space devoted only to peace and a disinterested science (promoted and instituted by nation-states). Noble's photographs also remind us that the past is not dead as she records how Antarctica continues to be defined as an allmale space of bonding. Campbell literally conjures the ghosts of the past by drawing on the polar gothic using daguerreotypes to revive the earlier era's relation to terror. In *Ice Ghoul #1* she records an alien anthropogenic icescape devoid of humans and wildlife; but at the same time she captures the current feeling of anger about climate change by literally conjuring a ghost—a face with a screaming mouth carved by wind in the ice of a glacier—in order to shock a change in capitalist logic while there may still be time.

All four artists' viewpoints suggest some important new directions in contemporary art. Their work reminds us how feminist intersectional perspectives make us think critically about a landscape that has been romanticized, idealized, and rendered epic. The viewer's aesthetic experience of the work of these artists is not just about landscape, the masculinist heroic subjectivity, but also about subjectivity itself, since their narratives are about rethinking a landscape that is threatened as much by human actions as by the agency of geophysical processes. Samaras's work is explicit about the fundamentally anthropogenic character of the Antarctic's built environment in a way that troubles the assumptions of the Antarctic Treaty System and its technocractic style of governance, which downplays climate change in the way it defines human activity as merely transient and thus inconsequential. One can only imagine what could happen if these four artists, or other artists in their wake, brought this transformed aesthetic sensibility to other contemporary sites undergoing environmental degradation to examine how—often—history, aesthetics, and climate politics intersect and collide in the spaces we do not see or know.

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RECLAIMING
THE ARCTIC
THROUGH
FEMINIST AND
BLACK AESTHETIC
PERSPECTIVES

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What does it mean for a woman artist to follow the trails of so-called heroes, fearless male explorers in the service of their nation and backed by supportive men's clubs? Would it be possible to maintain a critical distance and reflect on these issues while being surrounded by the Arctic's beautiful and extraordinary landscape?

Stefanie Hessler, "Katja Aglert: Winter Event-Antifreeze," 2014

To my mind, there is this idea of a "contaminated sublime." Working with beautiful pictorial images, and at the same time trying to portray a kind of trauma within these types of so-called beautiful scenes, that perhaps unsettles the idea of the pleasure that we derive in beauty; that it can have a more disturbing resonance.

Isaac Julien, "A Contaminated Sublime: An Interview with Isaac Julien," 2012

In this chapter I discuss Isaac Julien's *True North* (2004) and Katja Aglert's *Winter Event*—*Antifreeze* (2009–2018). Initially, I was interested in the way these artists' twenty-first-century artistic practices intersect with and depart from themes addressed in my first book, *Gender on Ice: American Ideologies of Polar Expeditions*, since both artists were influenced by my earlier writing. Here I add the following questions: What new stories and works of art are being produced in more recent attempts to reintroduce subjectivities that were not allowed during the Heroic Age? And how does critical polar aesthetics contribute to revisualizing an Arctic that continues

to be seen in a colonialist frame as pristine and empty in the age of accelerated climate change? The main topic is the exploration of white male failure both in the past, during the heroic era when polar explorers fabricated the events of their expeditions to suit the particular flag-planting heroism and imperial entitlement of their day, and in the present, when conquest of the North Pole has resulted not in taming nature but in unwittingly claiming ownership of an earth system beyond our ability to control. Clearly, polar exploration in the late nineteenth and early twentieth centuries remains integral to the social construction of a distinctive nexus of white manhood and nationalism, reified as a particular form of white masculinity as dominating over extreme nature.² In the early twentieth century, the North and South Poles represented one of the few remaining masculine testing grounds where adventure and hardship could still be faced. As I wrote, "As all-male activities, the explorations symbolically enacted the men's own battle to become men. The difficulty of life in desolate and freezing regions provided the ideal mythic site where men could show themselves as heroes capable of superhuman feats.... Such claims were hardly likely to accrue to women living within the bounded spaces of everyday life, marriage and the workplace."3

At that historical moment, women and people of color had no protagonist role in nation and culture building and the advance of scientific knowledge. The Greenland Arctic Inuit men and unpaid women helpers, companions, and guides were erased from their roles as travelers and explorers by the historical preference for heroic masculinist narratives. So was Matthew Henson, the Black American explorer who had a central role in an expedition accompanying Robert Peary on his trek to the North Pole in 1909. The official public discourse allowed Henson to participate in the expedition but not to receive equal credit for his central place in this national story as it was told by Peary and by institutions such as the National Geographic Society.

Over one hundred years later, as climate change melts the ice, we are seeing a reemergence of interest in polar narratives marketing an imperial masculinity that consistently continues to deny the failures that were critiqued in *Gender on Ice*. This surge of interest since the late 1990s is exemplified by recent reprintings of original accounts, new biographies of nineteenth- and early twentieth-century explorers, and even reality TV simulated reenactments of their journeys. The polar regions remain a perfect backdrop for a heroic masculinity that seems to endure. "The heroes are still arriving. But today they do not leave the kind of footprints that once indexed heroic geography," as Elena Glasberg writes. 6

In this chapter I develop further my analysis of masculinist, nationalist, and racial politics from *Gender on Ice* while setting out in a new direction to include the study of environmental art in the age of the Anthropocene. I examine how both Aglert and Julien use a variety of media and aesthetic techniques to unsettle older colonial scientific representations and to undercut the authority of the Heroic Age and its colonialist and nationalist masculinist history as the major mode of engagement in the Arctic to this day. At the same time, the chapter engages with contemporary environmental questions connected to the Anthropocene and the Capitalocene, as well as with the persistence of the narrative of white male failure and purposeful inequalities at a moment when the climate crisis in the Arctic is accelerating, matching what used to be considered worst-case scenarios, while governments, nation-states, and corporations fail to take action. While Inuit communities continue to live within the limits imposed by Arctic environments, European and other colonizers remain determined to colonize, exploit, and settle lands and seas, often with disastrous results, whether industrial pollution or forced resettlement of northern communities in the name of sovereignty projects, as I discuss in chapter 3.

When Ice Is Just Ice: Gender and the Everyday in the Arctic Work of Katja Aglert

Katja Aglert is a well-known Swedish feminist artist and professor whose piece *Winter Event—Antifreeze* started with an artistic residency research trip in 2009 to Svalbard, a Norwegian archipelago in the Arctic Ocean. The ongoing project that began in 2009 was realized as a complex conceptual artwork that has been exhibited as a solo exhibition at the art and performance space Weld in Stockholm, Sweden (2012); Marabouparken in Stockholm (2014); the MAC Museum of Contemporary Art in Santiago, Chile (2015); FLORA ars+natura in Bogotá, Colombia (2015); and Polarmuseet in Tromsø, Norway (2017-2018).7 Her work develops from, and is influenced by, feminist artists such as Andrea Fraser, Renée Green, and Martha Rosler in the way her artistic research similarly transforms object-oriented artwork formats into discourse-oriented exhibitions that include performance, photography, and video. Aglert's artistic research focuses on the idea of the North Pole as a perfect backdrop for enduring myths of heroic masculinity and success. Her work addresses the continued fixation on the grand all-white male heroic tradition of modern polar exploration culture situated in the Heroic Age (1897–1922); the Arctic's popular image as a sublime wilderness or unspoiled tabula rasa outside

of history; and, finally, its more recent visualization as the ground zero of catastrophic climate change.

In *Gender on Ice*, I asked somewhat ironically what types of white men the Arctic and Antarctic made, and I analyzed how the quest of reaching the North Pole and the South Pole functioned as a male testing ground, where national shame was attached to losing and thus failing to demonstrate one's manhood. Much of the creative challenge of Aglert's work is her examination of gender, in particular, her exploration of how we should see the region given that the explorer mythology continues to play a role in accounts of the modern Arctic.⁸

In calling viewers' attention to the recuperation and rehabilitation today of a historical colonial white masculinity in the Arctic, her video Winter Event—Antifreeze (2009) addresses white male polar heroism not as a reason for admiration or esteem but as a questionable act, especially when failure is deliberately hidden. The denial of failure at each pole by the British and the Americans establishes continuity between these two national events. In Gender on Ice, I focus on the tragedy of the failed British Terra Nova expedition to the South Pole, led by Robert Falcon Scott, to provide important contrasts to and parallels with the US claim of reaching the geographic North Pole. I explain how Robert Peary's very American scientific enterprise, which stressed tangible results, contrasts with Scott's account, which followed British literary and military traditions that valorized the inner qualities of tragic self-sacrifice rather than performance and achievement. Drawing on the letters and diaries of members of Scott's expedition who were denied power by their social position, I examine how Antarctica became a discursive space where a nationalist myth was established through Scott's letters as a means of mythologizing an ideology of British white masculinity that paradoxically ignores references to frozen bodies or to death in Antarctica. 9 As I wrote in Gender on Ice, "Antarctica is textualized; it becomes a discursive space in which intrepid British naval officers can prove that they can still die as gentlemen. Never deviating from their routine, they face death as they did life—unruffled, certain of themselves, and dignified."10

Besides being a site for polar exploration culture, the Arctic was also used periodically as a base for whaling and walrus trapping starting in the eighteenth century. By the beginning of the twentieth century, however, interest shifted to include other extraction industries such as fossil fuels. ¹¹ In imagining a modern Arctic, Aglert's artwork brings in unexpected images of an industrial coal mining that do not conform to the Arctic's otherwise popular image as a space of strict wilderness. These images include

commercial activities on the islands, using photographs of a mining town from Barentsburg (1920) and of Camp Mansfield, located on Blomstrand Island, which was briefly the setting, at the beginning of the twentieth century, for a factory where marble was processed; due to the effects of frost weathering, the marble disintegrated and was useless, an outcome Aglert presents as yet another heroic failure (figure 2.1).

In the exhibition, the cover of the book *Gender on Ice* is set against photographs of such sites (figures 2.2 and 2.4). The book's cover incorporates the artwork of the feminist and postcolonial Australian artist Narelle Jubelin. The image is a close-up in petit point of what freezing to death in such extreme temperatures does to a polar explorer's face, which is reminiscent of a 1914 photograph of an ice mask taken by Frank Hurley in Antarctica (figure 2.3). Jubelin, the artist whose image is on the cover of *Gender on* Ice, reworks that disturbing image and places hers within a bombastic gilt frame to explicitly underline the book's overriding thesis: how the traumatic experience of failure in both the British and the American expeditions was reworked to turn the official version of events into something that was at once psychically and physically undisturbing and worthy of public reverence. The book critiques how failure (or even possible fraud in the case of Peary) can be recuperated as a heroic example of character, scientific achievement, or even honor. In the context of Aglert's exhibition, the Gender on Ice book cover is set against other failures in the region, including photographs of industry that was short-lived and abandoned abruptly.

Within the same group of images (figure 2.4), Aglert is also trying to expand the notion of Svalbard as a heritage site and think about preservation when the ice is in constant transition, frozen but already moving. Along with including the "Code of Conduct for Arctic tourists" formulated by the Svalbard Environmental Protection Act of 2001, she also brings together in her work both industrial ruins on the Arctic islands and wilderness. For her, ice itself is regarded as part of a global heritage that is crucial both for future survival and for the growing tourist industry in Svalbard. 12 But for Aglert, protecting the ruins more than nature would erase the anthropogenic, natural-cultural entangled histories of this place. Thus, Aglert suggests ironically that layers of ice provide stability to both nature and the ruins. In other words, she highlights how frozen nature is part of heritage but can also act as a resource and even a commodity. Moreover, she highlights how ice is alive and never static and in some cases has created all kinds of problems for Svalbard, both as a territory for conservation and as the home of the Svalbard Global Seed Vault, which was built to maintain the earth's genetic diversity in the face of future calami-



Figure 2.1 • Katja Aglert, untitled photograph of the industrial remains of a factory in the Arctic, at Camp Mansfield, Blomstrand Island, Svalbard, Norway, from the artist's book *Winter Event—Antifreeze*, 2014. Courtesy of the artist.





Figure 2.2 • (top) Narelle Jubelin, untitled single-thread petit point sculpture, 1990. Jubelin's work (shown here as part of Brad Norr's book cover design) illustrates what freezing to death in extreme temperatures could do to a polar explorer's face. Source: Bloom, *Gender on Ice*, 1993.

Figure 2.3 • (bottom) Frank Hurley,
The Meteorologist, Cecil Thomas
Madigan, photograph, ca. 1911–1914.
Hurley's image of an ice mask was
captured in Antarctica. Courtesy of
Mitchell Library, State Library of New
South Wales.

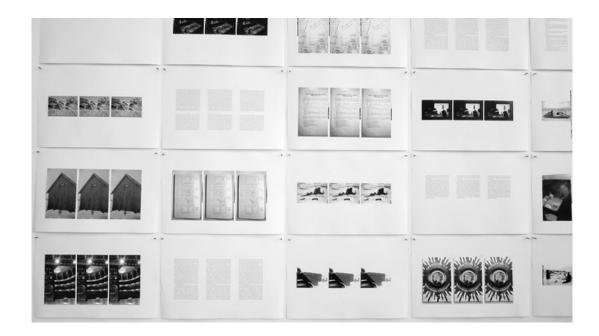


Figure 2.4 • Katja Aglert and contributors, installation view of pages from their 2009 book of the same name as the exhibition Winter Event—Antifreeze, curated by Stefanie Hessler at the Museum of Contemporary Art, Santiago, Chile, 2015. Courtesy of the artist.

ties. ¹³ Paradoxically, what was meant to save life itself needed saving when it was inundated in 2017 owing to melting permafrost.

Aglert's dark humor is not limited to her choice of images but encompasses the totality of her thinking about what it means for a woman artist to follow in the footsteps of these failed male fortune seekers who have been traveling to the Arctic since the eighteenth century in the hope of returning home with fame and fortune. She uses the Fluxus artist George Brecht's ingeniously simple score titled Winter Event - Antifreeze as a basis for her own radical feminist critique of white male failure. Brecht's score was a way for art to "ensure that the details of everyday life, the random constellations of objects that surround us, stop going unnoticed."14 But she expands on the effect of Brecht's work beyond the context of 1960s art to transform how we see the Arctic today through clichés of romanticism and the traditional sublime. 15

For Aglert, as the environment becomes more dangerous, it embodies a different kind



of contemporary sublime that is dangerous to humans.16 Moreover, as the ground zero of catastrophic climate change, the Arctic is no longer seen as the most extreme and inhospitable environment for humans. In her work we see how the modern Arctic is warming in marked contrast to most of its earlier history. Climate change influences the issue of more-than-human belonging in such a precarious part of the world, and this perspective is at odds with the way Svalbard was mostly conceived as a space of conservation and a repository of the past where nostalgia for an earlier Arctic could live on in perpetuity. Both Aglert's video and the wide range of photos of the Arctic that she collected in her book Winter Event - Antifreeze and displayed in her exhibitions exemplify this struggle between her own lack of belonging, structured by masculinist power relations, and the mechanisms

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Figure 2.5 • Artist Katja
Aglert facing the camera
with broken Arctic sea ice in
the background, in a video
still from her exhibition
Winter Event—Antifreeze,
curated by Stefanie Hessler
at Weld in Stockholm, 2012.
Photograph by Mattias Wreland. Courtesy of the artist.

of authority that construct the conditions of that Arctic imaginary and its images. 17

The reintroduction of subjectivities that were forbidden from joining expeditions as equals in the Heroic Age is an aesthetic issue for Aglert as she rids her work of the visual references that would allow the viewer to focus on the sublime landscape of extreme nature alone, unattached from context. She does this by highlighting the banality of some of the conversation behind the scenes drawn from her video, which appears as a paper script installed on a wall for the audience to read, and through an LED display of running red letters above her video that resembles the signs above the opera stage on which translated subtitles are presented (figure 2.5). Through these strategies she deliberately sidelines images of the region's beauty, with the result that the scenery often seems more modest. This is also evident in Aglert's video in which she stands in front of various Arctic landscapes, always near a shore, holding melting ice in her bare hand (figure 2.6).

Like Anne Noble's and Connie Samaras's work on Antarctica discussed in chapter 1, Aglert's work is deliberately antiheroic in her use of and commentary on documentary. The conventional male omniscient narrator used in such videos is replaced with mostly female voices and background noises that center the experience of the viewer. In some scenes, when the panoramic landscape appears, it often seems diminished: the emphasis is not on Aglert's isolation in this vast and desolate landscape, or her singular artistic genius, or her leading role in the expedition but rather on her participation as a member of a larger artistic residency research group that is working and traveling together. Her work mimics the documentary genre, but here the artist appears as the actor and her performance plays down the romantically charged landscape of the transcendent Arctic Ocean. Her self-presentation is deliberately modest and self-conscious, in contrast to the narrative of the lonely white male hero or artist, and recalls instead the modesty and melting of the ice sculptures in Ursula K. Le Guin's "Sur" as described in chapter 1 of this volume. She privileges the banal types of actions that are happening behind the scenes—the sounds and things around her, the directions she is being given by the camerawoman on where to stand, and warnings from fellow travelers telling her the location of a polar bear in the vicinity or a gunshot heard nearby.

The disruptions and the quotidian conversation with the camerawoman redirect the viewer's attention away from the Arctic landscape, which appears commonplace. This is deliberately done to highlight the perceived connections between the everyday and Aglert's art. For Aglert, her



feminist project is also about the processual in relation to performance (plate 11). Performance for her is "an artistic expression (and documentation of the behind the scenes of the performance act) as a means to explore forms of criticality of the traditional sublime of the arctic, through modes of ongoing transformation (through performance), rather than the static representation claiming some truth (grand narrative)."18 The repetition of ice melting in her hands is also to represent ice in her work, at times as just ice, and it suggests the importance of bringing the issues associated with it down to a literally graspable and deliberately absurdist small scale. We get glimpses of the extraordinary landscape of the Arctic through Aglert's deliberately laughable images, especially the close-ups of her melting ice in her bare hands, which are much more tightly framed, thereby robbing the setting of any epic character. In this sense, her work is asking us also to rethink the way we understand the sublime in the present.

Aglert writes, "The repetitive act of melting ice, for me, is an artistic method to perform

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Figure 2.6 • Close-up of the artist Katja Aglert melting ice in her bare hand. Source: Winter Event—
Antifreeze, 2014. Courtesy of the artist.

modes of transformation together with the ice's own 'iciness' (ice performing ice)."¹⁹ Ice no longer references an inhospitable and dangerous landscape that is "frozen in time." Rather, for Aglert, "the melting is an act of performing the entangled bodily porous relationships that also are at the core of the 'climate issue' — we are all connected in this together."²⁰ She means that not only did she transform the ice from frozen matter to liquid, but the ice in turn transformed her body temperature from cooler to warmer. She writes about how this was integrated into the performance, the timing of which was dictated by the duration of the ice's transformation from frozen to fluid.²¹

The way the North Pole had served as a testing ground of an exclusive heroic masculinity is referenced further in her choice of the historic Arctic images she includes in her book (coedited with Hessler) Winter *Event—Antifreeze*. The selected images include the gravestone of the Arctic explorer Roald Amundsen, a key Norwegian figure of the Heroic Age of Arctic and Antarctic exploration who led the first expedition to the North Pole by dirigible in 1926 but later died while taking part in a rescue mission of the airship *Italia* in the Arctic in 1928. She also has the famous photographs of the Swede Salomon August Andrée's balloon expedition of 1897 to the Arctic that were recovered in 1930. That journey to the North Pole failed when the balloon started to lose hydrogen and crashed into the pack ice. On their march back south, the explorers died on the island Kvitøya in Svalbard. The photograph of Andrée, taken by the third expedition member, Nils Strindberg, was recovered in 1930 and has become one of the most famous visual representations of the failed Arctic exploration in Sweden. This image, included in her book Winter *Event—Antifreeze*, depicts Andrée posing with his rifle over a dead polar bear that he had presumably shot (figure 2.7). Her rereading of the heroic pose, one of the more iconic images of imperialism in the Arctic, alters the meaning from "hunting trophy/triumph" to the paradox that this leads to the explorers' death: years later, the parasites in the uncooked polar bear flesh were proven to have killed them.

Aglert's artwork throws these heroic myths of desperation and failure back at the audience and, in doing so, suggests how misguided were such projects serving the purposes of nationalism and imperialism, especially in light of the reverence with which they were treated. Using deadpan humor and repetition as a means of taking us beyond conventional points of seeing, she strikes a lighter and even absurdist note in the context of these more serious historical discourses about the difficulty of life in desolate and freezing regions, substituting the banal details of everyday life in the



Figure 2.7 • Nils Strindberg, Andrée Standing by a Polar Bear He Shot, photograph, 1897. The negative from this photograph of the famous Swedish polar explorer Salomon August Andrée, along with the bodies of the explorers who accompanied his failed 1897 balloon expedition to the North Pole, was not recovered until 1930. Courtesy of Tekniska Museet, Stockholm.



Figure 2.8 • Katja Aglert, bust of Vladimir Lenin in Barentsburg's main square, Svalbard, Norway. Photograph from Aglert's book Winter Event—Antifreeze, 2014. Courtesy of the artist.

Arctic for the grand heroic images of the past. By including the image of Andrée in her book and exhibition, she underscores the contrast between the polar bear as trophy, a proud prop of conquest, and the polar bear as an unexpected deadly threat that brings about the explorers' demise. Additionally, some of the photographic images she includes as still images in her exhibition and book seek flatness by including a small portion not of a pristine landscape but of a more industrial one, such as her documentation of containers from a port in Longyearbyen (Svalbard's most populous town, with around two thousand residents), or unlikely signs of human habitation in the forlorn Arctic islands, where there is blockstyle Soviet housing and a bust of Vladimir Lenin (the world's northernmost statue of the communist revolutionary) in Barentsburg's main square (figure 2.8). Such photographic examples that interweave natural

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and political-industrial history effectively demonstrate the trouble with clear-cut nature/culture distinctions.

Aglert also calls the viewer's attention to the question of how paintings and photographs of a traditional Arctic landscape create an experience of cultural numbing, as discussed with regard to Anne Noble's work in chapter 1. Aglert is transfixed by the commercialization of the Arctic and its subsequent romanticization in the contemporary imagination. She includes a photograph of the 1823-1824 Romantic painting *The Sea of Ice*, by Caspar David Friedrich, to underscore the paradoxical fact that Friedrich had never been to the Arctic (plate 10). He created the work in Elbstrand, near Hamburg, Germany, and yet he painted what became and continues to be the quintessential image of the Arctic that conveys a subjective, emotional response to its extreme nature. The grandiosity and spectacular destructiveness of sublime nature in Friedrich's painting offer a mortality glimpsed but not actualized that still shapes our perceptions of the region today. Aglert's sense of humor also applies to the more recent images of polar bears and walruses in which animals are the stars, not the humans. Her book Winter Event—Antifreeze includes banal images of the sleeping walruses who appear behind the scenes, as if we're waiting for the polar bears, which increasingly have become part of mass culture and media spectacle, to perform as the main act (figure 2.9).²² In these newer images, we are no longer dealing with the inhuman scale of the nineteenth- and early twentieth-century paintings and photographs. These landscapes do not overwhelm our categories of understanding. They are decidedly antisublime, if not unsublime—just snapshots of walruses asleep.

Roland Barthes, the French cultural critic, has claimed that photography can actually block memory. ²³ The images that Aglert implicitly critiques—such as that of Andrée posing with his rifle over a dead polar bear—are reimagined and can become a countermemory. For Barthes, memory is not so much image as sensation. For Aglert, the challenge in this project is to approach these older representations anew and to think about *how* to see the Arctic differently by creating new memories. In an age of environmental disaster, what new forms of art, feeling, and sociality does the melting polar region allow to come into being? Aglert is interested in a kind of art that pierces the complacency of the polar imaginary of the past to affect us right now. She uses repetition in her work in an unexpected and even jarring way to get us to retrieve the Arctic in new ways that implicitly question the heroic and ask what it means to resurrect it a hundred years later, when global warming and the return of the older



Figure 2.9 • Katja Aglert, photograph of walruses asleep on Moffen Island, Svalbard, Norway. Source: Aglert's book *Winter Event—Antifreeze*, 2014. Courtesy of the artist.

moments of colonialism and its singular white male hero have brought renewed attention to this region. In this way, Aglert's viewpoint makes us think differently about how postcolonial feminist environmental perspectives have contributed to changing contemporary art and Arctic discourses.

Renarrativizing the Arctic: Isaac Julien's *True North*

Isaac Julien is an internationally known British installation artist, filmmaker, and professor whose multiscreen film installations and photographs incorporate different artistic disciplines to create a poetic and unique visual language. He has had solo exhibitions in most major cities around the world, has taught extensively internationally, and has won numerous prizes. Julien was awarded the title of Commander of the Most Excellent Order of the British Empire in the Queen's birthday honors

in 2017. Most recently, he received the British Charles Wollaston Award (2017) from the Royal Academy in London, where in 2018 he was made a royal academician. He is currently distinguished professor of the arts and leads the Isaac Julien Lab at the University of California, Santa Cruz.

True North, like most works in Julien's thirty years of art and film practice, articulates how issues of colonialism, nationalism, gender, and sexuality have shaped the economic structures and human labor that underwrite Black experiences and imaginations in diasporic locations, including, in this case, the unlikely setting of the Arctic during the earlier days of polar exploration.²⁴ In recent years, *True North* has been shown in many international venues, including at the Royal Ontario Museum in Toronto, Canada (2017); in a retrospective of his work at the Associação Cultural Videobrasil, in São Paulo, Brazil (2012); and at the Milwaukee Art Museum's exhibition *Expeditions* in Wisconsin (2012).

The issue of white male failure at the North Pole takes on another meaning in Julien's work, since here failure is connected to the ways late nineteenth- and early twentieth-century polar expeditions were exclusively white and male undertakings, forging what I called in Gender on *Ice* "a discourse of nationalism, empire, and white male heroism." ²⁵ In contrast to the British, the Americans tried to produce a narrative of masculinity that was part of a scientific tradition, which worked discursively to exclude the significant presence of Inuit people and the participation of Matthew Henson from the account. In the American narrative, there is a larger emphasis on the actions of flesh-and-blood heroic men. Successful performance, athleticism, and scientific achievement matter most. While the tragedy of Scott's failed expedition to the South Pole is acceptable within the parameters of the literary, there is no place for failure within the ideological narrative of scientific progress and athletic performance that framed the discourses of Robert Peary's expedition.²⁶ That is why the fact that Henson was obliged literally to carry Peary back on his sledge from the North Pole (because Peary had lost nine of his toes, which made it an ordeal for him to wear snowshoes) was not made public by Henson until 1966, over forty years after Peary died.²⁷

Even though Peary's expedition was supposed to be scientific, his "faithful record" at the North Pole was from the start contested and unstable and remains to this day highly disputed and controversial. ²⁸ This inability to acknowledge outright the failure of the expedition, I argue, explains the significance of Henson as the major corroborating witness and the narrow focus of the critique of Peary, which has centered on establishing or disputing the accuracy of his claim to have reached the Pole.

Therefore, the narrative of Scott's failed expedition to the South Pole resonated more widely than that of the Peary expedition's claim. Inspired by the events of the 1909 expedition to the North Pole, Julien's *True North* (2004-2008) revisualizes the Arctic, taking on the competing stories of Peary's controversial expedition, which radically altered the lives of his longtime African American exploration partner Matthew Henson and the Inuit men and women of Ellesmere Island and northern Greenland (figures 2.10 and 2.11).²⁹ The title, *True North*, references how polar exploration might have had a different meaning for Henson than for white polar explorers at that time. Robert Stepto has argued that "the seminal journey in Afro-American narrative literature is unquestionably north," and one can see that Henson's autobiography, A Black Explorer at the North Pole, extends the geography of freedom mapped so often in the African American literary tradition that dates back to the antebellum slave narratives. 30 Though Henson was born to freed slaves, his family was persecuted by the Ku Klux Klan, and he and his family subsequently ended up in Washington, DC, to escape terror and discrimination. But the long and dark history of slavery was not entirely a matter of the past in the age of Jim Crow, even in the nation's capital. Henson himself became an orphan by the age of twelve, and before he started to work for Peary, he survived by going to sea as a cabin boy; he traveled to ports as far away as China, Japan, Africa, and the Russian Arctic seas to escape persecution.

The film and installation *True North* (2004–2008) is usually shown as a large-scale multiple-screen audiovisual installation and offers one of the boldest examples of the new departure in the artistic and scholarly discourse on polar expedition narratives. Like Aglert's work, True North brings us back to the Heroic Age of exploration. During that period, many of the Arctic regions had not yet achieved independent Indigenous self-governance systems. That did not come until a century later, as did Nunavut's independence in 1999 and Greenland's in 2008; both continue to remain part of larger countries (Canada and Denmark, respectively).31 In Euro-American histories of the Arctic, the heroic era is often seen as distinct and is often contrasted with the current era, although, as I have argued, the earlier colonial viewpoint persists and contributes to the crisis in the present. Drawing in part from *Gender on Ice* and Henson's later writings, Julien's work critiques earlier Arctic representations such as Robert Flaherty's *Nanook of the North* (1922), a signature film in which invidious portraits of the Inuit community as backward and disappearing highlight the Native's inability to adapt to Western progress.³² Julien's film resonates with its audiences because it responds to a larger visual culture

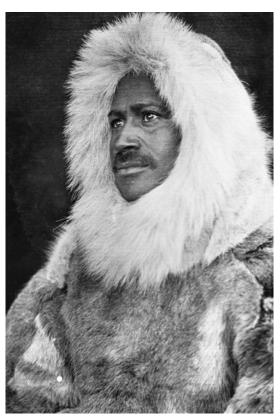


Figure 2.10 • (top) Photographic portrait of Matthew Henson taken immediately after the sledge journey to the North Pole and back. Source: Henson's 1912 autobiography, A Negro Explorer at the North Pole.

Figure 2.11 • (bottom) The four Inuit men who accompanied Robert Peary and Matthew Henson on their voyage to the North Pole, ca. 1909. From left to right: Egingwah, Ootah, Ooqueah, and Seegloo. Source: Henson's 1912 autobiography, A Negro Explorer at the North Pole. Photograph by Matthew Henson.



of the Arctic by exploring the relation between aesthetics and politics as well as the Peary expedition's complex politics of exclusion.³³

Delving deeply into Henson's primary role in Peary's expedition, Julien is attracted to the inescapable rawness and violence of the relationship between Henson and his employer. The film situates Henson front and center, drawing the tensions between Peary and Henson to the fore of the historical narrative, to question the veracity of Peary's account of Henson's role. One of the most powerful scenes in Julien's film retells the story of the expedition from Henson's point of view, based on Henson's own account that he was the first in Peary's party to reach the North Pole.³⁴ Henson decided to make it to the pole ahead of Peary after learning that Peary had intended to exclude him from the final march to the pole. In Gender on Ice, I point out how Henson's retelling of this incident disturbs the colonial discourse of that era, which portrays Blacks as irrational and violent and whites as rational and well-tempered. Fearing that Peary might kill him to keep this secret, 35 Julien's film uses Henson's own account written in 1966 as a voiceover to explain how he ensured his own safety following Peary's initial violent outburst to prevent it from escalating. The consequences for Henson of Peary's betrayal were grave. According to his biographers, Henson did not receive the national and international recognition he deserved, and at the time of his death in 1955, he subsisted off a meager pension while also working as a parking attendant in a Brooklyn warehouse.³⁶

True North takes poetic license and restructures Henson's story in unexpected ways. It is a film about the North Pole but was filmed in Iceland and northern Sweden, which is made evident to the viewer through shots of Iceland's ice caves. It focuses on descriptive reenactments but draws from the documentary genre, historical documents, and nonfiction material and, like most of Julien's films, is heavily research based. Significantly, in Julien's film, we do not see Peary or his rival, Frederick Cook, or evidence of the bitter controversy that ensued between the two American men who were both competing to be the first to attain the North Pole at that historical moment. In lieu of the driving anxiety and the competition in these white male exploration narratives, Julien's film foregrounds the sheer physical attraction of the North Pole, as well as the significance of the four Inuit men—Egingwah, Utah, Ooqeath, and Seegloo—who accompanied Peary and Henson (plate 12 and figures 2.12 and 2.15). 37 Julien rewrites these older stories representing the four Inuit men and Henson as witnesses to Peary's North Pole trek; in Julien's film, they ultimately replace Peary as the narrative's focus.



Figure 2.12 • Isaac Julien, untitled photograph from *True North* series, digital print on Epson Premium Photo Glossy 250g paper (102.9 × 102.9 cm), 2004. Actress Vanessa Myrie is dressed as Matthew Henson. Courtesy of the artist.

Julien rethinks the relation among cinema, aesthetics, and the racism endemic to earlier well-known representations of Arctic exploration by highlighting the aesthetic drive and imperial ambitions that powered the early exploration narratives, which unfolded in sublime landscapes. In contrast to Aglert, who relies on the discourse of the everyday, the mundane, and the banal, Julien pushes and celebrates the aesthetic (as he does in all his work), challenging the foundational assumptions of the sublime as overwhelming, humbling, and invigorating. He takes aim at the notion of polar sacrifice and the way polar exploration was seen as a moral touchstone and an artistic device. The suffering that Henson endured was due less to the privations of the Arctic than to the racial hierarchies that Peary reproduced. Rather than offer us an unmediated vision of the Arctic that encapsulates the spiritual investment in power over a realm inimical to habitation, he presents it instead as highly technologized and artificial. Presented across multiple screens, with lush production values, rather than as a single-channel video, the film and photographs immerse the viewer in their technological beauty.³⁸ But Julien's use of multiscreen immersion makes the viewer's coherent overview of a single image impossible, invoking desires for possession that cannot be exhaustively explained by nationalisms or ownership. However, he does not give

up politics to focus on beauty. Instead, he politicizes the aesthetic as an ironic critique of Heroic Age polar exploration photography's tendency to erase the political dimensions of this activity. Asked why he combines beautiful, compelling images with marginalized voices in his work, Julien writes:

We tend to think that [for] images to be posing certain political questions, or to be intellectually interesting, they need to somehow not be too aesthetically oriented. In a sense, anti-aesthetic image-making is the normative view made for politically "authentic" content. So, of course, I want to oppose that. And I want to oppose that because I think perhaps it's too easy to exist in this binary; and I want to think about the possibility of making images that can exist aesthetically in a culture that poses difficult questions. I think those images are connected to trying to reclaim desire politically, or reclaim images that are more poetic and more associated with the lyrical, or "queering" of the image." 39

Though his work is in dialogue with the tradition of the sublime, he goes on to write how these beautiful pictorial images at the same time try to present a kind of trauma within these scenes and create a disturbing resonance, what he calls in the epigraph a "contaminated sublime."

Moreover, Julien seduces the audience visually when he rewrites the narrative of the subservient Henson (as concocted by Peary) in a visual register far different from what one would expect. In this way, Julien's film insists that an alternative North Polar heroism exists both in spite of and against Peary, and it is different from the masculinist white nationalist heroism of the polar exploration era. As Monica Miller, a feminist scholar of English and African studies who documents and theorizes the emergence of Blackness in places that have no well-developed colonial or imperial history, explains, "*True North* does not merely insert blackness into the landscape and 'claim' the poles for black or colored people, but rather the film naturalizes racialized and gendered experience in the polar environment.... Henson is not an exotic presence, but one that belongs. Blackness in *True North* is literally and figuratively a mobile concept."⁴⁰

But Julien reformulates this alternative narrative of Blackness and belonging as articulated by Miller with a different aesthetic, one that is modern, ironic, artificial, and detached. In this way, he subverts an older pseudoscientific history known as *climate determinism*, which argues that Black people could not belong in the North because it is racially impossible. Such a theory would further exclude Henson from the official narrative of the pole's discovery, according to historian Anthony S. Foy:

"The pseudoscientific notion of climate determinism functioned as an ideological corollary to the strict controls of Jim Crow segregation, explaining why black people must stay in their place, the tropical South. If Henson embodied the race's contribution to an American triumph, then this ability to weather the extreme physical demands of the Arctic frontier also symbolized the race's mobility as it excelled despite the political, economic, and social limitations placed on it at home." Henson himself at a 1909 banquet in his honor claimed that he could not only survive but flourish in the dangerous and freezing regions of the Arctic and thus that his achievements fully disproved pervasive popular notions of climate determinism: "When I went to Greenland they said I would never come back. They told me that I could not stand the cold—and no black man could. I said I would die if necessary to show them. I survived all right and here I am." ⁴²

For this reason and others, Peary drew criticism from contemporaries for even having an African American man as the sole US companion to accompany him to the pole. To appease the fear of these critics, in his 1909 official account, Peary minimized the significance of Henson's talents by emphasizing his role as a handyman capable of performing the tasks of several people: "Henson was part of the traveling machine.... [T]he taking of Henson was in the interest of economy of weight."43 To explain why he chose Henson over a white man for the final party, Peary suggested that Henson "lacked as a racial inheritance the ability to lead.... He would not find his way back to land and it would be unfair to send him back alone."44 Whether these statements were a tactic of Peary's or reflected a fundamental belief is less important than the discursive fact that this was how Peary constructed Henson's role. According to Booker T. Washington, who wrote the preface to Henson's own 1912 book, A Black Explorer at the North Pole, Henson's role extended beyond the narrowly defined place assigned to him by Peary, as Henson not only was skilled enough to write his own book but served as a navigator, spoke fluent Inuit (he does not mention that Peary himself was never able to learn the Inuit language), and functioned in many other capacities, including as a blacksmith, carpenter, cook, and translator.

In his film Julien shifts registers to mock such older racial notions as climate determinism and other baseless pseudoscientific accusations that Peary hurled against Henson. To do this, the film radically departs from Henson's story by including a Black female fashion model, Vanessa Myrie, scantily dressed in high fashion to impersonate Henson in the Arctic (plate 13). Julien's use of the commercial aesthetics of fashion photography,





Plate 1 • (top) Lisa E. Bloom, Smoky Skies from Wildfires, Berkeley, California, Morning of September 9, 2020. Source: author photograph.

Plate 2 • (bottom) Still of an orange landscape from Denis Villeneuve's 2017 science fiction film *Blade* Runner 2049. Cinematographer: Roger Deakins.

Plate 3 • (top) Anne Noble, Hot Lips, from Bitch in Slippers series, photograph, 2008. The image is a close-up of painted red lips on a transport vehicle at the US base at the South Pole. Courtesy of the artist.

Plate 4 • (bottom) Anne Noble, set of nine thumbnail photographs of beaten-up transport vehicles at the US base at the South Pole—many named for "old girls" and absent women—from Bitch in Slippers series, 2008. Courtesy of the artist.

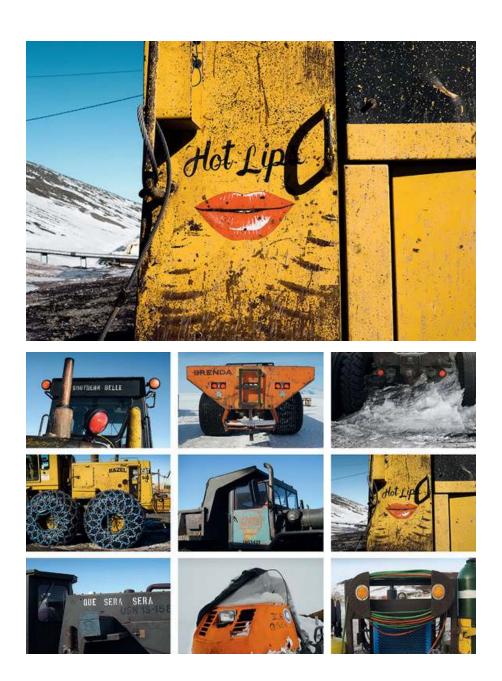




Plate 5 • (top) Anne Noble, Antarctic Storm, photograph, 2002. Tourists "experience" extreme Antarctic weather inside a diorama at the Antarctic Center in Christchurch, New Zealand. Courtesy of the artist.

Plate 6 • (bottom)
Judit Hersko, Clione
Antarctica—Sea Angel,
photograph, 2009. The
microscopic gelatinous
sea snail in Antarctica
is threatened with
extinction from climate
change. Courtesy of
the artist.







Plate 7 • (top) Connie Samaras, Dome and Tunnels, from the series V.A.L.I.S., photograph, 2005. Exterior view of the Buckminster Fuller Dome at the South Pole sinking into the permafrost. Courtesy of the artist.

Plate 8 • (bottom) Connie Samaras, V.A.L.I.S. Dome Interior, digital print, 2005. Interior view of the Buckminster Fuller Dome at the South Pole, altered by the photographer by flipping the negative. Courtesy of the artist.

Plate 9 • Joyce Campbell, *Ice Ghoul #1*, from the series *Last Light*, Becquerel daguerrotype, 2006. This image captured in Antartica records a face, with deep eye sockets and a screaming mouth, carved by wind in the ice of a glacier. Courtesy of the artist.

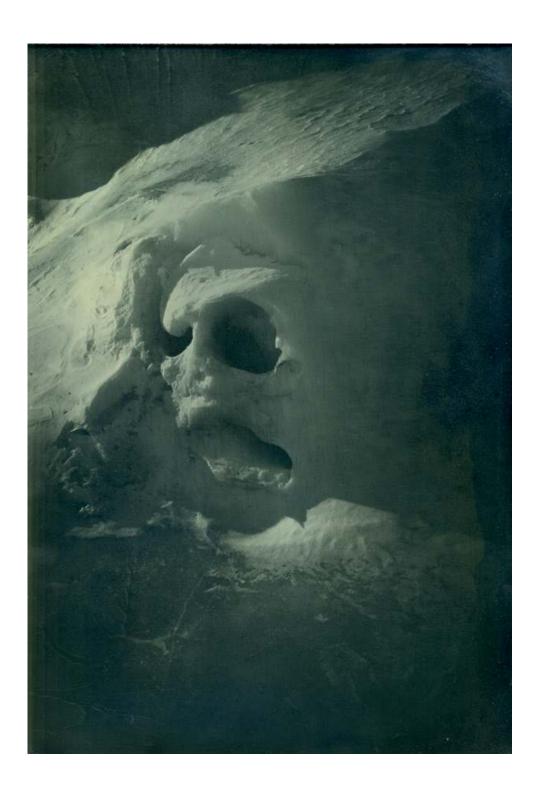














Plate 10 • (opposite top) Caspar David Friedrich, The Sea of Ice, aka The Polar Sea or The Wreck of Hope (38 x 50 in.), ca. 1823–24. Nineteenth-century German oil painting, inspired by William Edward Parry's Northwest Passage expedition of 1819–1820, which depicts a shipwreck in the Arctic. Courtesy of Kunsthalle Hamburg.

Plate 11 • (opposite bottom)
Katja Aglert in front of the camera
(documentation of the artist's
performance in Svalbard), 2009.
From Winter Event—Antifreeze,
2014. Photograph by Amy Wiita.
Courtesy of the artist.

Plate 12 • (top) Isaac Julien, Inuit and Black faces in Fantôme Créole (four-screen projection combining True North and Fantôme Afrique), installation view from Kunsternes Hus, Oslo, 16 mm color film transferred to DVD, 2005. The projection includes close-up portrait images of actress Vanessa Myrie, representing Black explorer Matthew Henson, and three Inuit actors, representing the four Inuit men who accompanied Robert Peary and Matthew Henson on their voyage to the North Pole. Courtesy of the artist.

Plate 13 • (bottom) Isaac Julien, installation view of triptych from *True North* series, digital photo prints (each 100 × 100 cm) on Epson Premium Photo Glossy, 2004. In the triptych, actress Vanessa Myrie, wearing high fashion, represents Matthew Henson in the Arctic. Courtesy of the artist.





Plate 14 • (top) Zacharias Kunuk and Ian Mauro, film still of a melting iceberg in the Arctic National Wildlife Refuge, from Qapirangajuq: Inuit Knowledge and Climate Change, 2010.

Plate 15 • (bottom) Zacharias Kunuk and Ian Mauro, film still of a flock of birds in the Canadian Arctic, from *Qapirangajuq: Inuit* Knowledge and Climate Change, 2010. **Plate 16** • (opposite top) Subhankar Banerjee, Caribou Migration I (from the series Oil and the Caribou), photograph (86 × 68 in.), 2002. Banerjee's aerial-view large-format photograph tracks with great precision the caribou migration in the Arctic National Wildlife Refuge. Courtesy of the artist.

Plate 17 • (opposite bottom) Subhankar Banerjee, Brant and Snow Geese with Chicks, from the series Oil and the Geese), photograph (68 × 86 in.), 2006. Banerjee's large-format aerial photograph shows migrating birds and snow geese with chicks, living in and moving through the Arctic National Wildlife Refuge. Courtesy of the artist.









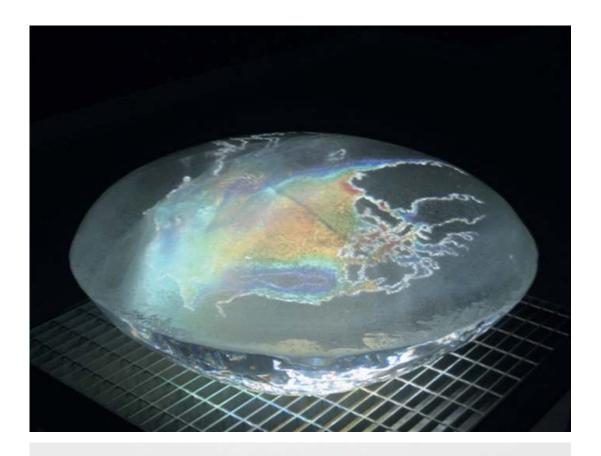




Plate 18 • (opposite top) Jean-François Millet, *The Gleaners*, oil painting (33 × 44 in.), 1857. Nineteenth-century French oil painting that depicts farmers removing the grain left in the fields following the harvest. Courtesy of Musée d'Orsay, Paris.

Plate 19 • (opposite bottom)
Subhankar Banerjee, Gwich'in
and the Caribou, photograph
(18 × 24 in.), 2007. Bannerjee's
image depicts a Gwich'in male
hunter, Jimmy John, and his
companion carving the meat of
a recently hunted caribou in the
snow. Courtesy of the artist.

Plate 20 • (top) Lillian Ball, 66
Degrees, 32 North, 50 Years, video
animation of Arctic ice-melt maps
projected onto ice sculpture,
2007. Courtesy of the artist.

Plate 21 • (bottom) Andrea
Bowers, Julie Anderson, Syndee
Crice, SnoCat, Karen E. Palmer,
C. M. Pico, and Michele Rowe,
Ken Saro-Wiwa's Last Words,
installation view of beadwork
(8½ × 78 in.). Photograph taken
at the Andrew Kreps Gallery, New
York, 2009. Courtesy of the artist.

Plate 22 • (top) Annie Pootoogook, (Untitled) (35/36) Red Bra, colored pencil and ink on paper (51 × 66 cm), 2006. Courtesy of Dorset Fine Arts, Toronto.

Plate 23 • (bottom) Roni Horn, close-up view of sediment on the bottom of a large glass column containing melted ice removed from an Icelandic glacier, from the installation Vatnasafn/Library of Water, Stykkisholmur, Iceland, 2007. Photograph courtesy of Elena Glasberg.



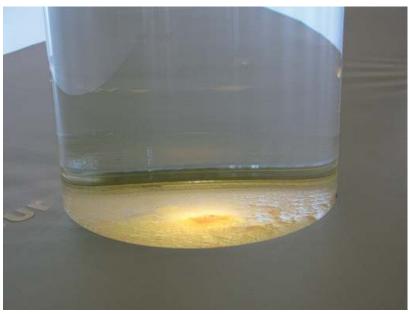






Plate 24 • (top) Ursula Biemann, aerial view of the tar sands of Alberta, Canada, a film still from *Deep Weather*, 2013. Courtesy of the artist.

Plate 25 • (bottom) Ursula Biemann, split-screen film still of a Bangladeshi woman standing on sandbags juxtaposed with an eroding shoreline, from *Deep Weather*, 2013. Courtesy of the artist.



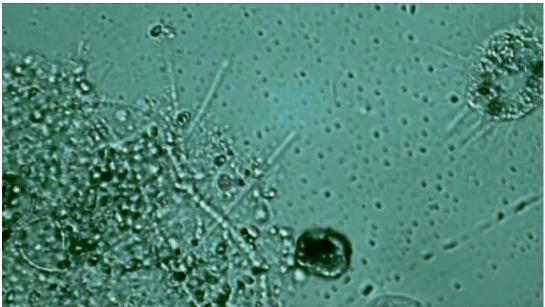


Plate 26 • (top) Ursula Biemann, aerial view of birds' nests on the Shetland Islands coast, film still from *Subatlantic*, 2015. Courtesy of the artist.

Plate 27 • (bottom) Ursula Biemann, close-up of microbes in seawater, film still from Subatlantic, 2015. Courtesy of the artist.

Plate 28 • (opposite top) Brenda Longfellow, close-up of an animated duck against a snowy mountain background in the Candian Arctic, film still from Dead Ducks, 2012. Courtesy of the artist.

Plate 29 • (opposite bottom)
Brenda Longfellow, close-up of an animated duck flying over the tar sands extraction zone in Alberta, Canada, film still from Dead Ducks, 2012. Courtesy of the artist.









Plate 30 • (top) Activist Debby Dahl-Edwardson's image of cut-up whale meat displayed outdoors in Barrow, Alaska. Film still from Brenda Longfellow, *Offshore Global*, 2015.

Plate 31 • (bottom) Edward Burtynsky, Nickel Tailing #34, photograph (40 × 60 in.), 1997. A river in Sudbury, Ontario, appears to be a lava flow but is discolored orange by nickel tailings, a waste product of metal extraction and oil activities. Courtesy of Robert Koch Gallery, San Francisco/Nicholas Metivier Gallery, Toronto.



Figure 2.13 • Isaac Julien, installation view of a three-screen projection from the series *True North* (2004) at the Akron Art Museum, 16 mm color film to DVD transfer, 2010. In the image, actress Vanessa Myrie is in the foreground of a melted Arctic set alongside two images of waterfalls. Courtesy of the artist and Akron Art Museum, Ohio.

casting Myrie wearing a white summer dress, also makes the Arctic appear almost like a runway, now transformed into an inviting place with sunny skies and warmer weather, all as a consequence of global warming. This brazen and incongruous strategy queers and parodies not only an older anti-Black discourse of climate determinism and racial notions of leadership but also the era's regressive gender politics—especially a highly simplified and formulaic narrative of white masculinist heterosexual agency prevailing over a feminized space where Native women are equated with nature.

In Julien's film, Myrie is cold and iconic, as she is made both very visible and radically unavailable sexually, unlike Peary's youthful Inuit mistress, Allakasingwah, a nude photograph of whom is included in his 1898 autobiography *Northward over the "Great Ice.*" In Peary's pho-

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tograph, titled Mother of the Seals (an Eskimo Legend) (figure 2.14), Allakasingwah is cast as occupying an uncertain position between the human and the animal, lying nude on a rock and rendered passive as a natural resource or sexual object for Peary's use. In comparison, Myrie in Julien's film is presented as a Black sovereign subject who surveys the landscape and appears self-possessed and sexually unavailable. She might be subject to a male gaze through an older politics of representation but is not controlled and subjugated by it like Allakasingwah. Indeed, both Henson and Peary had Inuit mistresses and illegitimate children in the Arctic and maintained relationships with these women and children over multiple expeditions. 45 This very fact complicates the Arctic explorer myth that assumes that Blacks do not belong there, as generations of descendants of Henson's and Peary's mixed offspring

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Figure 2.14 • Robert E. Peary, Mother of the Seals (an Eskimo Legend), photograph of Allakasingwah, Peary's youthful Inuit mistress, in the nude. Source: Robert Peary, Northward over the "Great Ice," 1898.

remain in the more livable parts of the Arctic. ⁴⁶But the inclusion of Myrie impersonating Henson is ironic since it also signals that Peary sanctioned Inuit mistresses on his expedition to protect against what was seen as the potential but more dangerous carnal relations between men on his expedition. ⁴⁷ Julien's film, in response, camps up the homosocial and racial relations between Peary and Henson. Julien may queer the homosocial relationship between the two men, but by substituting Myrie, he alludes to their relationships with Inuit women only indirectly.

The incongruous and self-possessed presence of Myrie, shown washing her hands and fondling the ice, turns the landscape of dangerous ice flows into just ice, not a theater of life or death, and in this respect recalls Aglert's images of her hands melting the ice. However, in the case of Julien, the contrast between the stunningly spectacular landscape and Myrie's banal gesture underscores his ambition to remind us of how fetishized the ice and the Black female model are. Julien emphasizes this visually since there is nothing more incongruous than putting a Black fashion model on the ice and having her wear white clothing to aesthetically mark her off from the landscape and further highlight its sublimity.

But Julien's highly artificial and ironic relationship to beauty is also a response to Peary's older colonialist discourse, which minimized the significance of Henson and the Inuit workforce by representing them not as exploited workers but as "cogs" that are instrumental in the workings of what Peary termed his smooth and well-managed "traveling machine." 48 Julien draws on Henson's 1912 book, which foregrounds the ways in which the white men were materially and emotionally dependent on his and the Inuits' participation. For example, Henson frequently emphasizes his own position and that of the Inuit men. 49 We learn from his account that he saved Peary's life twice and that his own life was saved by one of the Inuit men who accompanied them to the pole. Indeed, Henson's insistence on the presence of the Inuit men is important in its perception and construction of the expedition, which is also important to Julien's film. The film refuses to promote the racism evidenced in Peary's supposedly scientific text, and it disturbs the equilibrium established by Peary's rationalist discourse that forces African men and Inuit men to stay in their place. In this sense, the film differs from Henson's own autobiography, which introduces a version of scientific evolutionism in which there is the idea of a path of progress, which is slightly different from Peary's unchanging and static racialized order. According to Henson, African Americans need only develop their full cultural potential. By demonstrating their capabilities, they eventually can be accepted as equals to whites, and the belief in this possibility underpins Henson's view of racial achievement.

Julien, by contrast, is interested in foregrounding Henson's subjectivity and using the figure of Henson/Myrie to bring back the beauty of the Arctic. However much he is affirming a recovery of Black subjectivity, he does it in a mockingly counterheroic way, and the heroism he maintains is deliberately exaggerated and could be understood as a form of post-colonial mimicry, to use Homi K. Bhabha's well-known term. ⁵⁰ As in the process of mimicry more generally, Julien's film highlights the fashioned and performed nature of the original authoritative discourse of exploration narratives that he draws from and spotlights what happens when the colonialist enterprise is threatened by the displacing gaze of its double—in this case Henson/Myrie. Julien is taking us back not only to these original heroic polar exploration narratives but also to a whole discourse of earlier colonialist artistic, literary, and cinematic representations of the Arctic to restage and in some sense disrupt the aesthetics and politics that those original representations are drawn from.

In his own exploration narrative of 1910, Peary presented the Inuit as incapable of fending for themselves in such a harsh environment because of their supposed inability to fully embrace Western technology. In this sense, Peary's writings anticipated Robert Flaherty's 1922 film, *Nanook of the North*, mentioned previously as a film that consigned Native people to the past and positioned them as exotic and timeless anachronisms. However, what is often not represented in media and polar exploration narratives is how skilled the Inuit were as drivers of the dogsleds and as hunters—in other words, as experts clearly in possession of traditional and modern knowledges. ⁵¹

Julien's choice to include footage of Inuit men in *True North* (plate 12 and figure 2.13) also references the Inuit men in Peary's actual expedition and serves to remind us of the important participation of these men in Peary's expedition; it also differs from Henson's own response in his 1912 memoir. ⁵² Julien's use of close-ups of the Inuit faces on multiple screens destabilizes Peary's racialized hierarchy and presents the Inuit as legitimate subjects rather than as the laboring bodies and exotic props of Peary's photograph of Henson and the four Inuit men at the North Pole in 1909 (figure 2.15). The image is in keeping with existing Euro-American photographic conventions of the period, which tended to represent distant and remote places through photographs of local "Native inhabitants"; but in this case all the men's identities are subordinated to that of the American flag.

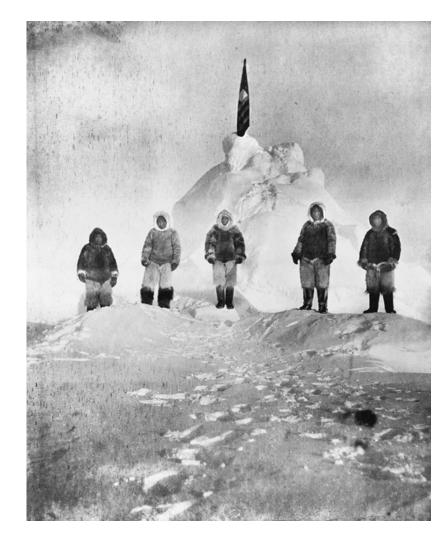


Figure 2.15 • Robert E. Peary, photograph of Matthew Henson (center) and four Inuit guides (Ooqeah, Ootah, Egingwah, and Seegloo) at the North Pole, 1909. Source: Robert Peary, The North Pole: Its Discovery in 1909 Under the Auspices of the Peary Arctic Club, 1910.

Julien's close-up images also transform how we look at the mirage-like contemporary footage of the Arctic landscape and its ice. At first it seems completely desolate, but once we get closer and observe the Inuit going about their daily lives, using dogsleds, we see that the Arctic landscape is grounded in the history of Inuit culture and the sounds of mammals and birds. Julien creates space for effective listening and compels us to pay attention to sounds that situate human and nonhuman subjects as part of the environment. This is conveyed pointedly through the detailed natural soundscape and the projection of Inuit voices through the music of throat singing outside the frame as we view the landscape through their eyes. By making the Inuit key here, Julien also presents an alternative view of the nature/human relationship in which the interdependency of organisms takes the place of the mapped, commodified, and aestheticized landscapes of the heroic era.

Thus, Julien's aesthetics of the pole cannot be simply folded back into a discussion of the sublime, science, or politics. Instead, he attends to it in a

way that critically engages and impacts an entire tradition of photographic and cinematic art and sound representations of African Americans and Indigenous people. He does this not only by inserting Henson and the Inuit into a central role but by creating an entirely new parodic counterdiscourse, enabled by a different deployment of new technologies, that underscores the coexistence between humans and nature that he represents.

Changing Physical and Psychic Realities of the Arctic

Katja Aglert's work comments more directly than Isaac Julien's on climate change and the melting ice. Still, it is possible to think of both of their works as environmental performance pieces that deal with the past history of images from the earlier era of exploration and that at the same time comment on the way climate change interferes with how we view the Arctic today. We cannot help but notice how the Arctic is made more accessible by the melting in some of its scenes. The Arctic is more easily reached (including the industrial town Barentsburg, where Russian miners today continue to work on the site shown in Aglert's work), and it is important to connect this to the strong political and economic interests of different nation-states in the Arctic at this time, especially with regard to new shipping routes and claims to oil and coal in places that were inaccessible in the past. Thus, these works of art traverse not just the human imperialism of the colonial era but also the newer imperialism in the age of the Anthropocene and the Capitalocene.⁵³ Indeed, both artists make the older sublime associated with Arctic landscapes appear less threatening even though the region is actually more dangerous than ever. This shift decenters the mythic and exotic qualities of the expedition narratives. Both Aglert and Julien reframe the landscape in terms of an everyday context and as an agent in a more-than-human social life and as what Julien calls a "contaminated sublime" and reconfigured history. This is underscored in both their works in fairly outrageous ways. Aglert repeatedly melts ice in her hand to suggest that ice can also just be ice, not death and suffering. She also recalls that "it was rarely humans, but arctic gulls or walrus that were the audience of my Winter Event—Antifreeze performances when I first performed them in different sites of the Svalbard archipelago."54 Julien puts a Black fashion model and actress on ice, using the Arctic as a runway, and films her interacting with the melting ice. He does this not simply to aestheticize the melting Arctic but to show us how these landscapes are radically transformed by late industrial modernity.

Both works challenge human relationships to natural landscapes, which have typically been a relation of domination in which the landscape is conquered, transformed, or turned into human advantage. Not only do Julien and Aglert address the conquest-based relationship to nature in itself, they also critique its universality and reveal the racialized and gendered nature of it. Consequently, their work insists on representing landscapes and the sublime at the cross section of multiple fields of social, political, and material determinations, which includes, in Julien's work, Indigenous and Black relations to nature and the environment.

Both use the melting ice to ultimately speak back to these older colonial scientific and artistic representations, undercutting the authenticity of the Heroic Age and its colonial history as the "natural" mode of engagement in the Arctic. As a consequence of this move, Julien's work is retrieving the Arctic in new ways that implicitly question the heroic and what it means to resurrect it at this historical moment when global warming and the return of the older moments of colonialism have brought renewed attention to the Arctic. Whereas Julien's aesthetic deals with reimagining polar imperial fantasies, which he parodies and critiques, Aglert's artwork rethinks the way the natural and cultural landscape of Svalbard are represented and, like Julien's work, complicates the region as a bastion for the discursive construction of heteronormative masculinities ruling over nature. Aglert draws on Svalbard's relatively short history of European occupation and its lack of Indigenous populations, representing it as a region largely visualized through the prism of narratives of heroic polar exploration, maritime exploration, commercial fishing and hunting, and industrial mining. These are never separate from politics or socially inscribed power structures, even though these spaces are often visualized as pristine and empty. Julien, in contrast, is interested in the question of survival on the ice from the days of polar expeditions to the North Pole in the earlier twentieth century. In the era of accelerated global warming, it is clear that the so-called conquest of the North Pole did not result in the defeat of the environment at all, as if that was indeed ever even possible. There was no final conquest, no dominion established. And if global warming continues on anything like its present accelerated track, this tendency will only continue to intensify greatly and shape everything we do on the planet, transforming our relationship to not just nature, politics, and history but life itself.

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AT MEMORY'S EDGE

COLLABORATIVE

PERSPECTIVES

ON CLIMATE

TRAUMA IN

ARCTIC CINEMA

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Native survivance is an active sense of presence over historical absence, deracination, and oblivion.

Gerald Vizenor, Survivance: Narratives of Native Presence, 2008

Traditional stories can be conjured creatively for an audience pondering and weathering even unsurvivable circumstances.

Dianne Chisholm, "The Enduring Afterlife of *Before Tomorrow*: Inuit Survivance and the Spectral Cinema of Arnait Video Productions," 2016

This chapter is written as a contribution to the work in Arctic visual culture and film studies, growing fields that are just beginning to address climatically concerned aesthetic practices that engage with collaborative perspectives on climate trauma without sentimentalizing or spectacularizing suffering. Much of this work brings into being new forms of seeing, feeling, and knowing that are connected to the crisis of visualization in the Arctic's fast-changing landscapes. Critical polar aesthetics here engages with not only the altered perceptual habits and the complex temporal and historical disjunction introduced by climate change but also its serious psychological consequences. Here I broaden the work done on memory and its aesthetics to address what it means to ethically witness the accel-

erating social and psychic impact of a warming Arctic through a cultural inquiry into these issues. It introduces three innovative short films on the Arctic that call forth new forms of representation of the climate crisis in a world beset by uncertainty. All three films push the viewer to imagine a different way of seeing, feeling, knowing, and "weathering even unsurvivable circumstances," in Dianne Chisholm's words. Each puts into focus what Anishinaabe cultural theorist Gerald Vizenor calls "an aesthetics of survivance." Survivance as a critical term in Native American studies refers to an insistence on the ongoing nature of active survival in which Native American peoples go beyond merely subsisting in the ruins of tribal culture after ethnic genocide to actively refashion memory for the contemporary era. Though the term aesthetics of survivance was not first defined to respond to the climate crisis, it can be used to articulate the central place of creative storytelling in visual form in Indigenous knowledge to address climate trauma, which, like ethnic genocide, also involves mobilizing images in order to transform and resist dominant structures to prevent a kind of forgetting. The films addressed in this chapter are made in collaboration with members of Indigenous communities who have taken up film and television to give voice and form to unfolding climatic issues related to the precarious world they inhabit. In contrast to the temporary visitors discussed in chapters 1 and 2, the focus of this chapter is on the long-term residents who must live on an everyday basis with the increasing climatic risks to their communities. These unfolding climatic issues and concerns give occasion to address the wider questions of memory central to these films. Each explores the shared private and public histories and memories of its subjects in order to keep alive the memory of Inuit people who are no longer "at home" in the Arctic in the way they once were.

The title of this chapter, "At Memory's Edge," is taken from the title of a book by James E. Young that engages with the Holocaust in contemporary art and architecture but that comes out of a field of cultural scholarship developed by mostly Jewish writers (myself included) that focuses on the issue of memory and psychological pain in a more limited European context than the subject of this chapter. In the Jewish context, there is a strong ethical coercion not to forget the Holocaust, but on the personal level, survivors of that generation face the possibility of trauma and also might desire to forget or suppress memories. When it comes to transmitting traumatic memories to others, especially across generations, the postwar artists in Young's book explore both the necessity of memory and their incapacity to recall events they never experienced directly, what

Marianne Hirsch so aptly calls their "postmemory" of it. Hirsch's notion of postmemory does not take us beyond memory but reflects back on it. 5 In what follows I address the issue of memory and aesthetics to acknowledge the traumas of Indigenous communities as these communities both are at the forefront of present climate change and also historical survivors of the violent processes of colonialism. These events are very separate and specific episodes in the history of trauma. The traumatic impact produced by colonial wars, by colonization itself, and more diffusely by ongoing racism cannot be adequately understood in terms of the basic concepts and distinctions that were used to theorize trauma associated with the Holocaust, in which trauma resulted from a single, extraordinary, catastrophic event. 6 Nor can the theory of trauma associated with the Holocaust alone account for other forms of ongoing violence associated with the everyday "slow violence" of the climate crisis.

This chapter challenges the notion that traumatic experiences of the climate crisis can be adequately represented only through more traditional Western avant-garde or modernist aesthetic forms, which can be traced back to Theodor Adorno's notorious and much-cited pronouncement from 1949 that "to write poetry after Auschwitz is barbaric," which marked the beginning of the debate about whether and how to represent the Holocaust.⁷ Adorno's preference for a morally acceptable formalist aesthetic that avoids realism and draws on the old distinction between art and mass media, high and low culture, is too narrow on its own to engage the planetary scope of traumatic events and the myriad forms that bear witness to the so-called Anthropocene. In my earlier book *Jewish* Identities in American Feminist Art: Ghosts of Ethnicity (2006), I argue that the manifestation of American feminism in the arts also pushed away from a stringent form of visual asceticism to express the intellectually difficult questions of our day. Here, like in my earlier book, I embrace a much wider diversity of cultural aesthetic forms but in this case to engage sympathetically with new scholarship and activism in these regions that conjoins issues routinely kept apart in climate change and its aesthetic that engages landscape, environment, and ecology.

In the context of this chapter, traumatic experiences are represented in a range of forms, as the first two films are more accessible documentaries, and the third is fictional, experimental, and nonnarrative. Each is chosen to spark cross-cultural conversations in order to imagine the future for memory in an increasingly precarious world. The documentary *Qapirangajuq: Inuit Knowledge and Climate Change* (2010), by Zacharias Kunuk and Ian Mauro, is the first to ask Inuit elders to describe the environ-

mental changes they are experiencing in Inuit Nunangat (Arctic Canada) in their own Inuktitut language. The film engages climate in ways that deepen our geographic understandings of adaptation and resistance from Indigenous perspectives. It contains an interview with the activist Sheila Watt-Cloutier, who was the first to articulate environmental and climate change as a human rights issue and the first to address the previously unheard suffering of Indigenous cultures. The second documentary film, *Attutauniujuk Nanami/Lament for the Land* (2014) by Ashlee Cunsolo Willox and the local Inuit communities of Nunatsiavut, Labrador, Canada, provides a striking example of how recognizing suffering from climate change in the Arctic can serve as a necessary first step toward the amelioration of that suffering by breaking the geographic isolation imposed on both individuals and communities in local and regional contexts. The third film, That Which Once Was (2011), by Kimi Takesue, a Japanese American filmmaker, is a fictional experimental film set in a future defined by climate breakdown, when millions of people will be driven from their homes. It focuses on two climate refugees, one from Inuit Nunangat and the other from the Caribbean, faced with the traumatic experience of relocating and adjusting to difficult circumstances after losing family members. Broadening the conversation on climate trauma, a term first used by E. Ann Kaplan in her book Climate Trauma: Foreseeing the Future in Dystopian Film and Fiction, all three films encompass Indigenous and minority peoples and perspectives and use a range of media to create a sense of possibilities for themselves amid the ongoing destruction of their environment by anthropogenic climate change.8

Between Aesthetics and Politics: Zacharias Kunuk and Ian Mauro's Qapirangajuq: Inuit Knowledge and Climate Change

Qapirangajuq: Inuit Knowledge and Climate Change (2010) works at the intersection of aesthetics and politics and is part of a growing genre of documentary that highlights the firsthand experiences of those most impacted by climate disruption. Produced by Zacharias Kunuk's multimedia platform and television company Isuma TV, the documentary is made for both a local and international audience and is readily available over the internet (plate 14). Kunuk is an internationally known Inuit filmmaker who made the 2002 film *The Fast Runner* and is well known for decades of work in both television and film. For this documentary, Kunuk collaborated with Ian Mauro, a well-known Canadian environmental geographer and filmmaker who spent a decade living with Inuit communities across

Nunavut, studying traditional knowledge. The film focuses on the Inuit's own intimate experience of living on the ice in Igloolik, a semiautonomous territory of Nunavut, the Arctic region at the northern tip of northern Quebec. It is mostly inhabited by Inuit and is where Robert Flaherty's silent documentary *Nanook of the North* (1922) was filmed. Kunuk's and Mauro's film is both a testimony and an eyewitness account about what it means to live in environmental conditions that are gradually becoming increasingly degraded. The film also seeks to challenge the Western media's limited portrayal of the effects of climate change in the Arctic, as Inuit community members address the implications of coastal erosion, permafrost melt, and changes in wildlife for their local economy.

Qapirangajuq: Inuit Knowledge and Climate Change also presents an earlier prototype of what is now developing in documentaries internationally in Indigenous filmmakers' growing reportage from communities on the front lines of climate change. It was included in the first film festival on Indigenous Voices on Climate Change, which took place in Copenhagen in 2009 and coincided with the COP15 climate change conference. The festival highlighted documentaries from Indigenous communities across the world that provide on-the-ground local evidence of the impacts of and adaptations to climate change, in the present tense. Since 2009, Indigenous voices in climate-themed film are starting to be featured more widely in both general film festivals around the world, such as the 2019 Berlin International Film Festival and Sundance Film Festival, and in environmental film festivals, such as the student-organized annual Environmental Film Festival at Yale University.

Qapirangajuq: Inuit Knowledge and Climate Change largely dispenses with a voice-over and instead allows both its female and male subjects to speak without intrusions, focusing on their intimate thoughts as they record their everyday lived experiences in their local community. The film begins with an observation by one of the elders: "Today it is impossible to correctly predict weather. . . . By observing the sky, weather was predicted. Cloud formations indicated wind directions. Now it is different." This is an ongoing deep concern expressed throughout the film in different ways. It voices the sense of disorientation they are feeling and living through now as climates and atmospheres, formerly important points of organization in their life, are rapidly changing, disrupting traditional knowledges that the community has relied on for centuries.

The film, though it was made in 2010, remains important in that it challenges how we perceive human interaction with the natural environment and privileges other ways of seeing and knowing besides the scientific.

Part of the challenge of the film for international audiences is finding out how important these other perspectives are and how Western ways of seeing and knowing often don't include traditional subsistence knowledge, which is important to the Inuit but often dismissed in global capitalism as no longer relevant.

The challenges the Inuit face from climate change are seen as part of a larger decolonizing project articulated by Kunuk that emphasizes the importance of maintaining Inuit cultural traditions and histories. His films explore the necessity of memory and postmemory in transmitting traumatic memories to a generation that did not experience genocidal practices directly. His postcolonial approach is evident throughout his critical practices in film and television. One of the most salient features of this film is that it presents the climate and the landscape through the lens of Native ancestral traditions. Such a perspective is discussed as a long historical tradition of observing the environment closely as a necessary skill for surviving off the land through hunting and fishing. This is a system called IQ (Inuit Qaujimajatuqangit) and is well known to the Inuit audiences of this film since the principles of IQ are integrated into its making; the film, indeed, regards the land not as a landscape but as an environment that conveys Inuit perspectives on a whole other system of knowing, feeling, and listening. Another value closely related to IQ is qanurtuuqatigiinniq, that is, the ability to adapt, innovate, and creatively find solutions to everyday problems (plate 15). The term references Inuit ingenious resourcefulness and the way they draw on their keen observation skills to bring the human and the nonhuman world closer together in a pan-Arctic world of places and species to create a dynamic new kind of art and film production. 10 The images in this film are populated with birds, seals, and polar bears to dramatize the importance for Inuit of the biodiversity of this ecosystem. It provides a distinctly different perspective at odds with notions of an empty "unpeopled landscape" dominating the older discourse on the Arctic discussed throughout the book.11

Kunuk and Mauro's documentary film serves an important role in transmitting vital traditional Inuit knowledge from one generation to the next and in keeping alive the memory of cultural practices from a functional past; it also transmits knowledge between different knowledge systems and across languages. Significantly, many of the interviewees do not see themselves as climate or environmental victims, with all the passive and depoliticizing connotations of *victim*, choosing instead to see themselves as historical survivors of cyclic colonial violence, which allows for a sense of political agency.¹²

Kunuk and Mauro's film aims to construct a mode of analysis of crisisshaped subjectivities amid the ongoingness of adaptation and improvisation. Sometimes, however, their views are directly at odds with Western perspectives, particularly when it comes to science. One of the more controversial insights for the filmmakers is how, for the Inuit elders, polar bears are not a recognizable symbol of anthropogenic climate change, as they are for many people around the globe who have a much more detached position that allows them to understand these animals simply in terms of their symbolic meaning—in a way that disregards the web of relations in which they exist. 13 Local and Indigenous people cannot afford such a privileged perspective, and thus polar bears have a quite different and far less transcendent meaning in this local context.14 For the Inuit elders interviewed in this film who cannot afford such distance, they are real living and breathing animals whose behavior, they argue, has been adversely affected by marine biologists. The interviewees consider the biologists' efforts to conserve polar bears to be in conflict with their local, traditional interests, including their right to determine appropriate human interactions with wildlife and their long-built knowledges and traditions for doing so. Their concern is not how to prevent the polar bear's eventual extinction (which is seen as a real possibility in other parts of the Arctic in the not-so-faraway future) but how to prevent the bears from becoming more aggressive and posing a greater threat to their community. Some of their concerns focus on what they see as the destructive technologies used by marine biologists in managing the bears: polar bears are drugged with tranquilizers, their hearing is affected by the overuse of helicopters to remove them, and the improper placement of the radio collars on their necks prevents them from reaching inside the seals' breathing holes to find fish and mammals to eat.

However, the local community is not simply antiscience: there is less disagreement between the local community and the scientists regarding the negative impacts of the modernization of the contemporary Arctic and coal and oil industries' destructiveness than one might anticipate. It is not by chance that Watt-Cloutier, an Indigenous activist who was nominated for the Nobel Prize and from 2002 to 2006, was the international chair of the Inuit Circumpolar Council (formerly the Inuit Circumpolar Conference); she and Mary Simon, a lifelong social justice advocate for Aboriginal rights and formerly the first Ambassador for Circumpolar Affairs at the Department of Foreign Affairs and International Trade for Canada, are featured in this discussion, since the filmmakers made a concerted effort to highlight the central role that Inuk women play in present Inuit life and

to explore the creative sagacity with which women have been adapting tradition in the contemporary Arctic. To mark this, the film takes the *ikuma* (women's seal-oil lamp) as its iconic trademark.

Watt-Cloutier discusses at length how the severe environmental neglect and damage from extreme industrialization in the Arctic are among the lasting legacies of colonialism. She further explains how this was exacerbated by persistent organic pollutants (POPs) and mercury traveling long distances to poison traditional food eaten raw in her community—such as meat and blubber from seals and whales that now contains high concentrations of pesticides and industrial pollutants (figure 3.1). This condition in which people living in the Arctic are the most contaminated, even though they live far away from the sources of these pollutants, is described by Marla Cone as "the Arctic paradox" in her 2005 book *Silent Snow: The Slow Poisoning of the Arctic*. ¹⁵ Watt-Cloutier specifically found that high POPs and mercury levels in Native mothers' breast milk caused irreversible neurological damage to infants, leading to reduced learning ability later in life, among other conditions (figure 3.2).

For Simon and Watt-Cloutier, an Indigenous future cannot survive in any straightforward manner under the current conditions until global carbon emissions and pollution from afar are radically reduced. To bring this about, they turned to activism: Watt-Cloutier served as a spokesperson for Arctic Indigenous peoples in the negotiation of the Stockholm Convention banning the manufacture and use of POPs, including DDT. More recently, she was the first to articulate environmental and climate change as a human rights issue when she launched the world's first international legal action on climate change: a petition, along with sixty-two Inuit hunters and elders from communities across Arctic Canada and Alaska, to the Inter-American Commission on Human Rights, alleging that unchecked emissions of greenhouse gases from the United States have violated Inuit cultural and environmental human rights as guaranteed by the 1948 American Declaration of the Rights and Duties of Man.

Both Watt-Cloutier and Simon understand speaking out on these subjects as a collective social practice paying homage to their ancestors who previously experienced the violence of modernity in their home territories, a consequence of the reach of colonialism and its genocidal practices. In the not-so-distant past, disease, Christian missionaries, the destruction of Indigenous religions, forced Western-style boarding schools, and restrictions on hunting, fishing, and other subsistence practices took a tremendous toll on Canadian Native societies—a period when they were not consulted in decisions by the territorial or state government. ¹⁶ Simon





Figure 3.1 • (top) Zacharias Kunuk and Ian Mauro, film still of Indigenous activist Sheila Watt-Cloutier: "The toxins were airborne, carried by clouds, the wind and they dropped on our land." From *Qapirangajuq:* Inuit Knowledge and Climate Change, 2010. Courtesy of the filmmakers.

Figure 3.2 • (bottom) Zacharias Kunuk and Ian Mauro, film still of a group of Indigenous people eating seal meat in the snow: "The food we eat is contaminated with mercury." From Qapirangajuq: Inuit Knowledge and Climate Change, 2010. Courtesy of the filmmakers.

comments in the film, "We cannot exist by purely making money. If we don't have our environment we cannot survive." ¹⁷ Mary Simon's work with Watt-Cloutier has reshaped the conception of Indigenous women's anticapitalist environmental activism located within, on the one hand, the Indigenous rights struggle and, on the other, political ecology, connecting specific local struggles against fossil fuel companies in the Canadian Arctic with the struggles at Standing Rock in the United States and the Australian outback. ¹⁸

Traumatic Landscapes, Transformed Selves: Ashlee Cunsolo Willox's Attutauniujuk Nunami/Lament for the Land

In contrast to Qapirangajuq: Inuit Knowledge and Climate Change, the Canadian documentary film Attutauniujuk Nunami/Lament for the Land (2014) is an English-language film made by a settler woman academic from southern Canada, Ashlee Cunsolo Willox, in collaboration with many Inuit and health professionals in the five communities of the Inuit Land Claim Settlement Region of Nunatsiavut, Labrador, Canada, which was formed in 2005 (figure 3.3). The film documents the psychological effects of ecological loss among the Inuit and is available on the internet. Cunsolo Willox writes, "It was meant to share Inuit voices as far and wide as possible, and it was made with Inuit, to tell Inuit stories, and to connect with other Northern Indigenous peoples."19 The documentary includes short clips from a set of interviews conducted with twenty-four Inuit residents. They are from remote coastal communities that are inaccessible except by plane or by boat since there are no paved roads in or out. In all of these areas, the Inuit of Nunatsiavut, Labrador, continue to rely on the land and the sea for their livelihood and culture and remain active hunters, fishers, and trappers.

The film documents the overwhelming sense of loss and distress that the residents are experiencing from accelerated global heating as air temperatures are already more than two to three degrees above normal. It portrays communities that are still strong and vibrant, but as the climate crisis worsens, the people interviewed are experiencing intense feelings of grief as they suffer climate-related losses of valued species, ecosystems, and land. All rely on the ice, the cold, and the snow for part of their livelihood, and on the land that connects family, kin, and the community. The film poses the problem of memory, particularly for the audience of Indigenous viewers, who have to process enormous losses, human distress,



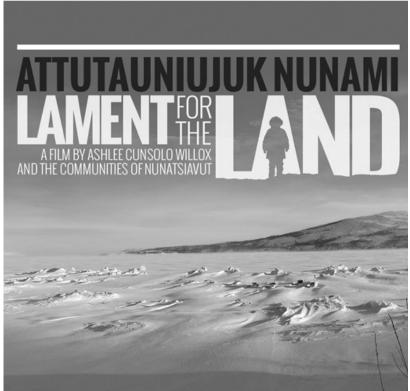


Figure 3.3 •
Poster for the
film Attutauniujuk
Nunami/Lament
for the Land, 2014
Courtesy of the
filmmaker, Ashlee
Cunsolo Willox, and
the communities of
Nunatsiavut.

and feelings associated with depending on essential ecosystems that are degrading over time.

In the first half of the film, the expansive landscape of sea, snow, and ice surrounding the Indigenous communities is presented at length with voice-overs expressing how the ecological spirit of the land is central to their philosophy and practice of life. Life for the older interviewees, they tell us, is an extension of living off the land. Myrtle Groves explains in *Attutauniujuk Nunami/Lament for the Land*, "Hunting, fishing and picking berries is our identity. It is just our way of life. It is how we grew up.... We are [now] worried that we are losing it." For her and her community, the land is both a home and a resource for living, where the human species is merely one aspect of a vibrant ecology.

As the climate crisis worsens, it is unthinkable be for them to be severed from the environment. The visuals shift from sweeping shots of the

outdoors to indoor settings where many people are being interviewed as they talk about how the change to the landscape is now more rapid and noticeable. "The snow melts so fast.... It is more difficult to go out on snowmobiles as the ice now is really dangerous." Their concern about not being able to predict the weather anymore is connected with a sense of serious loss and grief. They have trouble reconciling their past relationship to the land and the present and do not know how they or their children and grandchildren will cope in the future. Consequently, they have doubts about whether they can change with the times and live without their former relationship to the environment: "Knowing how to survive on the land gave me a sense of confidence and self-awareness.... [Now] we are not who we were anymore and are losing control over our life."

Since the focus is on everyday life, the film supplies images of the community members at work on the land and at home. It differs from *That* Which Once Was, the film I discuss next, not so much in its imagery as in the portrayal of "ecological grief" experienced by these communities when their members' bodies and minds lose their close relation to nature and to the land itself. The film includes some Inuit sharing; for example, someone who is not a mental health professional states, "Dependence on alcohol has gone through the roof.... There are more addictions, both alcohol and drugs." It makes visible the network of ordinary Inuit who have joined forces with researchers and mental health professionals to confront climate change and support Inuit well-being and flourishing. Previous research conducted in Nunatsiavut, Labrador, by the filmmaker and other colleagues indicates that changes in climate amplify previous traumas and lead to increased incidences of alcohol use, drug addiction, suicide, and domestic violence.²⁰ The film presents the health-care system in the Inuit territories as influenced by its colonial past, including the forced resettlements in response to the tuberculosis epidemic of the 1950s and the evacuation of Inuit to southern sanitoriums and residential schools. Anthropologist Lisa Stevenson in her 2014 book on this topic, Life Beside Itself: Imagining Care in the Canadian Arctic, explains that healthcare agencies up until the early 1980s didn't consider who the patient was or what their quality of life was, just whether the patient would be kept alive. 21 New public organizations that enabled the Inuit to be responsible for administering their own health services and municipal organizations only became possible after the Canadian government formally recognized Aboriginal rights in 1982.²² Attutauniujuk Nunami/Lament for the Land represents the significant changes in mental health-care policy instituted by the mostly Inuit mental health workers, who are grappling in nuanced

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ways with the identity and culture of the community as they face the current challenges from climate trauma.

For Cunsolo Willox, the climate emergency has altered the Inuit's ideas of themselves and diminished their sense of a future that has similar environmental conditions to the past. She turns to filmmaking in an attempt to grasp the psychological life of the Inuit and communicate the grief she sees as a natural response to ecological loss, one that may become more common worldwide as climate impacts worsen. The film leaves the future of memory in doubt, and while it presents the community as adrift, the mental health professionals she interviewed recognize the need for community, empathy, and caring in these precarious times.²³

Dystopian Futures and the Reconstruction of Memory: Kimi Takesue's *That Which Once Was*

Whereas the first two documentaries represent the accelerated violence of climate change that is happening in our time, the science fiction world created in Kimi Takesue's film *That Which Once Was* (2011) suggests the next stage of catastrophe, as it is about climate refugees in the future, on a scale that hasn't happened yet. It is an experimental dystopian film made for the US public television series Futurestates. Takesue is an awardwinning filmmaker working in documentary, narrative, and experimental genres. Her films have been screened at more than two hundred film festivals and museums internationally, including at Sundance, Locarno, New Directors/New Films, London's Institute of Contemporary Art, the Shanghai Museum of Contemporary Art, and the Museum of Modern Art (New York City) and have aired on PBS, IFC, Comcast, and the Sundance Channel. Though this film was made for television, it embodies the ambition of a more experimental cinema willing to take up some of the more challenging questions about memory and loss in the context of the climate crisis when memory now has to be reconstituted from absence.

That Which Once Was explores the ethics of an intimate style of film-making and is a meditation on the emotional experience of dislocation. It brings together two protagonists, one from the Arctic and the other from the Caribbean, who are now climate migrants, literally displaced from their countries of origin to live in an institutional context supervised by social workers in a US urban center. Set in 2032, the film raises interesting questions about human memory at a time when Takesue imagines that many of the world's most vulnerable people will be displaced. In the first half of the film, there is little sense of positive, secure human possibilities.

The film begins with a hazy out-of-focus image of ocean waves crashing on a beach somewhere in the Caribbean. This is followed by a soothing song in Spanish in the background, as children from the Caribbean calmly play with large balloons in an urban classroom in the United States (figure 3.4).

The scene appears almost idyllic until the camera shifts and we notice a close-up of the numbers on the arms of each child, which resemble the inmate identification numbers tattooed onto prisoners at German concentration camps in Europe in the 1940s. These tattoos remind us of the tremendous scale of the prisoner population then and now. This is reinforced when we hear on the radio news that "a hurricane swept over Bangladesh killing tens of thousands and leaving many more homeless," and we see an eight-year-old boy sitting alone absorbing this disturbing news as he plays nervously with an old fish decoy—one of his few remaining possessions from home. The boy, however, becomes increasingly agitated and seems to be reliving some prior traumatic event triggered by both the distressing news report and the strong breeze from a large, dirty fan nearby that the camera presents in a detailed close-up. When the boy is calmer, one of the female mental health practitioners sits beside him and gently asks, "What do you remember?" He replies, "Nothing." She then asks, "Tell us about home. What was it like?" He responds, "I don't remember."

Memory in this film first functions as a disabling force because of the huge contrast between what was and what is now and because of how traumatic loss overwhelms the boy. The eight-year-old is an almost ghostlike human being who is at first diminished as he has lost all cultural moorings. As the film evolves, the child takes more of an interest in his life when he eventually befriends an older Indigenous man, played by Natar Ungalaaq, who is a climate refugee himself, displaced from Nunavut, Canada. But unlike the young boy, who has lost all memory, the older man sculpts in ice and retrieves what he has lost, remembering it through making his art. His ice sculptures of polar bear cubs capture one of the subtle points of the experimental film (figure 3.5): for most ordinary people caught up in large public climate disasters, the presence of the people is constituted from the important fragments of memory they can find and hold on to. In this case, the older Indigenous refugee takes up the traditional work of storytelling in visual form and uses the dynamic potential of ice sculpture to create a sense of lively presence from what is absent. This is what Indigenous literary theorist Gerald Vizenor calls survivance. Vizenor uses the term to explain how Native literary and linguistic traditions continue to flourish in contemporary media despite and in response to colonialism's systemic suppression of oral culture. For Vizenor, "Native survivance is



Figure 3.4 • Kimi Takesue, film still of children playing with balloons from *That Which Once Was*, 2011. Photograph by Richard Beenen. Courtesy of the filmmaker.



Figure 3.5 • Kimi Takesue, film still of Indigenous man (played by Natar Ungalaaq) carving ice, from *That Which Once Was*, 2011. Photograph by Richard Beenen. Courtesy of the filmmaker.

an active sense of presence over historical absence.... Native survivance is a continuance of stories."²⁴ The ice sculpture would be, in Vizenor's terms, "an aesthetics of survivance" that enables the Indigenous ice sculptor to revive fragile shared oral traditions and preserve the collective stories and memories of his past in his equally ephemeral and precarious art.

The boy is able to establish trust and share a form of his own memories with the older man in turn only once he understands the importance of his own ice sculptures. This is established when he posts above his bed a photograph of an iceberg given to him by the Inuk man, which he places next to the old fish decoy, one of the only possessions given to him by his deceased father. Only near the end of the film are the past and present brought together through these lost objects. At that point, the boy reestablishes his connection to both the natural and human world and begins recovering his lost memories to move toward renewal. Throughout the film intergenerational and cross-cultural friendships are shown as

. 1 0 critical to Indigenous survivance in the future in an increasingly precarious warming world.

Creating an Alternative Cinematic Language for Documenting Precarity

In *Attutauniujuk Nunami/Lament for the Land*, ecological grief is felt in relation to experienced or anticipated ecological losses. In *That Which Once Was*, survivance and resilience are stressed, and the characters also deal with an experience of extreme alienation, confined within an institutional space after being displaced entirely from home. *That Which Once Was* ends with the insistence that the community will adapt, and this resonates with *Attutauniujuk Nunami/Lament for the Land* in showing the need for community and empathy.

All three films reveal new perspectives from filmmakers and their partners who are making connections among Indigenous histories, representational practices, and the growing environmental threats in the modern Arctic. In doing so, these films create an alternative visual archive and cinematic language formed by women and Indigenous filmmakers, representing disrupted Inuit traditions as their life is rapidly changing as a result of accelerated global warming. Through eyewitness testimony Qapirangajuq: Inuit Knowledge and Climate Change and Attutauniujuk Nunami/Lament for the Land give voice to Inuit populations, who challenge received knowledge imposed by the Canadian (non-Arctic) South and who put other forms of observation and partial knowledge into dialogue with dominant and marginalized accounts of climate change in the Arctic. The two documentaries differ in that the first, by Zacharias Kunuk and Ian Mauro, is much more political and activist, as it repeatedly makes clear that the human species has caused climate change and that the ensuing catastrophe is an extension of the ways that social and ecological systems have already been disrupted historically through the violent processes of colonialism. While the film makes visible previously unheard suffering, the solution does not depend on psychological recovery alone: this film emphasizes political action toward systemic change. Attutauniujuk Nunami/Lament for the Land, by contrast, insists on the importance of psychological counseling, implying that there is a way out and that humans can survive in these transformed circumstances despite all, if they can hold on to their cultural identities and receive the care they need from community members and mental health practitioners.

All three films are attuned to the changing physical, cultural, and psychic reality of the Arctic. Social media are seen in *Qapirangajuq: Inuit*

Knowledge and Climate Change and Attutauniujuk Nunami/Lament for the Land as an essential form for networking and transmitting vital knowledge between different knowledge systems and across languages and thus as instrumental in helping the Inuit community maintain itself amid an impossible but still livable situation through resiliency and adaptation. Qapirangajuq: Inuit Knowledge and Climate Change is especially important in reflecting back on memory, in terms of how its community is experiencing present climate change and how it has survived past dispossession and disaster caused by colonialism. That Which Once Was raises important questions about the future for Indigenous memory as people living in some of the more vulnerable parts of the world are negatively impacted by sealevel rise. The film distinguishes between the construction of an eternal image of the past, "that which once was," and the way the experience of the past can produce something unique through the conditions of the present that could create, in Gerald Vizenor's terms, "an active sense of native presence over absence." ²⁵ Kimi Takesue follows both Vizenor's and Walter Benjamin's thinking in showing that the past does not exist independently of the present as a force of nature but relationally through an engagement with the material elements of the past as they exist in the present. In dark times, all three films conjure the hope and difficulty in how art and film can be used for thinking about environmental and climate breakdown and how art's impact on cultural memory can contribute to cross-cultural solidarity and to the creation of new forms of community.²⁶



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WHAT IS UNSEEN
AND MISSING
IN THE
CIRCUMPOLAR
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ART AND

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COLLABORATIVE

PERSPECTIVES

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Lisa E. Bloom and Elena Glasberg

I am fascinated by how we imagine the Northern land and its seas. What is land? "It's just home. To us, it's home," says Robert Thompson, my Inupiat friend from Kaktovik. Alaska.

Subhankar Banerjee, "Land-as-Home versus Environmental and Political Imperialism in the American North," 2008

I didn't see any igloos in my life.... Only Skidoo, Honda, the house, things inside the house.

Annie Pootoogook, quoted in Evelyn C. White, "Cutting the Ice," 2018

In this chapter and the next, Elena Glasberg and I take our lead from major developments in artistic practice and a growing body of eco-arts criticism that addresses Indigenous and collaborative approaches to art and visual culture around the problematics of visibility and representation

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of environmental deterioration, particularly as they intersect with the modes of state and corporate power. We are primarily interested in how artists from the past two decades who collaborate with or are themselves from Indigenous communities produce and analyze what we broadly call data—facts, material things, images, and their practices of production and circulation—in order to intervene in official state and corporate narratives, and images of environmental degradation and climate change.¹ Such artists' approaches to recording and otherwise engaging climate phenomena go beyond representing, illustrating, and describing or even expressing emotional states around the changing climate. In some cases, such artists pursue data collection themselves and even develop their own alternate methods of measurement, pushing to question the very constitution, production, analysis, and circulation of climate discourse (see chapter 5). They engage with a problem that goes beyond the suppression of specific images or data, to the very redefinition of what constitutes evidence of changes in the ice, land, and animals of the polar regions.

The work of such contemporary artists from the past two decades discussed in this chapter—Subhankar Banerjee, Lillian Ball, Andrea Bowers, and the late Annie Pootoogook—does more than comment on official reports and accounts of the climate. Instead, their work points to unprecedented material-environmental conditions not picked up by official state or scientific discourse. In the case of Banerjee, who worked with Indigenous activist communities to make his 2003 photography exhibition at the Smithsonian Institution's National Museum of Natural History, the focus is both on his various artistic collaborations and on the bitter Senate controversy that ensued when his photographs of the Arctic National Wildlife Refuge were deliberately censored and erased. Ball demonstrates environmental-societal entanglements, putting viewers through what it feels like to some of the Sámi she interviewed to live in a country where the glaciers are disappearing faster than even Arctic peoples have the capacity to fully recognize. Bowers's art is less politically notorious than Banerjee's, but her representation of oil spills in the Arctic that can never be completely cleaned up has helped ensure that the Exxon Valdez oil spill of 1989 will be historicized as a turning point in the management of environmental disaster. Her art, made in collaboration with Western activists and the Gwich'in Steering Committee, not only produces visual data but creates alternative narratives connecting environmental protests against oil companies in Nigeria and Alaska. Whereas Banerjee and Bowers are artist-activists who focus on social justice while addressing

the environmental transformations of our time, Annie Pootoogook, an Indigenous artist from Nunavut, Canada, shifts to a more personal frame to represent the interconnections of the environmental and social changes that are disproportionately and negatively affecting Arctic livelihoods. But her artwork is also about a group of Indigenous people under threat in the Arctic, and her response to this predicament is not presented in a linear scientific manner but through indirection and even perversity, suggesting much more about the nature of Indigenous resilience.

Countervisualizations: Subhankar Banerjee's Photographs

Subhankar Banerjee is a well-known Indian American photographer, scholar, and activist who is one of the first artists and writers on the Alaskan Arctic to develop a form of environmentalist art photography in collaboration with Indigenous communities; he reimagines what counts as data in the context of Big Oil and the resurgence of territorial empire. He is a professor and endowed chair in the Department of Art and founder and director of the Species in Peril project and the Center for Environmental Arts and Humanities at the University of New Mexico. His ongoing collaborative work also connects the "slow violence" of environmental impacts discussed throughout this book to what he calls "the necessarily 'long environmentalism' of activist directed art that focuses on justice oriented aesthetic practices that are concerned with solutions and reparations over time."²

With the ongoing scramble for oil and gas in the Alaskan Arctic and a fierce legal battle in August 2020 over the fate of the resources lying at and below the surface in the Arctic National Wildlife Refuge (ANWR), Banerjee's earlier photography is especially relevant to reconsider. Banerjee's work came to public attention when his early photographs from ANWR, the largest remaining stretch of wilderness in the United States, were first used as evidence in a bitterly contested Senate debate in March 2003 over whether it should be opened for oil drilling. Reflecting back on his photographic work from this period, Banerjee stated in an interview with Alexandra Tursi, "Most people think of the Arctic as just snow and ice, and ice and snow. It's far more than that. There is a remarkable diversity of color. This became a motif as a means to understand ecology as well as a motive to challenge the snow/ice idea. It is very subtle and simple—brown and blue, grey and blue. The color guides you to look at the land differently."5

Banerjee's use of color photography to portray four seasons of life on the refuge records both endangered life and the changing temporality of

the seasons, particularly around the area where drilling would take place (plates 16 and 17). His work reframed the way we visualize the Arctic over a twelve-month period and challenged the human-centered imperial depiction of the region as a frozen wasteland year-round put forth by then senator Frank Murkowski (also the former governor of Alaska). In March 2002, in a moment of Senate theatrics, Murkowski had held up a flat white poster board and said, "This is a picture of the Refuge as it exists for about nine months of the year. This is what it looks like. It's flat, it's unattractive." 6 On March 12, 2003, Secretary of the Interior Gail A. Norton similarly described the Arctic coastal plain as if it were an object of conceptual art, "a flat white nothingness." In 2005, Senator Ted Stevens of Alaska, the chief proponent of drilling, in a feature on the PBS NewsHour with Jim Lehrer, went so far as to proclaim his display of a large blank sheet of white paper as a more accurate depiction of the refuge than Banerjee's photographs, emphasizing the region's "emptiness" and thus availability for development. 8 At that time, Senate opponents of drilling, such as then senator Barbara Boxer (D-CA), successfully disproved that the refuge was simply a white nothingness by using Banerjee's large-format color photographs of calving caribous, migrating birds, snow geese with chicks, and frolicking polar bears living in and migrating through the refuge to illustrate the irreparable damage that would occur to a region that has been called America's Serengeti were it to be opened to drilling. As a consequence, the vote to open the refuge to drilling failed, fifty-two to forty-eight.9

Banerjee's photographs from this fourteen-month period (2001–2003) shared the basic production modes of science: direct observation, surveying and mapping, data collection and documentation, and, finally, visual display to connect the Arctic to both the lives of the Indigenous people who live nearby and to the caribou, birds, and beluga whales in the region. Viewers of Banerjee's photographs can track with great precision the caribou migration as if they were scientists making observations in the field, or they can count the beluga whales or the types and number of birds. Unlike most landscape photographers, who sojourn through sites to capture fugitive images, Banerjee's conservationist ethics and training as a scientific field observer show through in his commitment to spend lengthy periods living in the Alaskan Arctic taking photographs in collaboration with Indigenous people in what he refers to as the "land as home." ¹⁰

Banerjee's interdisciplinary eye and activist devotion to truth may well stem from his scientific background in physics, but his pursuit of art draws from cultural and human ecology that goes beyond scientific

WHAT IS UNSEEN AND MISSING

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documentation. His photographs remind us of the necessary connections and collaborations across disciplines, including his work with Alaskan Indigenous communities and the way artist-activists like him can work between art and science. 11 Though at first glance his color photographs of Alaska invite comparison to those of Ansel Adams, a founder of modern landscape photography, Banerjee undermines the sense of stability and majestic permanence suggested in Adams's photographs of Yosemite by deliberately photographing several ecologically and culturally significant areas of the US Arctic targeted for oil, natural gas, and coal development. And while much of Banerjee's photography of migratory patterns imposes an aerial perspective that also seems to quote Adams, his photographs often erase all ideas of a horizon, disorienting rather than settling the viewer.

When one stands before one of Banerjee's sixty-by-seventy-two-inch color prints, it takes a moment to reorient oneself and recognize the seemingly abstract patterns of color and texture as real caribou, birds, and whales and to understand that the absorbing and detailed visual drama playing out is a mobile civilization being threatened by the global need for inexpensive fossil fuels (plates 16 and 17). His version of the highresolution aerial view, rather than promoting a human-centered imperial sense of ownership over a distanced landscape, shifts the purpose of his images from documenting a landscape that seems available for the taking—whether as scopic pleasure or as colonial Arctic waste sites to be developed for extraction—to reimagining what counts as data through a form of environmentalist art photography.

Tracking the signs of migration across the large color print, the viewer partly takes on the nonhuman agency of the aerial view that is simultaneously very detailed. Looking at the photograph is almost like looking from a great height through powerful binoculars, an act of concentration that induces a vertiginous disorientation as well as an anxious connection to the fragile and delicate movements of the herd seen at this map-like distance that is also intimate and close. Banerjee's own cohabitation pays attention to the symbiotic relationship between human and nonhuman: the Gwich'in people's traditional subsistence and cultural practices are connected to their reliance on the caribou herd's annual migration from northern Yukon to their calving grounds on the coastal plain in the Arctic refuge. 12 This focus contrasts starkly with Adams's photographs, whose sublime landscapes were tied to histories of Western imperialism and manifest destiny in their nationalist framing of Yosemite as wilderness. Adams, like Carleton Watkins before him in the late nineteenth century,

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obscured any history of the Indigenous inhabitants who were forcibly removed during the park's founding. 13

The unusual move toward censorship made by editing the captions of Banerjee's photographs from the ANWR at the Smithsonian in 2003 suggests the power that Big Oil had in the United States during the administration of George W. Bush; artwork was as vulnerable to censorship as reports that ran counter to the administration's interests. The late art critic Ingrid Sischy argued that despite the seeming innocuousness of nature photography and its apparent realism as an artistic genre, what came to pass with Banerjee's exhibition for her was even more frightening than the more famous episode in the early 1990s when Senator Jesse Helms led the fight on Capitol Hill against the National Endowment for the Arts and its support of Robert Mapplethorpe's photographic explorations of homosexuality and Andres Serrano's visual critique of the Catholic Church. 14 Sischy goes on to detail that once Banerjee's photographs became part of the Senate debate on the ANWR, his exhibition was "essentially turned into a circus and became a spectacle of institutional double-talk, foot-in-mouth slipups, and nonsensical, detrimental changes."15 Publicity was halted and the exhibition was moved to a smaller, out-of-the-way venue. But probably the most troubling change was the way the photographs' meanings were deliberately altered through the editing of Banerjee's captions. 16 For example, one of Banerjee's original captions for a close-up image of a sandpiper read, "This species, a long-distance traveler, migrates each year from Argentina" (figure 4.1). Stripping away the reference to the migration pattern, the censored caption's description of "a buff-breasted sandpiper" artificially highlighted the photograph's realist aesthetics. Further, the edited captions removed the reason the sandpiper relied on the Arctic refuge and required protection of its migratory path. It narrowed attention to the merely taxonomic aspects of the aerial panoramas of animal migration, effectively curtailing Banerjee's integration of visual data, aesthetics, and political concern for the full life cycle of animals who migrate to wilderness areas beyond the frame of the photo—and beyond the artificially fixed effects of the Smithsonian's framing.

For the Smithsonian, a static taxonomic aesthetic worked to inhibit consideration of the kinds of dynamic ecological connections that are the subject of environmental science and contribute to the significance of the Arctic refuge as a place where birds and animals migrate annually. Banerjee used a telescopic lens at an angle positioned above the bird. Its wings are spread—whether alighting or taking off is not clear—but the bird remains in contact with the ground. Caught between flight and fight,



Figure 4.1 •
Subhankar Banerjee, Sandpiper,
photograph, 2002.
Close-up taken at
the Arctic National
Wildlife Refuge.
Courtesy of the
artist.

the sandpiper might be standing its ground or flying into attack, or just flying off for its own purposes. Banerjee's telephoto lens makes a pointed effort to observe the ephemeral beauty of a single creature in movement, while still being careful to provide the sandpiper with the distance from human intervention it requires for its uninterrupted display. And yet in isolating this one sandpiper from its flock, the photo also works within John Audubon's tradition of turning life into a scientific specimen, as in his major work, a colorplate book entitled *The Birds of America* (1827–1839).

Banerjee's original caption is about the actual life of the birds. He intended to offer not a taxonomic framing of natural history, as in Audubon's prints, but more context on the sandpiper's behavior and thus to lead viewers away from a narrow appreciation of the sandpiper's glorious appearance. That this sandpiper is on the move, migrating to the refuge and other locations within an interconnected world, was denied by the Smithsonian's imposed nationalist framing. Senator Richard J. Durbin (D-IL), incensed by the political pressure put on this exhibition by his Republican colleagues, said publicly, "I want the world to see the caption of the little bird that the Smithsonian says is too controversial for the public.... It's a sad day when the Smithsonian, the keeper of our national treasures, is so fearful." Fortunately, the public was not as fear driven

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as the Smithsonian's administrators. The attention brought by the controversy led the uncensored version of the exhibition to travel to sixteen museums within the United States; since then, Banerjee's work has been exhibited in more than fifty museums around the world.

In Banerjee's ongoing attempts to reframe the Arctic landscape, he is interested in representing the worsening labor and living conditions of Indigenous people in the contemporary Arctic who continue to engage in subsistence harvest practices, which have become more onerous than before owing to environmental pollution and climate change. From 2006 to 2007, in contrast to his earlier work, which used an aerial perspective to emphasize the nonhuman agency of wildlife, Banerjee photographed up close what he calls the "back-breaking labor" of Indigenous Gwich'in Athabascan and Iñupiat people of Alaska, with whom he has developed long-term relationships. For this series he is particularly influenced by the nineteenth-century French Barbizon school painter Jean-François Millet, who was a farmworker himself and is noted for his scenes of peasant farmers. While Millet was walking the fields around Barbizon his work included paintings of gleaning, the centuries-old right of poor women and children to remove the bits of grain left in in the fields following the harvest.

Drawing from Millet's most well-known painting, *The Gleaners* (1857) (plate 18), Banerjee seeks to convey the struggle to survive that takes place in the Alaskan Arctic and the unending, exhausting work involved in contemporary Indigenous subsistence practices of hunting. Millet would serve as an important inspiration for the many photographs of caribou hunting that Banerjee took in 2006–2007, such as *Gwich'in and the Caribou* (plate 19), a photograph taken at Arctic Village, Alaska, in which a Gwich'in male hunter, Jimmy John, is bent over, much like the women in Millet's *The Gleaners*, to carve the meat of a recently hunted caribou in the snow. For Banerjee, the series of photographs have special meaning since they represent contemporary food practices of hunting and foraging in the context of the ongoing threat global warming poses to Arctic ecosystems and the ways land-based Indigenous life is made vulnerable by the simultaneous and entangled effects of colonialism's legacies and extractive capitalism. ¹⁹

Banerjee's photographs overall create data about the vulnerable situation of the Gwich'in hunters who hunt, trap, forage, or travel on the land and underscore the serious consequences that rapid warming and possible oil drilling on the coastal plain of the Arctic National Wildlife Refuge, where the caribou have their calves, may have for the hunters' overall way

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of life, especially given the special importance of the Porcupine caribou to the Gwich'in people. As Sarah James, a Gwich'in elder and cultural activist who lives in Arctic Village, Alaska, writes, "Caribou are not just what we eat; they are who we are. They are in our stories and songs and the whole way we see the world. Caribou are our life. Without caribous we wouldn't exist." Writing in 2013, James recalls a meeting in Arctic Village in June 1988 when the Gwich'in Steering Committee was formed and chiefs from surrounding villages made a pact and agreed unanimously that they would speak with one voice against oil and gas development in the birthing and nursing ground of the Porcupine River caribou herd. 21

Banerjee's other photographs of the Arctic from this period also explore the complex bonds between Indigenous communities and the ongoing threats global warming poses to Arctic ecosystems (see chapter 3). When Banerjee first photographed in the Arctic National Wildlife Refuge in 2001–2003, the risk of a sudden release of methane from the Arctic permafrost was considered quite low. But atmospheric methane levels have risen dramatically in recent years, and new research suggests the amount of gas being released by Arctic lakes could possibly double.²² As permafrost thaws, these meltwater lakes connect with the groundwater system, leading to the drying up of streams, lakes, and wetlands, which impacts local communities.²³ When Banerjee returned to Alaska in 2006 to photograph the consequences of climate change in the Alaskan Arctic, he took the photograph titled Exposed Coffin (2006) (figure 4.2), a fairly deadpan image of a weather-beaten wooden coffin released from the thawing Arctic amid a rocky landscape along the Beaufort Sea coast. The color film captures the dark, almost-hurricane-like thickness of the daylight, adding to the disturbing tone of the title. Banerjee's choice of title is pointedly descriptive, as deadpan as the photo itself. Disturbing as the image is, the photo is actually exposing the devastating loss of Arctic permafrost, ground that had been mostly frozen for half a million years or more and is now melting in many places across the Arctic at accelerating rates. But even more to the point, the inadvertent disinterment has exposed the links between the earlier, almost quaint phase of the first oil rush in the Arctic (commercial whaling, as the body disinterred is thought to be that of an eighteenth-century whaler) and the industrial drilling and extraction now practiced since the 1970s.²⁴ But the photograph is less about the immediately visible coffin containing the bones of a lone whaler and more about the future threat of human extinction that has more inequality and violence associated with it than the first oil rush and that is more distant and more difficult to picture but every bit as real.



Lillian Ball: New Media, Missing Ice

Lillian Ball is a New York-based ecological artist and activist with a multidisciplinary background in ethnographic film, anthropology, and sculpture who has worked for decades on water issues. In her 2007 project 66 Degrees, 32 North, 50 Years, Ball also sees the Arctic as a key site in the negotiation of global environmental politics. She "documents" and uses the actual scientific research about melting to underscore the fragility and ephemeral quality of ice by projecting her morph map animation onto actual carved ice that will inevitably disappear (plate 20). Ball's title, 66 Degrees, 32 North, 50 Years, references the latitude of the Arctic Circle where ice is rapidly disappearing. A square metal pool located beneath the melting ice catches the meltwater

Figure 4.2 • Subhankar Banerjee, Exposed Coffin, photograph, 2006. The weather-beaten coffin was released by the thawing Arctic from a rocky landscape along the Beaufort Sea coast in Alaska.

Courtesy of the artist.

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which in turn accelerates the disappearance of the ice, mimicking how the process works in the Arctic. Like Banerjee, she is also compiling data and analyzing it—in her case, specifically data on the dwindling of the Arctic ice cap from 1990 to 2040. However, Ball moves away from traditional photography and its tropes of capture, development, and display and instead draws from new media technologies less attached to material permanence and linear time frames.

When Ball made her project in Jukkasjärvi, Sweden, over a thousand satellite photographs offering further evidence that the ice in the Arctic is disappearing were being withheld from the public by the Bush administration. ²⁵ These images, not released to the general public until late July 2009 by the administration of Barack Obama, provide troubling evidence of how "more than a million square kilometers of sea ice . . . were missing in the summer of 2007 compared with the previous year."26 Ball values Indigenous Sámi knowledge, not least because their way of life as herders who travel great distances with reindeer over the year is under severe strain because of global warming, which they witness directly through the severe and more rapidly shifting, unstable weather. 27 According to recent studies, reindeer-herding Sámi are beginning to face the limits of resilience discussed in chapter 3. One study concludes that "some adaptive strategies are discordant with the traditional life of reindeer herding, and there is fear among the Sámi of being the last generation practicing traditional reindeer herding."28 While the Swedish government does not dispute the evidence of warming, Ball does not see Western scientific knowledge as inherently more reliable or valuable than the intimate witness accounts of the Sámi people, and so she includes the Sámi's own data rather than merely seeing them as data points on a map.

Ball's project is not just about the science of warming; it is about what warming means for the Sámi way of life in the Arctic and for the rest of us on this planet. As time rolls on, the prospect of climate catastrophe looms larger, and the problem of how to avert it becomes even more pressing. A new report is expected in 2022, but the most recent one says that if we take action on emissions soon, immediately instituting all of the commitments made in the Paris Accords, we are likely to get only 3.2 degrees centigrade of warming, or about three times as much warming as the planet has already seen since the beginning of industrialization. Even with an accelerated cessation of carbon emissions, that amount of warming is easily possible by the end of the century.

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Andrea Bowers: Reactivating Data

Andrea Bowers is an internationally known feminist environmental artist who is a senior lecturer at the Otis College of Art in Los Angeles. She works in a variety of media, including video, drawing, and installation, and her ecological artwork, like Banerjee's, counters the way state or corporate information deliberately produces incomplete knowledge or data to disguise environmental degradation. She shares concerns with Ball and works internationally; her 2009 mixed-media show Mercy Mercy Me at the Andrew Kreps Gallery in New York City connects the unlikely alliances among climate activists and white and Indigenous Gwich'in Alaskans in their struggles against oil corporations' development plans twenty years after the Exxon Valdez oil spill and Nigerians' resistance to their government's collusion with Shell Oil in the 1990s. But Bowers also draws inspiration from the international politics of 1960s protest art. The title of her 2009 gallery show echoes Marvin Gaye's 1971 sorrowful pop anthem subtitled "The Ecology," one of popular music's most well-known environmental anthems.²⁹ Breaking down the traditional barrier between art worlds and the larger society, Bowers links the opening reception for *Mercy Mercy Me* to an international day of action proposed by the climate activist organization 350.org.

The idea for the exhibition began with a 2009 summer trip that Bowers took with a small group of environmental activists from 350.org and Tck Tck Tck to a climate summit that brought together Indigenous groups and climate activists at Arctic Village in northern Alaska, located on the southern edge of the Arctic National Wildlife Refuge. During the trip the activists and the Gwich'in Steering Committee talked about both oil development and the way it was causing Arctic warming, and the effects of permafrost melting on their communities.³⁰ Integrating Indigenous, ecofeminist, gallery, craft, and local and global modes of image making and display, Bowers interviewed members of the Gwich'in Steering Committee and incorporated their work in her own drawings, videos she created herself or found and repurposed, a collaborative beading produced with seven women from an Alaskan beading circle, and the redisplay of a protest banner from the time of the Exxon Valdez oil spill (figure 4.3). 31 Although the Exxon Valdez protest produced a legal settlement as a conclusion to a political struggle, Bowers's weaving in of the story of both Indigenous and Western activism, told in part through a series of videos she produced, focuses on struggles against oil corporations' development plans in the aftermath of the 1989 oil spill.³² Twenty years later, the problems of oil,

Figure 4.3 • Installation view of a worn banner that originally hung on a trawler in Kachemak Bay, Alaska, in 1989 to protest the Exxon Valdez oil spill. Made by Mavis Miller and loaned for Andrea Bowers's exhibition Mercy Mercy Me at the Andrew Kreps Gallery, New York, 2009, which fell on the twenty-year anniversary of the oil spill. Courtesy of Andrea Bowers.



gas, and coal development have only worsened for the residents of the Arctic still impacted by the earlier oil spill, as they are now experiencing unprecedented Arctic warming due to climate change caused by that development. Some of Bowers's videos explore the tensions in how the 350. org activists, an unlikely ally, collaborate with the Gwich'in as they work side by side on these pressing issues.

The banner in the exhibit was originally displayed as part of a protest on a trawler in the poisoned waters off of Homer, Alaska, during the 1989 oil spill. It is painted on black oilcloth, a fabric traditionally used on boats, and is frayed and worn with use, time, and probably rough storage; the banner has been rescued and placed in this new setting but not materially restored. The visibly worn and battered banner features the slogan "Alaskans Still Fighting," words that encircle a hand-painted rendering of the well-known blue-marble Earth icon. But this Earth differs significantly from the mechanically reproduced, even banal versions so common throughout visual culture. Made by Mavis Muller, the banner represents

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the local protests against the *Exxon Valdez* accident and its incomplete and inadequate cleanup as well as the long-term environmental consequences subsequently borne by both Alaska's white and Indigenous people.³³

The power of the tattered protest banner stems in part from the amateurish quality of its re-creation of the blue-marble Earth icon—and thus its rescue of the icon from decades of overslick marketing—as well as from the material fraying of the banner itself. The damage it has sustained—the material holes and incompleteness, along with the paradox of its memorializing an ephemeral or "dated" event—stands in for the violence of an incomplete cleanup forgotten by the very world so hopefully evoked by the icon.

Bowers's collaboration with an Alaskan beading circle that included Julie Anderson, Syndee Crice, Kat, Karen E. Palmer, C. M. Pico, Michele Rowe, and SnoCat to make the beadwork banner *Ken Saro-Wiwa's Last Words* (plate 21) breaks down the distinction between art and activism. Her work creates new kinds of data and stories through collaborations that draw on Indigenous and Western practices of crafting and close observation or reading of the land while gathering under the banner of a refunctioned blue-marble Earth. Although seemingly addressed by progressive law and improved environmental technologies, the ongoing effects of the spill remain unassimilable from the point of view of the people who must live with the damage.

In Ken Saro-Wiwa's Last Words, Bowers enacts in her art practice the visual logic of the connected, integrated Earth, stringing together Alaskan Indigenous and white histories of resistance and the similar struggles of the Nigerian people against Shell Oil. The banner was created in collaboration with Gwich'in and white artists, and its words refer to the famous speech of the Nigerian writer and environmental activist Ken Saro-Wiwa, who led a nonviolent campaign against the degradation of land and abuse of his people by Shell. Saro-Wiwa was executed in 1995 (along with eight other activists - Saturday Dobee, Nordu Eawo, Daniel Gbooko, Paul Levera, Felix Nuanta, Baribor Bera, Barinem Kiobel, and John Kpune, known as the Ogoni Nine) by the colonialist Nigerian government for resisting Shell Oil's strong-arm tactics in maintaining its economic empire.³⁴ The outcome of the legal case against Shell and the company's payment of \$1.5 billion in reparations further open up questions around the status and use of legal testimony as evidence and reveal how, over the time span of a long struggle, the regimes of the state and the oil companies who devastate Indigenous lands can work both ways—to kill and to repair.

The keeping alive of the protests of past eras—through the repurposing of a banner and icon of the ecological movement and the capturing

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of lost or unheard protest words in beadwork—suggests that contemporary art can find ways to respond to both Banerjee's notion of "long environmentalism" and Rob Nixon's "slow violence." Bowers's exhibit and its banners do more than rework and string together images of suppressed resistance to oil conglomerates. In rememorializing the struggle over the Exxon Valdez oil spill and its near-forgotten and incomplete cleanup from the point of view of the people who must live with the damage, the exhibit dirties the data and refuses the false cleansing of amnesia and denial. Ken Saro-Wiwa's powerful last words, "Lord take my soul but the struggle continues," were never heard by the military tribunal that executed him. Yet, in the form of handmade beadwork, the spelled out words resonate with the work of global environmental and Indigenous activists as it connects each tiny bead and each fragmented step across the time frames in which both environmental damage—but also cleanup—take place.³⁵

Missing Annie Pootoogook

The late Annie Pootoogook (1969-2016) was an internationally known Canadian Inuk artist who was the granddaughter of the celebrated graphic artist Pitseolak Ashoona (1904-1983) and the daughter of the respected graphic artist and throat singer Napachie Pootoogook (1938-2002) and the printmaker and sculptor Eegyvudiluk Pootoogook (1931-2000). She was initially trained in the same Inuit-led art cooperative as her parents, the West Baffin Eskimo Co-operative in Kinngait, Dorset Island, her home. Beginning in 2001, she worked as an independent artist in Ottawa and Toronto. She had her first major exhibition at Toronto's Power Plant in 2006, and in that same year was the subject of a documentary and won the prestigious \$50,000 Sobey Canadian Art Award. 36 Afterward, she was invited to exhibit at the Montreal Biennale and at Documenta 12 in Kassel, Germany; since then her work has been exhibited widely in galleries and museums in Canada and around the world. Despite her successful art career, she died alone and in poverty in Ottawa in 2016, suffering from alcoholism and abuse. Her cause of death is unknown.

Pootoogook's choice to select and frame her art through her own experience of daily life, including depictions of domestic abuse, put her at odds with the mainstream world of marketable Inuit art featuring scenes of igloos, dancing polar bears, and happy Inuit mothers and children.³⁷ On the surface, Pootoogook's drawings, which focus on her own hard realities, seem to lack the markers of local Arctic specificity that outsiders expect. But as she explained about her upbringing, "I didn't see any igloos

in my life.... Only Skidoo, Honda, the house, things inside the house."³⁸ Paradoxically, Pootoogook's nonconformity with mainstream Inuit art was one factor in her uptake into a more global art market beyond the West Baffin Eskimo Co-operative System that developed since the 1950s. As a result, she spent her career profoundly caught between traditions of art, Canadian and Indigenous cultures, and rural and urban locations. In her refusal to select and frame her Inuit experience through the scenes of a timeless traditional culture demanded by the market, Pootoogook found a market for another kind of Inuit authenticity. Further, we argue that her work both captures and attests to the disorienting effects of her awareness of how her environment is in the process of irrevocable change.

To grasp more fully the significance of her art, it is important to directly address Pootoogook's life story, not in any way to reduce her art to her life, but to place her as she was herself shaped by the entwined cultural and environmental changes her people's traditional home in Nunavut was undergoing. Even when the intention is to underscore Pootoogook's bravery and psychological forthrightness in her choice of subject matter, to insist on her truthfulness distracts from a more complex or full understanding of her artistry and consciousness.³⁹ Lindsay Nixon addresses the inconsistent relationship between recognition and support, asserting that the art world "cherry-picked the parts of Pootoogook's life and work that they could exploit, without offering enough support to survive the realities they saw her living every day." ⁴⁰ Canadian writers such as Nixon and Evelyn White link Pootoogook's unexplained death to the 2015 Canadian Truth and Reconciliation Commission's report on the national pattern of unsolved deaths of Indigenous women in Canada. ⁴¹

Nixon's lament, "I never met Pootoogook but I missed her," suggests how her absence-as-presence defines a chronic irresolution and loss that goes beyond the personal and cultural to the material foundations of precarious Inuit life. This encompassing environmental condition of loss and degradation becomes visible and even tangible as Nixon memorializes Pootoogook not as an Indigenous victim erased from cultural memory but rather as a more complex figure whose success within the Canadian art world abetted her demise. The difference between being erased and being missed, or misread, is subtle but crucial for Nixon as she analyzes Pootoogook's 2006 drawing *Sobey Awards*, in which Pootoogook can be viewed only from the back as she faces a phalanx of glasses-wearing and camera-wielding art judges, "crowding her, viewing her though literal lenses of othering and voyeuristic pleasure." 42

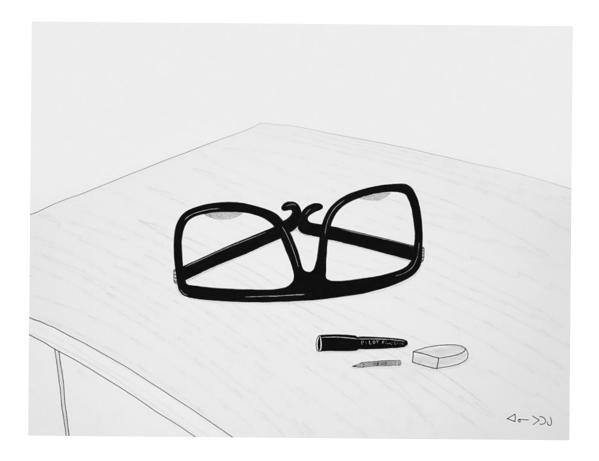
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a cascade of losses, some that ironically come in the guise of her posthumous recognition by non-Native Canadians. Repeating the word missing and the phrase I missed her, Nixon builds a syntax of mixed regret and anger that connects Pootoogook's absence to other missing Native women and, most crucially, to Nixon's very living grief at these collective losses. Nixon, as a Native woman herself, empathizes with Pootoogook's feelings of being exposed by her fame and estranged from her own environment and culture. Her wish to have been able to rescue Pootoogook from the exposures of fame as much as from the danger of living on the streets is also an angry acknowledgment of the mortal threat she shares as a Native woman in Canada. She wishes to rescue Pootoogook's life from an artistic reputation that covers over the "violent way she died" and to retrieve the suffering woman from her estranging fame and the serviceability of her death to the enrichment of the art world. 43 Most important, the art world misses what is hiding in plain sight, the materially degraded environment that was the context for her art and for her life. 44 Critics have emphasized Pootoogook's transgressive depictions of her experiences growing up in Kinngait (formerly Cape Dorset), Canada. They also praise her formal qualities of grounding and floating. Here we consider her in the context of ecological art and climate change. It is not so much a question of what her art says, nor of her identity as a victim. Rather, we consider Pootoogook's art as reflecting a tradition of Cape Dorset artistry that has changed with the changes in the land. Hunters and elders describe the ways that the environment (the ice) no longer supports the kinds of subsistence it once did. Ice recedes more quickly each season; fields are broken up and no longer reliable for hunting or travel. The animals they rely on grow scarcer. This has all been recorded. But what kind of record do Pootoogook's drawings provide? She draws what she remembers and what she sees. She draws what is in her heart and in her mind's eye. She draws what is there before her and in the mirror. What she reports parallels what the hunters and elders say of the disappearing ice. It is as much evidence of quantifiable change as a scientific report. Yet the art world, and even less the larger apparatus of fact production and truth vetting, still does not know how to look at Pootoogook's vision. And they don't even know what it is they miss; they keep missing the evidence. And they keep missing Pootoogook.

Nixon experiences not a single loss in Pootoogook's death but, instead,

Composing on paper using a purposefully "flat" perspective in a clean and careful "coloring-in" technique, Pootoogook comments on the art market that has brought her recognition and success, pushing back at



what counts as Inuit art. Pootoogook insisted that she could draw only what she saw around her: a pair of scissors, blades pointed slightly open, in a sure, free hand (Scissors; 2006); eyeglasses, their thick frames boldly outlined and positioned so that the folded arms show through the lenses, a figure that is satisfyingly self-complete, open to both inspection and introspection (Glasses, Pen, Pencil, and Eraser; 2006; figure 4.4); a red bra, symmetrical and self-supporting, simultaneously jaunty and lascivious, its white garment tag partially visible behind its clasps (plate 22). Although these signature drawings on the surface may not seem concerned with the world outside the private or individual, these drawings of technology, isolated from the materials they are designed to act upon, share a quality of potential. What might these blades one day

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Figure 4.4 • Annie Pootoogook, Glasses, Pen, Pencil, and Eraser, ink and pencil crayon on paper (20 × 26 in.), 2006. Courtesy of Dorset Fine Arts, Toronto.

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cut? Who will see through those lenses, and what will they see? Will breasts ever fill those cups?

Pootoogook takes an anthropological look at the brathat is the subject of (Untitled) (35/36) Red Bra (2006), as if it were an article dug up at a field site, holding it up for examination, to expose this undergarment to a detached gaze that is also a gaze of red desire, tinged with outrage and admiration. As an artist she imbues the bra with an uncanny liveliness, one detached from any function. Of course the obvious suggestion is that the bra—a Western contrivance—has little function or utility for bodily support in an Indigenous context. Pootoogook turns Western discourse on Native life around by suggesting the red bra is a Western fetish object, one that Pootoogook herself displays as if to say, I want this too. I want the power, even as I fear the power inherent in this wonderful and ridiculous object.

Her artistic process also reflects and comments on commercial process: she buys the exotic bra for her own use, yet she also draws it—in essence repackaging it—and then sells it back to the store, so to speak, that sold it to her in the first place. Pootoogook pokes fun at the selfimportant and self-justifying architectures of colonial support and investment aimed at Indigenous uplift, which—like the red bra—she exposes as well-constructed, desirable, and yet superfluous signifiers alienated from the people and the land.

Both the eyeglasses and the bra, in their technical function as enhancements, offer to repair human lack or limit, similar to the way that mimetic art conventionally preserves or extends life. But particular to Pootoogook is that the missing, lost, and unrepresentable part of the ecosystem that once held and sustained its populations, islands and regions, water, air, and land is the missing world of Pootoogook's ancestors, which cannot be reduced to representation or a set of practices or beliefs, or even to lifeways or traditions. What is missing and now requires support and enhancement is the traditional environment and the original vision of that world that has been multiply entangled in and multiply undermined by, ironically, the very technological advances, industrial processes, and cultural apparatuses that now appear to be inescapable, necessary foundations.

Pootoogook's sly, apparently humble drawings aim at nothing less than communicating the unsettling effects of cultural, cognitive, and environmental dissonance and despair, the rocking of foundations. Her scenarios crack through permafrosts of tradition and layers of propriety in the Indigenous, Western, and art worlds. If you see only the blank paper of

the medium through the frames of her penciled glasses, you have missed the evidence of resistant or renewed Indigenous Arctic environmental possibility. Pootoogook's glasses transform the scenes of her life in the Canadian Arctic into a record of unacknowledged data of a changing people and environment. Pootoogook's unseen evidence parallels Banerjee's counterarchives of the effects of a warming polar region. Both artists place settler colonialism within an Indigenous frame to point out the logic of extractivism that is driving social and climate changes.

At the time Pootoogook began drawing in earnest, the world of her foremothers certainly persisted in language, stories, and art. Her interior scenes suggest the uncanniness of everyday activities, given the shift from nomadic living based on following the seasonal migrations of game to permanent settlement in government-built housing. Beneath the cultural dislocations, the shift to settlement after 1959 coincided with an environmental condition described by Marla Cone as "the Arctic paradox," whereby the effects of southern-based industrial pollution migrate to and concentrate in the immediate environment of the far north, poisoning the waters and game that the people rely on for their living. 45 While the modernization of housing, transportation, and communication mitigated some of the ill effects of diminished game and broken traditional living practices, the cultural disruption brought upon a formerly nomadic people who lived in direct relation to the land was more profound—and it is this deep environmental disruption that Pootoogook's uncanny art captures.

Cultural anthropologist Claudio Aporta writes in his article "From Map to Horizon; from Trail to Journey: Documenting Inuit Geographic Knowledge" about how the Inuit sense of place is shifting consequent to their greatly reduced ability to hunt and follow animals, whose population numbers and healthfulness for eating has declined because of pollution and climate change's destruction of habitats. 46 In Aporta's account, tradition is not frozen; rather, it is as shifty as ice, as contemporary hunters respond to ever scarcer game by continuing the tradition of making cryptomaps designed to confuse outsiders and protect ever more fragile hunting grounds. Indigenous maps are made to track and hunt game. They are not necessarily locational road maps (there are no roads in shifting ice) according with outside parameters of place or GPS coordinates. In these maps place-names overlap, and the frame is an unfolding horizon, not a fixed goal. An Indigenous map may include markers and indications of entities and events that took place in the past or that are no longer in a fixed place.

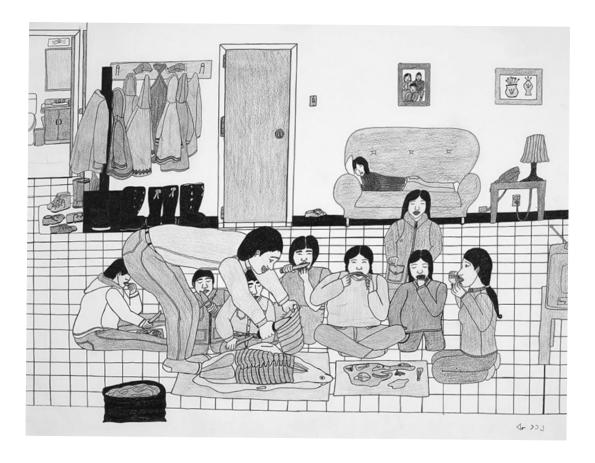


Figure 4.5 • Annie Pootoogook, *Untitled (Eating Seal at Home)*, ink, pencil, and crayon on paper (20 × 26 in.), 2001. A drawing of the interior of a modern home in the Canadian Arctic, where Inuit diners enjoy eating seal together on the floor. Courtesy of Dorset Fine Arts, Toronto.

Similar to such mapping, Pootoogook's seemingly direct representations of her life on Cape Dorset also employ techniques of consolidation, elision, and integration of memory, people, and events that are no longer there, that may never have been there, or that may or may not yet occur. Thinking of Pootoogook's drawings not as psychological or documentary realism but rather as a form of this traditional crypto-mapping that Aporta describes, whose codes include in-group secrecy to protect assets and cannot be read literally, suggests that Pootoogook's depictions are self-aware of of how they conduct power among artist, community, and the outside art world. Tableaux such as Untitled (Eating Seal at Home) (2001; figure 4.5) that depict scenes of Indigenous life appear at first glance to be more traditional, especially when compared

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to the more explicitly transgressive content of some of her work that has received the most critical attention. Her depictions of isolation inside, TV screens of newscasts, VCR cassettes of pornography, intimate scenes of sexuality, excessive drinking, and partner abuse are drawn in precisely the same manner as her more anodyne-seeming depictions of communal life. Yet even her depictions of more traditional communal activities are transgressive for the way they demonstrate that hunting and traditional Inuit living are in fact ongoing, not merely retained from the nomadic past. What her still-life tableaux with their stiffly drawn figures actually show is movement: the stark, pitiless overtaking of a still viable unsettled existence by forced modernization and by the environmental changes brought about by modernization.

The comparison of Pootoogook's art to nomadic practices of cryptomapping helps to expose how she is caught between a nomadic spirit and an unhappily settled condition. Pootoogook's refusal to provide images like those of her foremothers is an act of rebellion on many levels and against a range of oppressive circumstances. Her own decision to leave Kinngait after 2006 to live in Toronto and Ottawa, where she died in 2016, may reflect her desire for movement, which ironically became a movement to escape her home. And yet her ready absorption into a global art market, her very success, is yet another level of seemingly inescapable colonial control. In celebrating her transgressive depictions of Indigenous life, the art market seemed in some way to endorse the colonial trauma she lived. ⁴⁷

There is another way to trace the environmental significance of Pootoogook's life and art and her response to those circumstances. If we look again at *Glasses, Pen, Pencil, and Eraser*, it is the last item, the eraser, that indicates Pootoogook's irrepressible wit. What is done cannot be undone—or can it? Maybe art can erase life as easily as it can preserve it. Maybe that is exactly what art does in outlasting life. Is this a joke about cultural or ecological extinction, self-harm, or censoring? Pootoogook offers the critical tools of editing and revision, along with those of sight and creation, as if to say, I left nothing out, not even the means of unmaking—or of improving.

Missing and absence are complicated problems both in the realm of scientific data and in the world of art, where formal analysis requires attention to space and negative possibility. Resisting positivism—or the reliance on an unexamined real—entails separate yet entwined critical practices in data and in art. The problem of positivism is even more complex when applied to a real person in a context of Indigenous-colonialist tension. Where was Pootoogook to be found and seen? Where did she live

her life and recognize her life? She was discovered (as an artist but also in a colonialist sense) — but was she ever really seen? Do we ever really want to totally see or understand an artist, though? Isn't it mystery or impenetrability that in part maintains art's importance, if not its continued value? Now that she is gone, like so many other Indigenous Canadian women, what part of her is gone? What is always missed, unseeable, inapprehensible, mysterious in her?

Nixon's lament for Pootoogook—"I never met [her], but I missed her"—unearths the layers of her longing for Pootoogook as a suffering individual worthy of care, as an extended family member, and as a spiritual, artistic mentor almost close enough to touch and yet impossibly lost. 48 Yet even this understanding of what it means to another Indigenous artist to miss Pootoogook itself misses the full impact of Nixon's lament, which through the modifier *still* suggests that Pootoogook has been and will continue to be missed and that the environment in which she struggled, flourished, and succumbed was itself the condition of her demise: Pootoogook the celebrated Inuit artist was herself an effect of the breakdown of her foundation and her environment.

Nixon's unappeasable mourning for Pootoogook is inextricably tied to what her life had been and what it might have been, her unexpressed, foreshortened potential. But more prosaically, Pootoogook's life struggles with loss and dislocation were ignored, refused. She died on the street, *street-involved*, to use the sociological term often invoked by Nixon; hidden in plain sight. It is not enough for Pootoogook to have existed as a woman, an Indigenous person, and an artist representing her culture. She needed to have been—still needs to be—seen, reacted to, actually cared about as a person deserving of living a culturally cohesive life central to Canada, not at the margins or unhoused on the unseen streets. Only then would she still be missed as a whole legacy—one that might point in a direction of not appeasement but more cohesive government policy and support—a fully environmental approach, an aesthetically coordinated approach based on the vision, the data she presents and also withholds.

There's yet another way to see the eraser: less as a direct symbolic accusation or threat directed at the art collector than as a more expansive, looming threat of environmental undoing. If Inuit traditional life can suffer erasure in the face of cultural and environmental change, a similar dynamic of deterioration and loss has been spreading in the rest of the world. Environmental loss and damage cannot be undone, even as the art world seeks to ease, if not erase, its own capacity to maintain a safe distance from the worst of those effects. Art is no longer a symbol of the

glory of civilization, a token of the collector's acumen and high status, or a map of eternal shared values (if it ever really was). The ground beneath art, the field in which it is produced and which it reflects and from which it springs, is not just shifting—it is degrading, disappearing. It can no longer support its own products or its fantasies of global connection or wholeness. Pootoogook's art, her career, and her life reveal the permanent damage even while toying with Western art's emphasis on the value of creativity and the malleability of art materials, now that the foundation of all of that—earth, air, water, and ice—is coming undone.

The Power of Alternative Data

Frustrated with the way climate science data do not lead to action, artists turn to art that pushes representation and data beyond familiar, realist locations and beyond the disciplinary rationales of both art and science. Even more crucially, these artists enact their creative visions both as Indigenous artists or in collaboration with Indigenous communities to confront environmental harm where it is most painfully being felt. Working with Indigenous communities, Banerjee foregrounds in his photographs of the Arctic how the land on which human and nonhuman life has depended for millennia continues to be at risk both from global warming and from the destructive encroachment of the fossil fuel industry. Like Banerjee, Bowers collaborates with Indigenous and white environmental activist communities and takes a long view of climate change as brought on by both colonialism and the commercial activities of the fossil fuel industry. Her work also counters the way the state produces incomplete knowledge or data to disguise ecological degradation and protect the interests of the fossil fuel companies. Ball values the Indigenous Sámi knowledges and incorporates into her work the way they have experienced the evidence of global warming in practicing traditional reindeer herding. Without using official data, Pootoogook's artwork supplies evidence of degraded social and environmental conditions through the relational factors that adjoin such degradation, including food insecurity, to make the invisible in-betweens visible.

Rather than employ materials and methods through traditional means alone, all these artists use photography, drawing, new media, and installation art to stitch together a new interpretation and critique of the present in which the role of science as sole savior is troubled. As they ponder uncertain futures, their art points to the data that cannot be reduced to rational enumeration or charts to reveal how climate change is not simply

about science or data but connected to environmental and social breakdown that takes many forms. All the artists are creating through their art a new narrative of the people and the land of the Arctic in a rapidly changing present. In so doing, they question and experiment with the ways art can inform and challenge the distinctions between official data and what is considered illegitimate knowledge to address the monumental changes wrought on our environment and perception.

OUTIZEN
SCIENTISTS
OUTIVING
DETRITUS

Lisa E. Bloom and Elena Glasberg

The future anterior is intended to support a specific perspective—will where I am be habitable in the future?

Amy Balkin, A People's Archive of Sinking and Melting, 2015

It is common to believe that because we will never travel to them ... that losing a place that is not occupied by humanity is a loss of no importance; that going from unseen to non-existent will make no difference.... We are losing the core infrastructure of our imagination.

Roni Horn, Island Zombie: Iceland Writings, 2020

This chapter on the work of Amy Balkin and Roni Horn addresses how these artists who have long been concerned with some of the more unimaginable aspects of the climate crisis turn to installation art and artists' archives to transform what viewers think of as data into something more affecting, if not mobilizing. Focusing on the way Balkin and Horn redeploy everyday objects and otherwise discarded material debris, we draw attention to the potential of such art-world practices as the collection (Balkin and her contributors) and the installation (Horn) to engage public environmental awareness. The artists collect and incorporate a range of objects, including living materials like water sourced from glaciers in

VIEWERS AS CITIZEN SCIENTISTS

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Iceland, a carved whale vertebra from Alaska, a mass-produced plastic sample bottle used in Antarctic science, and stories about weather from Icelandic citizens. Such archives directly and indirectly comment on the ongoing degradation of the planet and the problem of how to recognize and act on that process of environmental deterioration. In recuperating and even soliciting fugitive, excess material that might be unsanctioned or considered unworthy as documentation of anthropogenic climate change, Balkin and Horn expand the discussion about the importance of art and aesthetics, and about the archive or collection specifically, in the context of the ongoing politicization of climate data.¹

Each artist takes a different approach to the problem of giving form to environmental emergencies. Roni Horn's Vatnasafn/Library of Water in Stykkishólmur, Iceland, is a provocative and even mesmerizing conceptual art piece housed in what Horn calls "the most beautifully situated library in the world." The main installation of twenty-four glass columns filled with glacier water from Iceland's interior invites viewers to interact with the artwork itself as well as with the extraordinary site of the former library, which is situated on a bluff overlooking the fishing town's picturesque shore (figure 5.1). Writing about her relation to Iceland as a source, medium, and open-air studio, Horn admits to an overwhelming, "absurd" urge to archive every stone on the island.³ This drive is perverse and yet somehow sensible—an island's delimited area, surrounded or contained by the sea, invites the attempt at a complete cataloging. Vatnasafn as a library of water successfully contains that absurd enthusiasm of a collection that might match the territory not by abandoning the project of collecting, archiving, and amassing, but by turning its potential for inward exhaustion into an infinite outward reflection.⁴

Balkin and her contributors' ongoing work, *A People's Archive of Sinking and Melting*, is almost anti-aesthetic in its attempts to connect climate crisis to waste, global capitalism, and social justice. There is an aggressive bareness in her collaboratively created installation that is made up of discarded and unwanted materials chosen and contributed by citizenscientists from around the world that includes an option to add an interview to accompany the archive and for possible publication. Unlike Horn's site-specific and permanent installation, Balkin and her contributors' is a movable archive that presents different communities' exposure to climate-related losses from a wide range of locations, including the islands of Kivalina in Alaska and Anvers Island in Antarctica. The archive of Balkin and her contributors, when not traveling as a short-term installation in a museum or gallery, is displayed in order of accession and documented



and installed in various forms, including as an exhibit organized by curators, that had annex-party status to the United Nations Framework Convention on Climate Change. When not on view, it is kept in a storage facility or temporarily available for use at Prelinger Library, a rather ordinary local library in San Francisco that is hardly like the modernist gem repurposed by Horn. When Balkin and her contributors' archive remains within the library stacks, its library form resurfaces directly when viewers must present call slips for each object and follow access protocols for rare books or special collections.

Both Balkin and her contributors and Horn build on and subvert familiar tropes commonly associated with lending and research libraries such as materials, collections, circulation, donations, reserves, and preservation. Ultimately, they reframe the library not simply as

Figure 5.1 • Exterior view of the former library on a bluff overlooking Stykkishólmur, a town on the western coast of Iceland and the site of Roni Horn's installation Vatnasafn/Library of Water, 2007. Photograph courtesy of Elena Glasberg.

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a static location of information or for the preservation of conventional "library resources" but as a flexible site networking history, memory, and materials—the "resources" that in the language of libraries stand in for or reference the islands, shorelines, and populations vulnerable to rising global sea levels.

Disappearance in Amy Balkin's A People's Archive of Sinking and Melting

Amy Balkin is an environmental artist and professor at the California College of Arts in San Francisco whose work combines cross-disciplinary research and social critique to generate innovative ways to engage with global issues of climate change. Besides *A People's Archive of Sinking and Melting*, her other collaborative climate projects include a series of participatory public readings of Intergovernmental Panel on Climate Change reports and supporting materials (2019). Her other projects include *Public Smog* (2004–), a clean-air park in the atmosphere—an artist's conception of the public domain outside current legal and discursive systems, created through purchase and withholding of carbon emission records from international trading markets—and *This Is the Public Domain* (2003–), an ongoing effort to create a permanent international commons.

The items comprising A People's Archive of Sinking and Melting are everyday objects and debris that range from discarded tools and bones to printed ephemera that, in Balkin's words, "are intended to form a record of the future anterior, prefiguring foreseen or predicted disappearance[s] and related displacements, migrations, and relocations."6 This is a growing collection of items contributed from places around the world that may disappear as a result of the effects of climate change (figure 5.2). There is an uncanny premise to Balkin and her contributors' conceptual archive as it projects the high cost of anthropogenic climate change through a map of future risk made of material objects and narratives collected in the present. Representing environmental damage yet to come has most often been the realm of science fiction writers, and like a science fiction writer, Balkin and her contributors complicate the notion of the future through rethinking the genre of the postapocalyptic, while also complicating the traditional view of art as more valuable than its constituent materials and subjects. In the case of these two archives (Balkin and her contributors' and Horn's), the mainly ephemeral materials bring a macabre twist to the normative value of art outlasting the real material, people, and places it represents.



Balkin's deadpan display of seemingly unconnected objects and contexts pointing to a future environmental apocalypse materializes what Rob Nixon calls "slow violence," a concept discussed throughout this book.7 Nixon's term refers to indirect signs and symptoms of destruction, both material and psychic, that are often uncanny and difficult to track or aggregate or even to prove. They may be felt in forms and bodies outside the normative purviews of the state or of science and are often denied or discounted by dominant structures of perception. Balkin emphasizes the agency of citizen-scientists to document, analyze, and archive everyday objects and occurrences that are often dismissed from memory and that do not figure as significant to official policy planning but that collectively suggest an unaccountable future effect. She also sees her archive of localized environmental destruction

Figure 5.2 • Amy Balkin and contributors, installation view of a display case (From the Majuro Declaration to COP19 Warsaw) in her People's Archive of Sinking and Melting, Robert Rauschenberg Foundation Project Space, 2013. Photograph by Fredrik Nilsen. Courtesy of the archive.

as contributing to the documentation of a more subjective, globalized account of shared experiences that challenges the anthropocentrism that often curtails social justice in the places most likely to disappear, such as Kivalina, Alaska, discussed in this chapter.⁸

Balkin's displayed items from Antarctica represent a continent at the forefront of climate change concerns. In 2015 when the Paris Agreement was drafted, those writing it were sure that the Antarctic ice sheets would remain stable even as the planet warmed several degrees. They expected that oceans would rise, at most, only three feet by the end of the century. In 2018 a major study revealed these earlier expectations to have been hopelessly complacent, finding that the melt rate of the Antarctic ice sheet had tripled just in the past decade. Two glaciers were in fact losing ice at an alarming rate, and if both glaciers go, the two Antarctic ice sheets could raise the sea level by two hundred feet by the end of the century.9 Balkin's project focuses on how fraught and difficult documenting ice melt can be for nonexpert individuals who notice the quotidian, ordinary, and small losses in their own locations, in contrast to the abstractness and either imperceptible or overly vast scales of scientific measurement. Much like Judit Hersko's microscopic yet concrete sea butterflies discussed in chapter 1, the gathered objects in Balkin's archive are difficult for humans to apprehend conceptually, yet can be rendered as documentable and displayed for consumption. To be seen, these objects require an aesthetics of selection that can in some cases perversely cut against scientific rationality by seeming too local or even inconsequential to global concerns.

Micaela Neus, one of the citizen-scientists who contributes abandoned tools to Balkin's archive, addresses the disturbances of living amid the ongoing effects of the melting during her work in Antarctica as a science support technician: "Every day sees a little loss, if you know how to measure it. Some of my co-workers remember when the sea ice grew so thick every winter, they could ski out to neighboring islands on their day off. Others have to spend hours chipping away ice-melt from under buildings because the snow pack actually thawed enough to flow as water into the wrong places before refreezing. That's what we see as workers. The scientists say the same things except they get grants and make graphs." ¹⁰

Neus comments on the everydayness of the loss; what she notices to be disappearing is now part of her daily life and routine as her activities are curtailed by the loss of ice. The discarded wrench, nap hook from a passing boat, and used scientific sample bottles that she contributes to Balkin's archive are unremarkable in themselves, commonly used by the hundreds by scientists in Palmer Station on Anvers Island who are build-



ing up a detailed knowledge of phytoplankton, one of the microscopic food webs in the Palmer Sea. The objects Neus has chosen not only are considered unworthy as evidence but are also utterly replaceable objects from the collective scientific community, whose job it is to document everything. Further, Neus points out that her chosen objects are essentially "communal" and would "otherwise have been discarded."11 These ordinary scientific sample bottles (figure 5.3) are not necessarily even noted as missing, since they are part of the largely unacknowledged support infrastructure of science. In bringing attention to the "abandoned" plastic bottle, Neus imparts a different kind of status to this indestructible yet apparently unimportant object.

Plastics are nearly immortal in relation to the human timescale and even in the scale of

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Figure 5.3 • Amy Balkin and contributors, scientific sample bottle from Antarctica collection, contributed by Micaela Neus with Caroline Lipke, from A People's Archive of Sinking and Melting, 2011. Photograph by Mary Lou Saxon. Courtesy of the archive.

geological time. The empty plastic bottle occupies (and in a way contains) a strange, in-between status: it neither degrades nor counts as documentable evidence within the official scientific project it—and Neus—supports. In describing the "communal" ownership of the bottle and suggesting the dispersed responsibility for its ultimate disposal, Neus points to the limits of science as currently practiced to produce an awareness of its own complicity in environmental degradation. Thus, the humble, plain, and empty plastic bottle, once inserted into Balkin's archive, becomes transformed into an art object that ironically comments on the classical inutility and immortality of art. Like art, plastic is forever. A literally empty signifier, the plastic sample bottle may also be a witness to an era beyond when humans, whether artists, scientists, or technicians, can survive on Earth.

A very different kind of found object comes from Kivalina, a tiny and isolated town that lies approximately 120 miles north of the Arctic Circle, at the tip of a thin, eight-mile-long barrier reef island in Alaska, where the population of about four hundred is primarily Inuit. Kivalina is one of thirty-one Inupiaq settlements that scientists believe will be destroyed by the effects of climate change, and it is facing imminent relocation. The Army Corps of Engineers built a seawall in 2008 to defend it against storms, but that has not protected the island from frequent flooding by rising seas. Kivalina has been struggling to relocate for almost two decades with little success, as climate change continues to escalate. The residents are living in a slow-motion disaster that will end, very possibly soon, with the entire village being washed away. The Federal Emergency Management Agency has been approached for help, but the agency says federal disaster relief in the United States is not meant to deal with the gradual impacts of climate change over time, like erosion and sea-level rise. Perversely, they could offer assistance only after a major storm destroyed the village. 12

The discarded objects used for scientific experiments in Antarctica and collected by Neus contrast with the hand-carved whale vertebra that Christine Shearer contributed to the archive from the village of Kivalina (figure 5.4), where she spent time researching her 2011 book *Kivalina: A Climate Change Story*. While objects from Antarctica fit within a discourse of modernity and science, from a space for "peace and science" according to the international 1959 Antarctic Treaty, Kivalina's history goes back thousands of years to some of the first settlements in the Americas. Shearer explains her choice this way:

I purchased this whale bone carving from Russell Adams Jr., a Kivalina resident in his 40s whose family has lived in the area for generations.



I was in Kivalina to do research on the *Native Village of Kivalina v. ExxonMobil et al.* lawsuit. But after talking to residents like Russell I realized the full extent and immediacy of the danger they face from climate change—not just the threat of losing their homeland, but their entire culture and way of life. The whale bone for me symbolized this way of life and the thousands-of-years-old Arctic culture the people are striving to preserve, which I describe in my book, *Kivalina: A Climate Change Story* [2011]. ¹³

From her outsider's perspective, Shearer emphasizes the perverse, unintended consequences of Kivalina's eroding coastline, which is displacing Indigenous peoples and erasing a way of life that had been sustainable for millennia. Like many Alaskan Native villages,

Figure 5.4 • Whale vertebra carved by Russell Adams Jr., Kivalina Collection, Kivalina, Alaska, from Amy Balkin and contributors' A People's Archive of Sinking and Melting, 2011. Contributed by Christine Shearer. Photograph by Mary Lou Saxon. Courtesy of the archive.

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Kivalina is one of the few places in the United States that has retained a largely subsistence lifestyle—but that is now changing. Hunting whales and eating whale meat are part of that legacy. That is why her contribution to the archive of a hand-carved whale bone seems significant but also again somewhat ordinary, an artifact of an everyday life of subsistence that is in peril should the community be relocated.

The whale bone carving is an artful reuse of an otherwise not very representative part of a whole whale. In this way, the part suggests the unseen whole of the whale. The carving of a human face seems also significant in that it melds the human to the nonhuman world, and not necessarily in a hierarchical relation. While the carving is most evidently part of a symbolic practice, it is also a relic or talisman of an individual whale, whose entire body had become absorbed into and by the humans in the environment as food, as spirituality, and as an object of veneration. Drawing from her experience living with and interviewing Indigenous people in the region as well as from archival sources, Bathsheba Demuth helps to further contextualize the carving in her book *Floating Coast: An* Environmental History of the Bering Strait. In response to her question, "What is a whale?" she was told, "[The whale] made the darkness of the polar nights visible, the cold bearable, and stomachs sustainable. It was a soul in life, a gift assuring human survival in its death." She goes on to explain that in isolated communities living along the routes of the bowhead whale, "political influence began with the human act of convincing whales to die, which bestowed moral authority and the practical good of caloric abundance." ¹⁴ The carving is thus a powerful piece of art that emphasizes the Inupiag community's life-sustaining synergies within nature's web. It depicts a down-to-earth world of interconnected multispecies beings that has always existed, often directly entangled with ongoing everyday struggles for survival. The inclusion of such an object in the archive brings to view a more intimate perspective on Indigenous ways of life, displacement, and climate change for communities whose very existence is a matter of indifference to the corporate media and the US government. The choice for the archive of the smallest part of a whale, carved with a human face, captures how the living whales and the human community that was so dependent on them together face annihilation driven by climate breakdown.

In many ways echoing the inclusion of the carved whale vertebra in Balkin's archive, Roni Horn proposes a narrative of a broken caretaking relation among humans, nonhumans, and earthly material. Horn similarly uses an artwork to speculate on possibly severed futures, centering such shared nonhuman material as water in both the form and content

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of her installation.¹⁵ Her work pushes her audience to process losses and emotions associated with unpredictable weather in conjunction with ecosystems that are degrading over time.

Roni Horn: Archiving Disappearance

Internationally known American artist Roni Horn's *Vatnasafn/Library* of *Water* (2007) is a permanent multimedia installation set in a former library built on a bluff overlooking the town of Stykkishólmur on the western coast of Iceland (figure 5.1). *Vatnasafn* emerges from Horn's career-long relationship with Iceland, where she has worked and lived part time since 1975, developing numerous works of art with Iceland as site, inspiration, material, and studio; treating it "less like a subject and more like a medium—a means through which she expressed broader concerns" for Iceland's environment. Horn is acclaimed for her work's formal aesthetic quality and conceptual depth, and art critics have acknowledged her work's public-facing environmental concern in the context of Iceland, here we elaborate on Horn's long-standing and profound environmental art of scalar interconnections among individual identity (and thus responsibility), language, earth materials, and environments.

Vatnasafn came into being at a point when Horn had been adopted and acknowledged in Iceland as an outsider who over the years had become a cultural insider. Horn's acceptance is both well-earned and unusual, since Icelanders have reason to be suspicious of outsiders. For much of modern European history, Iceland has been called "backward," having missed out on industrial modernization and having only since the 1980s leapfrogged into the postindustrial, technology-driven boom that crashed with the 2008 global economic meltdown, which saw Iceland's central banks fail. Today Iceland's remote northern location, geothermal-based ecosystem, and relatively late settlement by a homogeneous and small, isolated population make it a leader in hydroelectric energy development and an ideal site to host cloud storage computers and genetic research. Even before geneticists came to similar conclusions, Horn saw Iceland as a contained laboratory for experimentation and creation. But unlike traditional scientists, who gather specimens and observe objectively, Horn has engaged experientially with the culture and materiality of Iceland, traveling extensively across the island over the course of years and creating a range of work in and on Iceland. Her gradual and deep folding into Iceland set the conditions for her creation of Vatnasafn. When Horn became aware that Stykkishólmur's 1960s-era modernist library, set on

a bluff above the coast, was about to be abandoned, she—with the early support of Artangel—prevailed on the town to allow her to remodel the building to house an art installation as well as public meeting rooms and a separate apartment for visiting writers-in-residence. The installation includes *Weather Stories*, a collection of local stories about the weather to which the Icelandic public is encouraged to add.¹⁷

In the main exhibit, *Waters*, *Collected*, Horn has replaced the stacks with twenty-four floor-to-ceiling glass column tubes measuring twelve inches in diameter and ten feet in height, each containing melted ice removed from specific named Icelandic glaciers (figure 5.5). In exchanging water for books, Waters, Collected perhaps more precisely displaces the books, as an object's volume displaces water in a bathtub or an emotion unconsciously transfers from one object to another. Displacement is a more complex kind of material exchange than replacement and suggests concomitant but often indirect, repressed, or unacknowledged effects such as rising water levels or anxiety. The massive tubes also echo the cylindrical form of the ice core, the data sample crucial to climate science that is drilled from ice deposits, whose sedimented layers of minerals and trapped air bubbles can provide evidence of changes in water, air, and land over thousands of years (plate 23). Under "Creating the Archive," a visitor to the Vatnasafn website (formerly maintained by Artangel) can click on still-photography documentation of "The Source," "The Ice," "Collecting the Ice," "Ice to Water," and "Filling the Archive." 18 Mimicking—or performing scientific data gathering and presentation, Horn documents the process of selecting and gathering the waters from various locations, its storage in precisely labeled plastic containers, and its transfer and siphoning into the glass tubes of the installation. Horn's careful inclusion of evidence of her process might on the art historical surface feel like modernist selfreferentiality. But this art historical apparatus also points to the keeping of scientific field notes, labeling, and other practices that ensure the purity and even reproducibility of both scientific data and results. Horn's performance of documentation displaces the disciplinary practices of both science and art and yet enhances the value and independent status of each.

Echoing and evolving from the structures of displacement, each element in *Vatnasafn* flows into every other element, creating a spatial, architectural, textual, conceptual, and material network. The great specimen tubes, each illuminated by its own light sources, are rooted down into the floor and extend up to the ceiling; they are beams of light and also architectural support beams. Matters of identity and difference, pairing, doublings, and exchanges are repeated motifs in Horn's work, but none



Figure 5.5 • Roni Horn, floor-to-ceiling glass columns containing melt ice removed from Icelandic glaciers, from *Vatnasafn/Library of Water*, 2007. Photograph courtesy of Elena Glasberg.

is more constant or as variably useful as the pun. That often-demeaned connection is elevated to a formal property and nearly as important to Horn as the cut or line is to her core drawing practice. And like the anarchic power of linguistic surplus and ambiguity, the waters threaten to leak out and refuse containment, whether linguistic, categorical, disciplinary, or material. Translucent and yet fully solid, the tubes could possibly contain the spirits of glaciers that, given the pace of ice loss, may soon be extinct. Or the tubes could be scientific data supporting as-yet-unknown results. Without stating directly any position, *Vatnasafn* nevertheless intervenes in public policy, climate crisis, and Icelandic geophysical and cultural history to unsettle how data on glacial melting are collected, displayed, circulated, analyzed, and ultimately conceptualized.

In the installation's enfolding of viewers, and specifically via its invitation to Icelanders to contribute their own "weather stories" to the archive, Horn is building on Iceland's history of citizen science. Glacier keepers are local amateurs, sometimes entire families, who hike up the glacier to record changes in ice depth, quality, and mass. Icelandic glacier keeping dates to the 1930s, when it developed as a form of ground-truthing changes in the ice through direct, on-site observation using measuring tapes and sticks as well as even more purely cultural means such as waymarking and memory. Even though aerial and satellite measurement developed after World War II, this older form of measurement has persisted. And because glacier keeping is performed by those living near the glaciers, the data reflect not only social practices of art and record keeping but also Icelanders' spiritual identification with their land. It thus has a greater chance of translating into policies that might effectively intervene in human behaviors contributing to the glaciers' melting. As Horn explains, "Many of these sources will no longer exist in a matter of years," so collecting them is "something of an endgame." ¹⁹ Indeed, several of the collected glaciers had completely receded by 2017, their ice now preserved in Vatnasafn as a kind of relic. The ongoing reality of these receding glaciers — which Horn would surely consider natural archives of water—lends to Horn's library a more distressing resonance of environmental loss and disappearance.

Horn's sculpted forms and her preoccupation with material, conceptual, and linguistic involutions echo the "dark" ecological condition of a looming awareness of inextricable forces that preclude yet somehow include human agency. ²⁰ In a sense, this uneasy—or, to use a water word inspired by Horn's assemblages, distilled—awareness is both form and content of the installation. *Vatnasafn* is no ordinary space or container to be "filled up" like an empty vitrine with the content of an installation

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through which visitors pass, presumably without consequence, leaving no trace. Every replacement is connected to a displacement, no matter how distant or imperceptible. In fact, visitors to *Vatnasafn* are made acutely aware of their impact, as they are required to wear booties over their shoes as they walk over spongy rubber flooring incised with words such as *turgid*, *cold*, and *moist* that in both English and Icelandic describe both weather and personality types. *Vatnasafn* officially records visitors' entries and asks locals, if they choose, to leave a "weather story" to be placed in a growing archive of other such accounts. Visitors' passages are also noted in more fleeting ways, in reflections and refractions through the glass tubes and in windows, and in the echoes of voices and footsteps reverberating among the interior surfaces: each visitor is changed by *Vatnasafn*, and the installation itself is changed by those who visit.

Horn's installation envelops visitors within its conceptual and material labyrinths, its hallways, flooring, passageways, and windows, as within the elemental flows and folds of Iceland's volcanoes, pastures, waterways, and glaciers. Beneath the tame suburban crust of Stykkishólmur, the magmatic flows and upheavals from the molten center of the earth can be inferred, even felt and experienced. It's impossible—in gazing at the serene and encased liquids in colloidal suspension, some yellowed as though they were festering—to not think of a mad scientist's display of conjoined fetuses forever preserved in formaldehyde (plate 23). Part charlatan, part antiquarian collector-scientist, Horn is the amasser and visualizer of data. There's menace in the way *Vatnasafn* repurposes climate data as art or even entertainment, or worse, as arbitrary accumulation, a collection driven by irrational desire: the underside of empiricism and scientific method. But Horn is also the socially conscious public artist, a "permanent tourist" and celebrated Icelandic national treasure. Horn extends the scientific drive for self-possession through data collection to the art collection and then back to the collection's more suspect origins in the cabinets of wonders of the mad scientist and the circus sideshow. The result is an installation that is as potentially terrifying as it is, on its face, civic minded, inviting, playful, and even soothing. Through its very specific location, *Vatnasafn* shifts among registers and materials to point to a profound environmental metaphysics that for all its abstractness is terribly clear about the power of the unseen and the inexpressible—the liquid core of *Vatnasafn*.

Inner geography is Horn's psychogeographic term to describe inexpressible, unseen, unknown, or unconscious states, bodies, elements, relations, and places. Deserts, which seem in excess or remote or unnec-

essary to conscious, positivist thinking, are, Horn writes, "unknown and necessary." They are the "core infrastructures of ... imagination." Inner geography is another register of replacement and displacement or of involution, a feeling of being there and not there, inside out and outside in; it is a kind of metaphor for human-centered environmental awareness and connection. But the environmental entanglements of inner geography are not only about the kind of infrastructural, material connections that can be felt directly. In writing about her sculpting with water, which she calls a "receptive" material, Horn points out the obvious, that human bodies are 60 percent water, and thus she asks viewers to "recognize the water in you."

On the surface, this sort of connection, recognizing the water in you, seems intuitive. But how might it actually work to be a so-called body of water? Horn's koan-like directive is designed to lead to discovery, not to resolution. Visitors pass through *Vatnasafn* like ghosts, seen yet unseen, distorted to others, unrecognizable to themselves; there, but also hidden, changed, or revealed. Inner geography is a destination requiring you—in a pun I think Horn would appreciate—to *spill your guts* by contributing a weather story or by recognizing the weather in you as the unseen, buried, inhuman parts underwriting fantasies of both human wholeness and environmental connection. ²⁴ Viewers may also experience the pathos of data telling them something they would rather not know: that the end of the earth is already legible. Check it out (like a book). Do something! And yet the urgency of the collection can never be unmixed from its formal austerity. Bottling or containment is as important as flow for Horn.

With *inner geography*, Horn suggests that efforts to address environmental loss cannot focus only on the visible or knowable earth. The concept values the ecologically mysterious. This is not a Judeo-Christian mystery that is always deferred to a next world or to a nonhuman god, beyond human ken. Rather, the ecologically mysterious is very down-to-earth. It is real but only dimly, partially imagined and wholly unseen. It is bound to the surface of the earth, but it is, to echo Herman Melville in his 1851 novel *Moby Dick*, "not down in any map; true places never are." The extreme polar regions and other deserted or uninhabitable earthly locations are particularly fruitful for thinking through inner geography as a way to access a polar aesthetics of mystery and finitude, the unseen, the deliberately reserved or unused; landscapes left purposefully fallow and uninstrumentalized, reserved for sensation or for dreaming; landscapes whose purpose is to be unused or, in Horn's term, to be "nowhere." Horn is suggesting a logical inversion: that wasteland is necessary. ²⁶

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Horn's fascination with the possibilities and limits of the archive intersects with social and feminist history's concern for what is missing from the written record or for what we might consider here to be lost, missing, or nonexistent data. Ursula K. Le Guin in her 1981 short story "Sur," first published in the *New Yorker* under the guise of being a genuine narrative of Heroic Age Antarctic exploration discovered in an attic and now presented to readers (also discussed in chapter 1 in relation to Judit Hersko's artwork), invented a Latin American women's expedition that arrived before both Roald Amundsen and Robert Falcon Scott, yet "left no footprints" as a gesture of resistance to the grand narratives of possession and conquering. Instead of establishing monuments to themselves or their nations, the women engage in small-scale and site-specific practices of survival, including making art. One of the characters sculpts using the only medium available: ice. But her sculptures, like the footprints and claims the women explorers refuse, will never be known to the rest of the world or to history: "That is the penalty of carving in water." ²⁷ Great events and equally significant changes in infrastructures and culture cannot all be seen and known directly. The data are always partial; the record is incomplete, sometimes fluid and other times almost tragically local, untransferable. Like Le Guin, Horn the sculptor of earth materials understands that you can't just save the earth you can see or know.

Vatnasafn is designed not simply to disorient viewers' experiences of seeing, self-recognition, and bodily integrity but really to redistribute them environmentally, through scaled and nested sculptural involutions of inside and outside. The bay windows of the installation's main exhibit room look out onto a nearby islet that is universally acknowledged as being shaped like a whale. Yet perhaps the resemblance goes beyond metaphoric exchange. In The Arabian Nights, Sinbad the sailor lands on what he thinks is an island. When the ground underneath him begins to waver and upheave, he discovers that what he assumed was ground was actually the back of a whale. The disappearance of the whale is a complex kind of loss from the perspective of the human unknowingly living on its back. On the one hand, he must acknowledge his lack of knowledge of his own world. But on the other, he discovers the realm of the whale—and, more, he discovers the inner geography that is the open, uninstrumentalized "ocean" in which he floats, newly lost yet also strangely found in extreme interconnection. A sort of dematerial whale bone carved with a human face from Kivalina, this awareness of "the water in you" is the artifact produced by Vatnasafn. The psychic, sensual, intellectual, and emotional destabilizations produced through Vatnasafn cannot be reduced to cate-



Figure 5.6 • Roni
Horn, view from
the gallery's bay
windows onto the
western coast of
Iceland, which no
longer has glaciers,
from Vatnasafn/
Library of Water, 2007.
Photograph courtesy
of Elena Glasberg.

gories of conceptual, programmatic, or even environmental art. A visitor to *Vatnasafn* arrives as one kind of thing and leaves seemingly intact, still recognizably themselves. Yet some reorganization of inner geography has taken place through their having left something behind—either in a weather story or a footprint's soft impression in the pliable, receptive rubber flooring. The viewer and the viewer's fleeting impressions, reflections, and refraction are split apart and then gathered into the ghostly flow of glaciers that will be no more (figure 5.6).

Haunted by the Future

While these archive projects might look like memorials, conceptually they are more provocative and more original, emphasizing the counterintuitive, as when Horn envisions that the "deserts of the future will be water." ²⁸

Each draws our attention to what it means to think beyond normal human time frames and to recast the role of cultural memory in order to generate urgency in a different present tense. Each focuses on remnants or debris not considered relevant to climate change that hover right below the level of perception as uncanny harbingers of future destruction that might ultimately include human life itself. In a number of ways, the work of Balkin and Horn reactivates the past in our very own present and makes our dread of our own future all too rudely palpable in the twenty-first century.

The archives of Balkin and her contributors and Horn float between conceptual and material-political registers, between seriousness and humor, between density and levity. Perusing both, a viewer plays a shaping role and can pick and choose from an assemblage of material exhibits. Icelanders are encouraged to leave their own weather stories to be added to the library of water, at once a piece of each teller and an addition to a data set of weather observations. For *A People's Archive of Sinking and Melting*, hand-picked curators have preselected objects, which are assembled in a stripped-down display that mimics archaeology exhibits. How does the viewer respond to such an odd array of detritus? Is it science? Art? Journalism? A disgorged slow-motion time capsule?

Certainly, in the case of Balkin and her contributors, they are directly signaling their rejection or subversion of art-world conventions of Western beauty and value when they include an Indigenous carved whale vertebra that powerfully marks a more complex multispecies relationship that will soon be severed owing to rising sea levels. Such broken human-nonhuman relationships are not often prominently featured in contemporary art on climate change. Balkin's use of such an artifact forces the art world to confront art that speculates on possible severed futures. Although Horn's melted glacier water sculptures do not abjure aesthetics and certainly stand as supremely artful, she, too, is sculpting with the proleptically preserved ice of glaciers that are receding, even as their representations are so uncannily, spectacularly, preserved for the art viewer's appreciation. Both Balkin and her contributors and Horn undermine the liberal art-world bargain by which art enriches the world and its appreciation and circulation tend toward justice and repair. How can art balance out its entanglement within the very processes of damage and degradation—cultural as well as environmental—it so often pretends to be above, or even to repair?

Despite their different aesthetic approaches, Balkin and her contributors and Horn both focus on the active nature of witnessing in the visual field by requiring practices of looking that are rather demanding. This type of art does not merely seek to transform waste or water into static

works of art. Rather, their approach is more dynamic. In recuperating material that would otherwise be left behind or abandoned and making it the centerpiece of these archives, they give aesthetic form and visuality to still-unfolding processes of nevertheless indelible damage. In so doing, they transform everyday unseen or unwanted debris into illuminating, active climate data that also reposition the viewer as a citizen-scientist or a potential active, aware contributor to the archive.

In the midst of the acceleration of climate change, we need more than ever to imagine a progressive climate politics that can structure political hope. Horn's and Balkin's methods underscore the inadequacies of the techniques of collection, organization, description, and comparison in envisioning traumatic historical events. Their work responds to how art is about what cannot be seen or perceived by the mainstream media because while climate change is happening, in some cases it is imperceptible, out of phase, or too slow to be noticed, much less understood, by most individuals. In investigating what might otherwise be ignored as evidence, both artists produce work that fractures and reassembles evidence of the effects of ecocide. In this, they dismantle the notion of mastery over landscapes—or nature. Their works have in common that neither can be simply folded back into a conventional discussion of the Anthropocene or climate politics. Instead, by engaging critical polar aesthetics, these artists point to the violence of ecocide without creating yet another elegy. Or, if an elegy, it is one that points to the future.



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CLIMATE ART

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I choose to ... generate narratives that work toward reassembling a world that is desirable, one that is thriving with life and creative thought. However, this focus on affirming what we want still requires that we engage with the world as it is; it is by no means an excuse for mystifying or aestheticizing social injustice or ecocide.

Ursula Biemann, "The Poetics and Politics of Worlding," 2021

For the past several years, I have been producing a trilogy of art projects about proliferating oil mega projects.... *Offshore* evolved as a provocative thought exercise: "What if, we are asking, our future is not going to hold some promise of a massive shift away from fossil fuels but might very well involve the catastrophic burning of every last drop of oil and gas wrenched from every crack and crevice in the planet? What if?"

Brenda Longfellow, "Extreme Oil and the Perils of Cinematic Practice," 2017

This chapter focuses on how artists and filmmakers Ursula Biemann (Switzerland) and Brenda Longfellow (Canada) are reinventing documentary practices to create new forms of doing art that engage the representational challenges of making perceptible the multiscalar, multitemporal, and multiconnectedness of the Anthropocene. In so doing, these artists are creating new forms of imaginative critical polar aesthetics. This chapter

builds on my arguments developed in chapters 3, 4, and 5 but presents further case studies that reimagine the documentary form in more experimental and interactive forms to address the unseen political geographies of climate change in the Arctic. 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 local worlds across different continents and to address why some temporal and spatial orders are more visible than others in the Anthropocene. In this section, titled "Climate Art and the Future of Art and Dissent" (which includes chapters 6 and 7), I analyze how artists and filmmakers develop a unique aesthetic language with which to explore the complex temporality and scale of climate change. I look at more overt activist art to see how artists bring together realist and speculative modes of storytelling.

In the introduction, I relate the very concrete realms of the fossil fuel industry, capitalist development, and political notions of territory in the Canadian tar sands (considered part of the Subarctic and the Circumpolar North) and the Russian Arctic to my analysis of temporality in the Anthropocene. I focus on disappearing ice and industrial pollution but from locations that are literally out of sight and kept from political scrutiny by the fossil fuel industry. At issue is also the very scope of ethical witnessing (a theme in other chapters) and the way the extraction of oil transforms environmental regions in countries very far afield from where the oil is produced. To take just one example, the Canadian tar sands' toxic chemicals deeply affect Arctic ecological communities throughout the Canadian Mackenzie Basin and eventually flow to the Arctic Ocean, as discussed in chapter 3.

The artistic projects considered in this chapter seek to draw connections between the chapter's dual foci. On one hand, the chapter discusses "invisible violence": these unsightly places of resource extraction and processing are deliberately concealed from view by the oil companies. On the other hand, it also refers to another kind of invisibility of climate change, discussed in chapters 3 and 5, referencing the work of Rob Nixon on violence that is beyond our sensory grasp.² Slow violence, for Nixon, provokes us to expand our imaginations about what constitutes harm. He asserts that environmental degradation "occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space." Nixon insists that we take seriously forms of violence from climate change that have become unmoored from their original causes, creating harm within ecosystems and vulnerable communities. All these different forms of violence should not be seen as some distant threat but rather as

a creeping violence that requires critical polar aesthetics and activism to make them perceptible.

Aesthetics and Politics: Ursula Biemann's *Deep Weather* and *Subatlantic*

Ursula Biemann is a recent winner of the Prix Thun for Art and Ethics in Switzerland. Her videos Deep Weather (2013) and Subatlantic (2015) are shown primarily at museums, biennials, and university art museums throughout the world. *Subatlantic was funded by both Cape Farewell, a British organization located in London that is headed by David Buckland and has been extremely important to Arctic art/science activism, and the Volkard Foundation in Switzerland. Biemann's more recent climate work started in 2011, developing out of her earlier videos on migrant labor at borders and in the new transnational zones that emerged in the wake of globalization in the early 2000s. 5 Her experimental video-essay format that connects a theoretical macrolevel with the microperspective of political and cultural practices on the ground continues to work well in the context of climate crisis to convey the intimacy of her subjects in relation to the grand scope and brutality of the disaster. This format also remains well suited for conducting research, fieldwork, and video documentation at multiple sites from Alberta to the Shetland Islands, Greenland/Disco Bay (or Kalaallit Nunaat, as Greenlanders call their land), Bangladesh, and a tiny unnamed island in the Caribbean.

Like many other artists in this book, Biemann works with Indigenous communities on the front lines of environmental and climate disaster, but at the same time she maintains the ambition of her earlier work in trying to make imaginable a crisis that is geographically dispersed and complex, often punishing those least able to respond and recover. Moreover, her approach is experimental; she leaves the process of interpretation of her work open.6 This resistance to interpretive closure unfolds through the whispering voice of the artist in *Deep Weather*, which draws the audience into the urgency of the emotive, poetic, and theoretical aspects of the artist's planetary perspective. For Biemann, aesthetics is also about the senses and involves a questioning of not only intellect but also the way the natural world pervades all of life. In her work she registers a conception of nature not as unfolding separately from our own modern lives, like an otherworldly retreat, but as all around us and at times punishing and overwhelming us. The female narrator, who speaks about the natural world in a sensuous and direct way, transforms our relationship to nature,

linking it to the periods of human history, including late capitalism with its devastating consequences of pollution and climate change, as well as to the geological time of the planet. This is what the term *Capitalocene* discussed in the introduction refers to—the geological time of the planet that is uniquely created by the human history of late capitalism.

Deep Weather (2013) portrays climate change and industrial extractivism together by presenting oil extraction in the Alberta tar sands, followed by footage of communities in Bangladesh suffering from flooding due to rising seas. It juxtaposes places, sensations, and feelings and uses splitscreen film techniques as a way for the viewer to grasp the difficult, contradictory, and simultaneous scales and temporalities of the climate crisis. The first scene of *Deep Weather*, titled "Carbon Geologies," comprises images photographed from above the Athabasca River, which flows north through Alberta, Canada, and into the Arctic Ocean. She explores the notorious Athabasca oil sands, where deforestation and sand extraction have devastated what was once the largest boreal forest in Canada. Photographers and journalists are not allowed access to the tar sands, so the area can be filmed only from an aerial view (plate 24). Biemann uses this vantage point to draw attention to the scale of this nightmarish environmental disaster, which she tells us, in a whisper, is much larger than we think, "equivalent in size to the entire country of England." She goes on to explain in a quiet voice, as if it is a dirty secret, that "the toxic fluids collect in lakes and . . . the wildlife has retreated." But she also pointedly indicates in her voice-over that a world changed by hydrocarbons constitutes a direct threat to the Canadian Inuit, especially "the native trappers and hunters who live off the game" near the tar sands and in the Mackenzie Basin, and to the north in the Arctic.

In her images of the tar sands, the consequences of industrial terror replace the nineteenth-century sublime. She thus repositions the management of climate change as a matter of controlling not nature but industrialization. What now seems so out of control is not an unstable nature but extreme industrialization directly related to the Capitalocene and its transformation of the planet. The video dwells on the unsightly waste of toxic fluids and the dark polluted clouds that hover over the enormous tar sands facility as if to warn of the environmental damage yet to come. Both forms of waste stem from these vast modern infrastructures that seem to be the monstrous legacy of obsolete, dirty industrial infrastructure and its outsize machines, commonly thought to have been abandoned long ago in the global capitalist era. In this respect, her work echoes both Edward Burtynsky's 2009 photographs of the tar sands (discussed in chapter 7)

and Peter Mettler's 2009 *Petropolis*, his famous "aerial subversion" of the tar sands sublime, the first video funded by the activist organization Greenpeace to make visible what was previously censored and out of sight. But what makes this terror different from nineteenth-century industrialization is more directly related to the Capitalocene.

Like Burtynsky's photographs and Mettler's Petropolis, Biemann's images of the tar sands convey a stance of distant, cold neutrality in the face of a terrifying spectacle but, like Mettler and Subhankar Banerjee, also present these regions as the home of Indigenous peoples living in remote and hard-to-access territories. Yet, at the same time, Biemann's text and voice create an intimacy that is a far cry from the transcendent views one associates with this type of image. Biemann's work, like Burtynsky's and Mettler's, functions as eco-art activism that draws public attention to the otherwise overlooked Circumpolar North of mostly Indigenous peoples and territories, regions that were once extremely biodiverse because of the boreal forest in which the tar sands are situated. Even though Biemann's camera floats above the world as she photographs the tar sands pits, the female voice-over tells us her secret, as we experience ourselves as all too close and vulnerable to the enormous environmental and social consequences that will be the legacy of the relentless reach for dirty energy resources for years to come.

The catastrophe unfolding before our eyes and ears appears unstoppable. In the second section of *Deep Weather*, titled "Hydrogeographies," Biemann engages with the difficulties and paradoxes of disjointed action to slow environmental violence in bringing to the public's attention the convergent effects of climate change, oil extraction, and the negative synergies this produces across vast geographic expanses. The video unexpectedly shifts and adopts a planetary perspective to connect the search for fossil fuels in Canada to its unexpected consequences for Indigenous Bangladeshi communities located far away on the Bay of Bengal. This is one of the coastal regions where the waters are rising and land is being lost to the sea most visibly and manifesting some of the most dramatic physical changes in climate and geological structure. The video documents the current struggle of Bangladeshi communities that are protecting their delta villages from rising sea levels through a comprehensive system of cyclone shelters and an alarm system that broadcasts through the minaret's speakers. 8 Unlike the first part of the video, which focuses on tar sands where the human figure is absent by necessity because photographing the site close-up is prevented by the oil company, in Bangladesh Biemann follows the collective human labor that is driving the efforts to shore up and secure a barrier lo-





cals hope will prevent their communities from being flooded (figure 6.1).

Biemann's video makes clear that the effects of climate change have already exceeded what we thought possible or imaginable: we see footage of the enormous community effort of the Bangladeshis who are losing the land and resources beneath them, a loss that leaves communities struggling to survive as their land is stripped of what makes it habitable. The Bangladeshis rely on their own manual labor to build higher embankments to protect themselves from extreme weather events, only to discover that they have nowhere to go and might die in their sleep. In this situation, where once sustaining coastal landscapes are now eroding and disappearing thanks to flooding, Biemann's video comments that land "is little more than a constantly fluctuating, mobile mass" (figure 6.2).10

Biemann's video forgoes featuring the violent storms that are common fare in media reports, which focus solely on the spectacular apocalyptic aspects of extreme environmental

Figure 6.1 • Ursula
Biemann, film still of a boat
off the shore of Bangladesh,
from *Deep Weather*, 2013.
Courtesy of the artist.



Figure 6.2 • Ursula
Biemann, film still of the
shore of Bangladesh, seen
from a boat, from *Deep*Weather, 2013. Courtesy
of the artist.

disasters. Instead, her video is taken before the cyclone to highlight the well-organized collective human preparation in anticipation of what happens in these flood zones where there is no infrastructure and where the majority of people do not have the resources to clean up and rebuild once catastrophe strikes. Her focus on the Bangladeshis' labor compellingly prompts the viewer to question to what extent cyclones are no longer exceptional and have instead become the norm, leaving the communities trapped with nowhere to go.

In this section of Biemann's video essay, the screen is often split into autonomous parts, refracting the central perspective of a single frame into multiple perspectives. In one example, a young woman stands facing us in one frame of the split screen, which is still, while the other screen depicts an eroding coastline that is moving in a dizzying way and becomes a thin sliver of its former self (plate 25). The female voice-over evokes previous tragic experiences and devastating disasters to come when she whispers, "Populations along the

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. 1 6 coastal area drown in their sleep. The signals were muffled and came too late. Fluid lands moved farther east, and large chunks broke off." The calmness of her voice-over soothes us and draws attention away from the volatile issue of climate change in these communities. This sequence also puts into sharp focus the complex temporality of climate change on a local level. It also provides a particularly haunting depiction of how the ordinary people of Bangladesh live at the cutting edge of climate collapse.

In his book *Tropic of Chaos: Climate Change and the New Geography of Violence*, Christian Parenti examines the consequences of anthropogenic climate change, especially the extreme weather events already occurring within the belt around the center of the earth between the two tropics. He uses the term *damaged societies* in the sense that they, "like damaged people, often respond to new crises in ways that are irrational, short-sighted and self-destructive." ¹¹ However, this is not the case for the Bangladeshis in Biemann's video, whose experiences with climate change are the subject of this section. Rather, Biemann suggests that the efforts of the Bangladeshi people will prove to be woefully inadequate in the long term for preserving their coastlines in the Bay of Bengal, home to nearly half a billion people, all of whom are now acutely vulnerable to the rising seas despite their efforts to repair the damage.

Biemann's work presents the devastating effects of climate change on these coastlines, which to this day remain on the front line of Asia's experience of climate change. This is especially the case in Asia's poorer countries, as she whispers to us that "[climate change] is no longer to be witnessed here (in Canada) but elsewhere in equatorial zones." For her, the flow of capital into the tar sands in Canada creates refugee populations in Bangladesh and other poor countries located near the equator. But I argue that the flow of capital into the tar sands creates violence at home in Canada as well: against Indigenous peoples in the tar sands extractive zone. Biemann's work, in its attempt to make sense of this planetary conjuncture within which humanity finds itself today, needs to remember that the creation of refugee populations is happening both in rich countries like Canada and in poor countries like Bangladesh.

As I've suggested, Biemann's aesthetic project inevitably comes up against the way in which the dominant media outlets report on poor countries like Bangladesh. Her work also challenges the colonial tropes of the spectacle of so-called Third World futility and helplessness. By linking Bangladesh to Canada, she works against the reporting of the disaster as being confined to the Third World. In doing so, she creates a new perception of the tar sands as a local and global catastrophe: its consequences are

felt in the boreal forest around Fort MacMurray, impacting the Indigenous peoples in the tar sands extractive zone; far away in the Mackenzie Delta, downriver in the western Canadian Arctic; and then still farther away in other parts of the world altogether, such as Bangladesh.

Ursula Biemann's *Subatlantic*: Water Chemistry and Submerged Landscapes

In *Deep Weather*, the rhetorical transition from the tar sands of Alberta, Canada, to the flooded communities of Bangladesh displays an evident conflict between the connections of global capitalism and the flows of environmental destruction. In *Subatlantic*, the contrast is equally great, but the causes and consequences occur in the same places simultaneously. Both *Deep Weather* and *Subatlantic* use juxtaposition to invoke their message, but whereas the destruction in *Deep Weather* appears as the product of several long centuries of carbon burning, the radically transformative changes taking place in *Subatlantic* are happening on timescales measured not in decades or centuries but in millennia. The second video pays more attention to nonhuman actors and their powerful agency in shaping contemporary political landscapes.

Subatlantic combines science fiction and documentary to focus on the volatile period of the Subatlantic, the climatic age we are currently in, which started 2,500 years ago and represents the latest part of the geological epoch of the Holocene. Here Biemann is influenced by research by climate scientists reconstructing the end of the last Ice Age and the dramatic rise in sea level in regions like the Shetland Islands that began with the previous ice melt twelve thousand years ago and continued for several thousand years. 12 Biemann creates the fictional figure of a female scientist who travels through several thousand years across different temporalities to speak from a postglacial reality to address our similar situation now: we are going to lose many of the world's cities and structures in the not-too-distant future. Her fieldwork in locations far apart from each other—Greenland's Disco Bay, the Shetland Islands, and a small unnamed island in the Caribbean — was determined by her focus on the Subatlantic age and the submerged, dispersed spaces of the Atlantic Ocean, which are surprisingly connected to each other through invisible oceanic streams.

The first scene of *Subatlantic* begins with views from above of the rocky, steep coast of the Shetland Islands (figure 6.3). We hear the wind as we see what appears to be a pristine coastal island landscape. As with *Deep Weather*, listening is signaled from the outset as equally important



as seeing, and there are many natural sounds in the background throughout the film. A female narrator introduces us to an unnamed fictional female scientist, whom we never meet and whom the narrator refers to in the third person: "She is in charge of measuring fluctuations and sending the data to the lab on the coast. She inventories the freezing and melting, minutely recording her encounters with difference." Throughout the video, the human figure is present only acoustically, profoundly juxtaposed with the visual of the unpeopled landscape, a location we learn is sinking so precipitously that the scientists have had to remove their equipment for fear of losing it. But we see nothing that suggests this, or even that the land now lies one hundred yards underwater. We must rely on the narrator for this knowledge. "The faintness of change made it hard to detect, but the rocks witnessed a steady rise of the sea until one day all technical equipment had to be moved ... farther inland." The "change" happened over a long period that lies outside of human timescales but was a momen-

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Figure 6.3 • Ursula
Biemann, film still of birds'
nests in the Shetland
Islands, from *Subatlantic*,
2015. Courtesy of the artist.

tous occurrence when the first humans had to abandon their dwellings on the coast. There seems to be nothing urgent here. The climate-related feedbacks and interactions from these physical processes remain invisible to the eye. There are just images of ocean currents, winds, sea, fish, birds, land, and sky (plate 26). We see shots from above and below the water in different locations. But all seems peaceful and calm on the surface.

The narrative is rendered plausible only through the use of scientific instruments. But science here seems both embodied and sensuous. The female narrator's poetic voice draws us in to make us think of the aesthetic dimension of doing science in the field at multiple sites and underwater. "She makes efforts to attune her eyes to see underwater and fuse with the swarming sea, where the tiniest of microbes operate on an interoceanic scale." We are shown close-ups of the tiniest of microbes and are told, "Some are 400,000 years old and still alive" (plate 27). These new genetic materials released from ice sheets that are hundreds of thousands of years old make us think of how human agency is entangled with these sensuous nonhuman creatures, rather than being discrete and separate from them. Like Judit Hersko's pteropods (see chapter 1), Biemann's microorganisms are connected to the introduction of new materialism into feminist discourse that turns away from the traditional, essentialist position of woman-as-nature and toward a renaturalization of matter, as theorized by feminists such as the theoretical physicist Karen Barad. ¹³ The female scientist's aesthetically rendered scenes of water and organisms and her more poetic style of expression help us understand her fascination with these new genetic materials that were released from the ice after 400,000 years, a period longer than humanity has existed, but also make the viewer see "science" in more sensuous aesthetic and poetic terms.

Melting polar ice in Greenland is the focus of the next section of the video (see also chapter 4). The sound and movement of melting ice animate the video, as the forces that can stir up an entire ocean by transforming the flow of its currents. The female scientist explains, "The ocean streams will slow down before they stop altogether. Will England's climate resemble Labrador's? There was questioning in the water.... Water chemistry tells its stories of ancient ice melts, forgotten and retold." This is a premodern narrative about nature but one that is starting to recur. Her images focus on the uncontrollable force of fresh water from the melting polar ice caps that is changing the chemical balance and reducing the salinity of the ocean, impacting the surface streams coming from the Caribbean and hindering them from sinking down to the ocean floor and flowing back to the tropical region along the sea bottom.

The video essay depicts our speedy course into an unknown future, as the Atlantic Ocean's circulation is the weakest it has been in at least 1,600 years. It is profoundly discomforting to imagine that part of this slowing is directly related to our warming climate, as melting ice alters the balance in northern waters. Biemann's video is especially eerie because she records the same physical processes recurring again that happened at the end of the last Ice Age thanks to higher levels of atmospheric carbon dioxide. Carbon dioxide led the prior round of global warming, but back then it was responsible for warming the planet and ushering in the current climate, which enabled humanity to thrive. But today, ocean currents are slowing down due to the warming that has resulted from rising emissions and other greenhouse gases, which will have the opposite effect: it has already ushered in a climate breakdown that is being felt planet-wide.

Landscapes for Biemann are anthropogenic, not interpreted simply as natural phenomena or venues for events; rather, they are important in her efforts to imagine the globe differently, which extends to her interest in these contemporary physical landscapes that have political meanings in the way that they operate on timescales that exceed the entire span of human civilization. In Subatlantic, she elucidates a three-way link to ocean currents, the melting of the Arctic ice, and the submerged landscape of the Shetland Islands starting twelve thousand years ago. By comparing Bangladesh with northern Canada in Deep Weather, Biemann also tackles dimensions of geological time but on timescales of hundreds, not thousands, of years. This makes us not only consider the difference in the carbon footprint of richer and poorer nations like Canada and Bangladesh but also question whether it is accurate to speak of the climate change crisis within solely human time frames. Climate change is inverting our perspective on time, giving us not a deep time of permanence but a deep time of disorienting change, as discussed in the introduction. Nature, too, is changing on us and refusing to be stable; Biemann's work shows us how understanding this slow planetary destruction requires new forms of narrative and imaginative articulations to represent the eerie temporality of climate change.

The Melodrama of Hyperreality: Brenda Longfellow's Dead Ducks

Brenda Longfellow is a well-known feminist Canadian filmmaker, writer, and academic whose work is in conversation with Biemann's. As a filmmaker, she, too, focuses on representing the tar sands but on Indigenous lands. Longfellow's films primarily circulate at international film festivals and, in some cases, are shown on Canadian TV and taught internationally

to undergraduates in university departments. ¹⁵ This section discusses two political documentary projects: her animated film *Dead Ducks* (2012), and *Offshore Interactive* and *Global Offshore* (a companion project to *Offshore Interactive*) (2015), online documentaries that mix fictional elements with standard documentary footage. All are part of Longfellow's trilogy of art projects about proliferating oil megaprojects, which also includes *Carpe Diem* (2010), a political documentary that is part comic opera and part puppet show. ¹⁶

Dead Ducks combines fiction and documentary with opera and animation to satirically represent the challenge and difficulty of dealing with the ecological devastation that is happening in the tar sands without deploying a solely human point of view. The story is based on an actual event in 2008, when about sixteen hundred ducks traveled from Louisiana to Alberta only to drown in the oily muck of a tar sands settling pond (figure 6.4). As in Biemann's Deep Weather, which uses a whispering voice, the "voice of God" narration common in more conventional documentaries is replaced in Longfellow's film by the point of view of the birds as well as that of the humans who comment on them: a veterinarian, an environmentalist, and an Indigenous worker who has divided loyalties between his job as an engineer at the tar sands and his community and family, who have relied on the ducks in the past for food. *Dead Ducks* is both a serious documentary and a critical piece on environmental hazards. Like Biemann's video, it experiments with an aesthetics of intimacy, bringing viewers closer to the lives of ducks via the use of animation as the birds travel from place to place before they end up dying in the polluted tar sands settling ponds. 17 Longfellow creates an embodied sensual experience of the nonhuman, but in this case she renaturalizes the birds from an unnatural perspective using computer-generated imagery. The viewer is brought so near to the animated birds that we can almost see their faces as they soar hundreds and thousands of feet above the earth; the animated filmmaking technique allows us to feel as if we were flying right along with them.

In her use of music and computer-generated imagery, Longfellow experiments with both vision and sound to create new forms of film language and depict a postnatural condition that is empathetic to the birds but at the same time critical of the way we anthropomorphize and sentimentalize the nonhuman. She also uses X-rays, remote sensing, and other visualizing technologies that are used to monitor birds' migration and the impact on them of changes in the weather resulting from climate change—induced droughts. The images of the birds in Longfellow's work are both "real" and artificial and are meant to deliberately reference popular films like



Figure 6.4 • Brenda Longfellow, film still of dead ducks in tar sands, from *Dead Ducks*, 2012. Photograph by Todd Powell/Alberta Fish and Wildlife, Canada.

Winged Migration (2001), in which computer-generated birds were inserted into the documentary film to generate viewers' sympathy with an animal protagonist (plate 28). She does this partly to capture both the mundane and the resplendent aspects of their lives but also to have the audience empathize when the birds are caught unaware by the toxic ponds when they seek food and water (plate 29). All this takes place in a hyperreal and color-filled landscape that is juxtaposed with the dismal "real" industrial sublime landscape of tar sands tailing ponds, represented in the film in black and white as if to signify that the ducks are unable to differentiate between freshwater lakes and polluted ponds.

In a certain way, *Dead Ducks* is an imaginative response by the filmmaker to make sense of the intense public outcry over the plight of the ducks and the oil company's response. What is significant about the duck incident for Longfellow is how visual documentation by Todd Powell (a senior wildlife biologist with the Alberta government) featuring ducks dying in tar sands pond went viral. Like Banerjee's photographs of the Arctic National Wildlife Refuge, these images helped to galvanize international public opinion against the tar sands project at a moment when senior ministers from the government were lobbying American senators to regard the tar sands pipelines as the solution to American energy security. 18 Dead Ducks proposes that, despite the outcry provoked by the birds' death, multinational oil corporations proved quite adept at managing the ongoing environmental disaster as a mere public relations crisis and dissipating the perception of an ecological crisis, turning the tragedy into something to be be managed and contained. Media discussions on climate change and environmental issues were so impoverished during the conservative prime minister Stephen Harper's leadership in Canada that it was deemed enough to have the traditional telegenic white male spokespersons for the oil company to reassure us that they would take responsibility and fix the situation. As we will see, this corporate greenwashing became the target of the activist group the Yes Men, discussed in chapter 7. Both Longfellow's film Carpe Diem and the Yes Men remind us of the effectiveness of the public relations arms of these companies and the challenges for activists of finding ways to represent environmental crises that are not easily contained by the rehearsed performance of an earnest public apology by these companies, easily forgotten months later by the public. In this case, while the reputation of Syncrude, the oil company connected to the tar sands project, suffered, in the end the company was fined a mere \$1 million Canadian. The real and ongoing disaster of unconstrained oil extraction continued to flourish unabated. Longfellow,

in a nod to Biemann's video, seems to understand how the ducks enter the more ordinary realm of a trite melodrama of helplessness, becoming an object of pity in this political context, when she pointedly asks, "How was it that the plight of these ducks could evoke such emotional response when the plight of millions of Bangladeshis, coastal inhabitants, Inuit and sub-Saharans left most Canadians indifferent?" Activist Debby Dahl-Edwardson's documentary footage included in Longfellow's *Global Off-shore* addresses the erasure of the Indigenous peoples in extractive zones in Alaska, as described in the next section.

Brenda Longfellow's *Offshore Interactive*: Extreme Oil Culture in the Global Offshore Industry

Brenda Longfellow's interactive web pseudodocumentaries from 2015—Offshore Interactive and Global Offshore (a companion project to Offshore Interactive) —provide an activist critical engagement connecting the extreme industrial practices of resource extraction once associated with nonpolar territories such as the Gulf of Mexico with the frequently invisible and remote far north. It draws our attention to the larger system of oil extraction itself that makes disaster possible, providing a dynamic model of that system, since she is interested in both how big oil appears as an industry and how it works as a system. This perspective motivates all the works in her trilogy about proliferating oil megaprojects, including Dead Ducks. In addition, a documentary portion in Offshore Interactive engages with an Indigenous community in Barrow, Alaska, that is directly impacted by drilling in the ocean, which is disrupting their hunting of whales for their material subsistence.

Back in 2010, when Longfellow started these projects, oil prices were significantly higher, and the oil industry was investing billions of dollars in offshore sources, which were expanding to encompass areas off the coasts of Alaska, Australia, Brazil, China, Ghana, Greenland, Mozambique, Newfoundland, Russia, Thailand, Vietnam and so on. *Offshore Interactive* opens by displaying a 2005 quote from David O'Reilly, CEO of Chevron Oil—"The era of easy oil is over"—followed by found footage of an aerial view from a helicopter ominously surveying the oceans, in which the helicopter is a dark shadow on a gray day, for the next site for profitable offshore drilling. It begins with images of surveillance detailing how many barrels of oil can be extracted from various offshore sites around the world: Alaska (23.6 billion barrels), Ghana (1.8 billion barrels), and the Gulf of Mexico (51 billion barrels). The visuals make clear that back then there

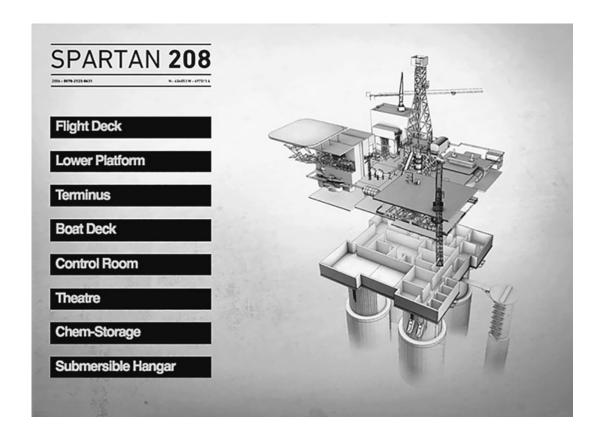


Figure 6.5 • Brenda
Longfellow, diagram of
the massive Spartan 208
oil platform, the site and
setting for her Offshore Interactive online portal, from
her Offshore Global online
pseudodocumentary, 2015.
Courtesy of the artist.

was much oil and profit to be made below the ocean, and the age of peak oil had ushered in a new gold rush that would be accompanied by extreme environmental and technological risk taking. By self-consciously using aerial views taken from corporate imagery, Longfellow parodies corporate advertising culture and its idea that big oil had indeed mastered nature just as it has mastered its imaging.

The sheer scale and scope of the threat posed by the oil industry is highlighted by making the massive oil platform itself the site and setting for her *Offshore Interactive* online portal, where viewers can access short documentaries and interviews (figure 6.5). The helicopter flying over the ocean in the opening shot lands on an empty model platform that is part of a fictitious rig in the Gulf of Mexico that we quickly learn is named Spartan 208; it will be in dire trouble in several years, when in

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2018 there will be an onboard fire and an explosion, possibly caused by to equipment failure. This doomed remote site serves as the starting point from which she explores the global offshore oil industry from 2010 on.

From the beginning of the interactive documentary, Longfellow's choice of the virtual oil rig as the setting for what follows immediately forces us to think about the dangers that lurk below the surface. Her fictive documentary is organized to give audiences a more intimate and interactive experience of this "extreme oil" culture and its failures, but it also makes clear from the outset that the viewer will have to think about the dangers of getting too close. She asks us to inhabit with her this ominous virtual rig that has been abandoned before and is possibly inhabited by the ghosts of previous onboard fires. We hear the eerie sounds of the high winds on the rig between clips, during long-duration takes, and in the background in the documentary footage when we click on the *Global Offshore* sites embedded in *Offshore Interactive*.

Imagining how hard life might be on such a dangerous rig is unsettling, as are the stories she collects of those who were on similar oil rigs at moments of crisis in the past, such as the *Deepwater Horizon*. Her interviews utilize verbal testimonies and written records to counterbalance the images' inevitable silences. As such, her work offers a different order of affective engagement with actual oil spills, chemical poisoning, and the technical complexity of deepwater oil drilling itself. These almost gothic experiences seem to speak of the ugly, the horrific, the supernatural, and the grotesque, completely leaving behind the sublime oceanscapes of an earlier era.

Some of the most disturbing interviews can be accessed only by clicking on the lower platform on the virtual rig, its hidden unconscious: actual first-person accounts of the lives deepwater drilling has changed in the wake of the ruinous 2010 *Deepwater Horizon* oil spill off the coast of Louisiana, which killed eleven workers and ultimately spewed more than five million barrels of oil into the Gulf of Mexico over eighty-nine days. We access images and photos from an "incident debriefing" report on what happened to the "survivors" of the *Deepwater Horizon* rig during the accident; only a sentence or two from the initial report is still legible, as the entire report was redacted. From the chief electronics technician, it has "huge explosion, head wound, I may die out here, half the derrick was on fire"; from the crane operator, "people screaming and hollering, scared to death."

As one advances farther down the rig, to the chemical storage area, one can access more traditional documentary interviews—stories from

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ground zero of the spill. The interviewees' outrage stems both from the seriousness of their own health conditions and also from the fact that many of these people had worked for BP at some point; after the spill they came to understand how expendable they really were to the company. Coastal residents Kindra and David Arneson, for example, had to move away from the Gulf of Mexico because they and their children were getting sick with high fevers; they said the chemicals in the gulf were airborne. They saw themselves and others as being used by BP, explaining, "We are the science experiment. We woke up to find out that we are the trade-off." All the interviewees point to the devastating human and nonhuman impacts of the oil spill, made worse by BP's lavish use of two million gallons of a chemical dispersant, Corexit, applied to the water's surface to fragment the crude oil and make it sink, rendering it invisible from the surface. Corexit might have helped disappear the 100 million gallons of crude oil from the public imagination but not from the seafloor or the bodies of workers interviewed in Longfellow's piece, who detail how it contained 2-butoxyethanol, a chemical that has caused them serious chronic liver and kidney damage. This connects to the physical and psychological trauma from toxic chemicals in the Arctic, discussed in chapter 3.

Longfellow's experimental approach, which evokes the genre of horror, emphasizes that her subjects are always at risk at these selected sites. By strategically resignifying horror in a purely industrial context, she conveys that oil spills and disasters from deepwater drilling are the norm, not the exception, especially after safety regulations put in place after the *Deepwater Horizon* accident were rolled back by the administration of Donald Trump.²⁰ Her interactive video makes us engage with what happens to human bodies and other sentient beings no longer protected once an oil spill or explosion occurs. As such, the horror continues beyond the documentary's credits at the end, for there will always be new threats or ongoing health problems for subjects both at and near these sites in the future.

Brenda Longfellow's Global Offshore: Indigenous Practices of Whaling in Barrow, Alaska

In the more traditional documentary from the Alaska section of Longfellow's 2014 Global Offshore, the focus is on the striking differences between global modernity and Indigenous practices of hunting whales for material subsistence, as detailed in chapter 4. Many of the featured short documentaries in this section were taken after the BP disaster in the gulf by



Debby Dahl-Edwardson, a local writer and activist who has lived for thirty years in Barrow, Alaska, and who collaborated with Longfellow on her project. These consist of firsthand accounts from Inupiat activists and elders who feared for the future of their community as oil exploration began to affect their traditional fishing grounds (these are reminiscent of the documentaries discussed in chapter 3). Some of the most compelling images in this segment depict the sustainable practices of the Indigenous populations and the Inupiat's dependence on the bowhead and beluga whales as crucial for not only their material subsistence but also their cultural and spiritual sustenance (figure 6.6).²¹

The images of the captured whales come across as visceral and gory, with long shots of the enormous mammal being pulled onto land and then cut up and skinned (plate 30). They do not, however, work as a source of sublime

Figure 6.6 • Activist Debby Dahl-Edwardson's documentary footage of whales on land, Barrow, Alaska, in a still from Brenda Longfellow's Offshore Global, online documentary, 2015. Courtesy of the artist.

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THE LOGIC OF OIL AND ICE

awe, and the Inupiat interviewed do not attempt to justify human domination of the natural world or humans' superiority over nature. That is, the whales carry different meanings for Indigenous traditions and food practices and how they are affected by oil spills in the context of these short documentaries, serving as what Laura Marks calls "recollection objects": in this case, they are living mammals that "condense time within themselves" and carry meanings across space and time even as those meanings are distorted in this context.²² The whales here denote the past, traditions, and the ongoingness of these traditions in the community; they reference a very long history of hunting the bowhead whale in a sustainable way, often killing a very small number during the annual whale hunt in the fall and spring to provide high-protein food for the entire community during the year. This community sees nearby drilling as an affront to what they see as the sacred side of these creatures.²³

The short documentaries give a voice to the local culture and the complex bonds between Indigenous communities and Indigenous food security, interspecies relations and dependence, and Indigenous spirituality, also discussed in the documentaries in chapter 3. Men might do most of the hunting, but women prepare the food and do the filmmaking and most of the speaking. The clips' explicit gender focus provides a fuller picture of the way that sentiment and intimacy are produced by the filmmaker, as exemplified by the indoor footage shot in a busy kitchen as the women prepare the abundant whale meat for the community and speak about the communal labor within the community. They explain that the whales can weigh as much as sixty tons, which means that both the hunt for the whale and its preparation involve groups of people from the community working together. By visually emphasizing these communal activities, the filmmaker prepares viewers to understand how the rhythms and routines of daily life and their traditions can be silenced or even stopped entirely by oil drilling.

Documentary Film and Critical Polar Aesthetics

All these films reimagine documentary and performance for a new era, engaging seriously with how to counter the gap between knowing and acting. They question what it means to live in an age in which oil companies structure their media campaigns to conceal the world's largest and most unsightly sites of resource extraction and processing from view. They are also concerned with this industry's consequences for the humans and nonhumans most impacted by climate change.

Today, in an age that mostly celebrates instant spectacles in the mass media, these artists offer a visual depth and complexity to convey the relation among spectacle, climate change, and the world of oil. The relatively slow and open-ended aspects of climate change can hinder efforts to mobilize citizens to appreciate the urgency of the situation and to think differently about how oil companies keep secret their own contribution. Moreover, the complex temporality of climate change as a future projection that lacks any finite resolution makes it especially difficult for artists to represent effectively. Throughout the chapter and book, I argue that environmental and climate violence that is too slow to see (in this late "society of the spectacle") needs a new form of imaginative documentary practice to render it perceptible.²⁴ But I also emphasize that some temporal orders are more visible and receive more media attention than others. Ursula Biemann's and Brenda Longfellow's aesthetic explicitly slows time down to let viewers inhabit multiple temporal orders that often coexist, including a focus on the long temporalities of the planetary scale.

For filmmakers such as Biemann and Longfellow, nature is no longer a thing apart, to be manipulated and exploited at a safe remove. It is now integral to a larger universe of instability, technological breakdown, social disruption, and suffering that is happening on a planetary scale, including, in the case of Biemann's film *Subatlantic*, at the level of microorganisms in Arctic ice that formed over millions of years. Her intention is to make an aesthetic contribution to current discourses about the rapidly evolving dangers of climate change, rising sea levels, and changing ocean currents. She makes intelligible in *Deep Weather* that if you are living in an area like the Bay of Bengal, the hundred-year flood of yesterday is the yearly cyclone of today.

Both artists focus on what is happening to Indigenous peoples in areas far from metropolitan centers, where climate change otherwise appears invisible in the Western media, often seen as one more disaster added to the ongoing intractable problems of poverty and colonialism. Longfellow also addresses how a viral video made by a Canadian environmentalist about the death of hundreds of birds in the tar sands tailing ponds can evoke a greater emotional response than the plight of millions of coastal inhabitants in Bangladesh or in the Arctic who have little digital presence and are often poor, leading lives shaped by farming and hunting in which time is connected to shifts in the seasons rather than digital time.

I hope that new perspectives on visualizing climate change as represented by these artists will help us express human fears about the geophysical "end of the earth" catalyzed by our entry into the Anthropocene. By

asking questions about the disproportionate impacts of climate change on certain geographically isolated poor communities and the mass migration that is going to occur as a result, these artists tell different stories to make us aware of how our entire way of thinking and being is now undergoing a melting transformation. Such work touches on how visual culture and contemporary art are important ways to imagine the very geopolitical consequences of the climate crisis, highlighting how some temporal orders are more visible than others. Their work enables us to imagine more fully some of the inequalities that humans are both causing and being affected by in the Anthropocene as we all face the challenges of our uncertain futures.

ORITICAL

POLAR ART

LEADS TO SOCIAL

ACTIVISM

BEYOND THE

DISENGAGED GAZE

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"Becoming polar" is the way that places under environmental pressure have been "polarized," or fantasized as pure only to be devastated; simplified only to be ruined by intervention.

Elena Glasberg, Antarctica as Cultural Critique: The Gendered Politics of Scientific Exploration and Climate Change, 2012

The photographers, filmmakers, and activists discussed in this chapter—Edward Burtynsky, Idle No More, sHell No! (350.org), the Yes Men, Liberate Tate, Platform London collective, and Not an Alternative—focus on the violence of extraction, as exemplified by how extreme industrial extractive practices once associated with nonpolar territories such as the Gulf of Mexico, Ghana, Nigeria, and Brazil are now infiltrating the Circumpolar North. These Arctic regions, once fantasized as pure and off-limits to industrialization, have now been opened to ruin by the oil and gas industries. This is what Elena Glasberg, in their book *Antarctica as Cultural Critique: The Gendered Politics of Scientific Exploration and Climate Change*, calls "becoming polar." It's not so much that the poles are new territory (either for the oil industry or for academics, activists, filmmakers, and artists) as that parts of the Arctic and Subarctic region are now becoming energy-extraction zones. In this sense, the Arctic is becoming more like the rest

of the world. But in terms of climate change, we will witness the reverse: the rest of the world will become more like the Arctic once warming is happening elsewhere at the same rate as in the Subarctic.

This is an important conceptual shift, as I discussed in previous chapters, since visual representations from the nineteenth century onward cemented the view of the Arctic as an exemplar of a sublime space overwhelmed by nature and as a desolate location, which contributed to the idea, a hundred years later, that it was impervious to the effects of anthropogenic environmental destruction. This other view of environmental destruction complicates more conventional photographic images of climate change in the Arctic—images of melting ice and polar bears drifting forlornly on ice floes—that are the staple elements of climate change discourse to signal loss and global ecological crisis. These more popular images, though they might be effective global icons of coming extinctions, also unwittingly obfuscate the fact that parts of the Arctic have been or will soon be opened to ruin and toxic waste through extreme industrialization as much as through climate breakdown.

All of the projects described in this chapter not only question but actively protest and challenge the ways in which oil companies structure their media campaigns to conceal the world's largest and most unsightly sites of resource extraction and processing from view. The works break with the familiar framework of elegy and loss to provide a more activist climate aesthetic that disrupts the totalizing perspective of the extraction industries, which view these regions as increasingly available and as a mere resource to exploit. Though this is a chapter on activist art, I also include Edward Burtynsky, a well-known photographer and filmmaker, to think of the ways his 2009 photographic exhibition Oil at the Corcoran Gallery in Washington, DC, has influenced more recent climate activist protests against the oil industry, such as the media strategy used by groups such as Idle No More and sHell No! (affiliated with 350.org). But at the same time, I argue that even critical anticapitalist aesthetics such as Burtynsky's can evoke disengagement, apathy, and dread. The chapter also shows the continuation of an institutional critique as artistic practice. Much of this work is by artist collectives that target funding and donations given to museums and galleries by the oil and gas industry. Other activist work described in the chapter, such as that of the Yes Men, sHell No!, and Idle No More, moves outside the museum and gallery system and intervenes in the everyday world of demonstrations and occupations, in both digital and physical spaces.

Much of such work builds on a longer history of political activism focused on AIDS (by groups like ACT UP and Gran Fury in the 1980s and

1990s), the antiglobalization movement, and the Occupy movement and its aftermath.² But the museum-specific protest art draws from institutional critique, a form of conceptual art that emerged in the late 1960s, and the work of many international activist artists and collectives including Hans Haacke and Andrea Fraser; and from collectives including the Guerrilla Girls and the work of Decolonize This Place, an action-oriented movement centering around Indigenous struggle and Black liberation (that is, concerned with the colonial histories of Western museums and the narratives surrounding people of color that such histories perpetuate).³

Edward Burtynsky: The Industrial Sublime in Late Modernity

Edward Burtynsky is a well-known Canadian photographer who works within a long-established genre of documentary photography and film. He has produced photographs and films for twenty years on what he calls "manufactured landscapes" to document how the mining and oil extraction industries have fundamentally damaged the world's potential landscapes. His term *manufactured landscapes* resembles my use of *anthropogenic landscapes* but shifts from *anthropos* to capital accumulation to make one think about what a photography practice of the Capitalocene should look like. Nevertheless, I suggest that as powerful as his work is, it is also an example of a disengaged art practice that is not critical enough.

Burtynsky is very successful in creating an all-powerful industrial sublime full of unspeakable horror that presents both the monumental scale of the industry and its devastating effects, but unlike the works discussed in previous chapters, his photographs stay away from fiction. His 2009 exhibition, Oil, which later gave rise to a catalog, was one of the earliest photographic projects to play a crucial role in linking the Arctic and the tar sands to the massive global petroleum infrastructure (see chapter 6).5 In *Oil*, Burtynsky depicts the huge network of the oil industry—from drilling rigs, oil fields, and vast motorways to junkyards for car parts. In so doing, he moves us from viewing the landscape as available for the taking to appreciating a form of art photography that creates new visual evidence of the industry's inhuman scale across different continents. His work also draws attention to the importance of documenting sites such as the tar sands that are technically illegal to document because the oil companies are attempting to erase or deny the violence that has taken place.6

Unusually, Burtynsky's oil photographs from around the world do not geographically separate out the sites of consumption and recycling from the sites of oil extraction and production. Rather, his photographs underline the presence of oil outside of pure settings of extraction and in interconnected realms of life. But common to all the sites that he photographs is oil's determinate presence throughout the world; the affective immediacy of his images reveals how the industry has created multiple disasters of environmental degradation. The violence of oil wells, drilling rigs, oil refineries, tailing ponds, toxic recycling plants, and junkyards of autos and tires that we often do not see is presented together with images of more familiar places that we do not perceive as extensions of the extraction industry: parking lots, gas stations, and freeways (figure 7.1).

In Burtynsky's work, one form of outright terror replaces another: the unnerving scale of the traditional sublime returns in terms of the oil industry as a whole, in images of sites of extraction and consumption that together make up one of the biggest industrial complexes in the world. The awe-inspiring industrial scale in his "ravaged earth" photographs provides a substitute for the old sublime of spectacular natural landscapes. What now seems so disturbing is not the old nature but these industries as a whole; no part of the world seems to escape the upheaval and destruction of Big Oil and its outdated version of technological modernization from the mid-twentieth century.

In his well-known 1997 photograph of the Ontario oil sands, Nickel Tailing #34 (plate 31), toxic sulfuric sludge becomes both beautiful and grotesque; his image establishes a very visceral relation between viewers and the spectacle of environmental disaster. 8 Similarly, Burtynsky's 2003 Oil Fields #19a, Belridge, California (figure 7.2), taken from a low perspective in the San Joaquin Valley's desert landscape, shows an expansive network of oil rigs that extends as far as the eye can see. Though it is less spectacular than Nickel Tailing #34, both photographs deliberately provoke a contradictory sense of attraction and revulsion, as the locus of the sublime switches from natural spectacles to nature's technological appropriation. This particular form of the aesthetic is what makes Burtynsky's work most compelling and fascinating, but at the same time, the view from above transforms the aesthetic experience of such violence into one of detached pleasure. Burtynsky's art, in his exceptional use of aesthetics, exemplifies a disengaged gaze but one that is disturbingly attractive—the beauty and forms of the various landscapes create the impact of his work. But even anticapitalist critical aesthetics such as Burtynsky's, in which he attempts to represent the relentless inhuman scale of environmental catastrophe, can induce a sense of powerlessness and resignation in the viewer toward this behemoth of an industry.10



Figure 7.1 • Edward Burtynsky, *Highway #1, Los Angeles*, photograph (39 × 49 in.), 2003. This aerial view of a Los Angeles freeway underscores the presence of oil outside pure settings of extraction and in interconnected realms of life. Courtesy of Robert Koch Gallery, San Francisco/Nicholas Metivier Gallery, Toronto.

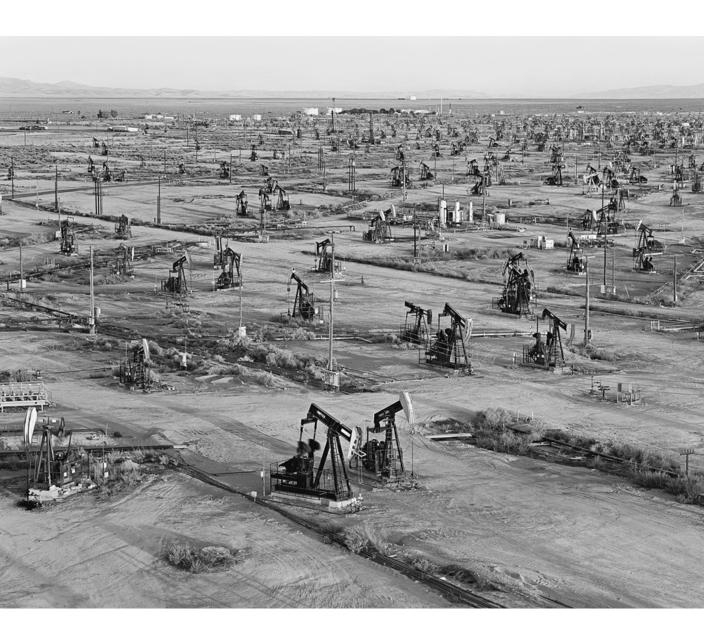


Figure 7.2 • Edward Burtynsky, Oil Fields #19a, Belridge, California, USA, photograph (40 × 50 in.), 2003. Taken in the San Joaquin Valley's deep desert landscape, the photograph shows an expansive network of oil rigs that extends as far as the eye can see. Courtesy of Robert Koch Gallery, San Francisco/Nicholas Metivier Gallery, Toronto.

Idle No More and sHell No!: Protests against Arctic Drilling

Idle No More and sHell No! pursue aesthetics and strategies very different from the terror and paralysis of Burtynsky's industrial sublime. Idle No More began in Canada in 2012 and marshaled social media to educate about and protest Bill C-45, an omnibus budget bill passed by the Canadian federal government. It Idle No More uses an anticolonial framing that focuses on Indigenous land rights and is often led by Indigenous people. Its work demonstrates its commitments to social change and a willingness to participate in active forms of dissent. As such, its work presents opportunities for fostering ethically engaged citizenship through greater knowledge and awareness of Indigenous issues in Canada and the United States, which requires an understanding of the historical and contemporary legacies of colonialism that continually position First Nations, Métis, and Inuit peoples as "lesser" citizens. sHell No! is a Portland-based chapter of 350.org, a well-known international organization addressing the climate crisis. 12

When the oil giant Shell brought to Seattle's city port a monstrous drilling rig, the Arctic-bound *Polar Pioneer*, which it planned to use as a staging ground for oil drilling in the Arctic, it was met by a large protest by these two groups. ¹³ The activist media strategy of Idle No More pitted the staggering scale of the huge drilling rig against human-scaled kayakers to play up the heroism of the protesters, whose efforts were met with success four months later, when Shell announced in September 2015 that it would abandon Alaskan Arctic drilling. Idle No More's media campaign used images of this massive industry that makes it appear too big to fail, not unlike Burtynsky's photographs, but instead of evoking dread and apathy, the campaign showed that this large and powerful industry could be disrupted by activists. The large scale of the unsightly rig did not deter the kayakers from coming out in large numbers to demonstrate their opposition to Shell and to all oil and gas exploration (figure 7.3).

These popular images from the sHell No! protest spread widely online, and the visual images provided evidence of an activist action that was critical in pointing out the importance of protecting communities and wildlife in the Alaskan Arctic from future oil drilling and spills. Ever since the largest maritime oil spill in history took place in the Gulf of Mexico in 2010, the intense media focus has publicized the hazards of drilling thousands of feet beneath the ocean floor in dangerous and risky conditions. This was at the forefront of some of Idle No More's concerns at the sHell No! demonstration on May 16, 2015. As an Alaskan Inupiaq activist at that protest, Mae Hank, explains, "Our culture and livelihood



Figure 7.3 • sHell No!, Seattle, Washington, protest over Arctic drilling, May 2015. In the sHell No! demonstration, activists transformed kayaks into agitprop theater to advocate for an Arctic not despoiled by oil spills. Source: www .usatoday.com.

is dependent on the bowhead, the walrus, the seal and the fish. How can Shell go ahead with such a risky operation when peoples' lives are at stake? Shell has a 75% chance of a spill in the region if it moves forward with drilling. Shell simply cannot be trusted with such operations."14 The transformation of parts of the Arctic by the fossil fuel industry has provoked a new wave of grassroots women-led climate activism that emerged after the Exxon Valdez oil spill in 1989, discussed in chapter 4. Idle No More was founded in 2012 in Saskatoon, Canada, by four women—three Indigenous women (Jessica Gordon, Sylvia McAdam, and Nina Wilson) and one non-Indigenous ally (Sheelah McLean). The group articulated a vision for their movement that combined defense of Indigenous rights with defense of the environment.15

In the sHell No! demonstration, the activists transformed kayaks otherwise used primarily by families for recreational purposes

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into agitprop theater to advocate for an Arctic not despoiled by oil spills. With the climate emergency accelerating in the future, we will continue to see more protests along the lines of sHell No! activism. The sHell No! action in Seattle is not an isolated incident but is connected to other climate art and environmental activism that focuses on Indigenous land rights, including encampments and occupations, many in Indigenous territories, such as the Dakota Access Pipeline protest. ¹⁶ Activists' social media strategies make us understand how extraction companies function as a scale-making activity, as a system and a structure. In this respect, these activists are in dialogue with photographic projects such as Edward Burtynsky's on the oil industry. ¹⁷ If Idle No More in its media strategy breaks ground in this genre of new media and performance that others have used in a place-based sense, the Yes Men frame their activism as performance-within-film as a medium to explore specifically political environmental questions.

Absurd Impersonations: The Yes Men's *But It's Not That Polar Bear Thing*

The two leading members of the Yes Men who live in the United States are Jacques Servin, an author of experimental fiction, and Igor Vamos, an associate professor of media arts at Rensselaer Polytechnic Institute, New York. They have produced two films: *The Yes Men* (2003) and *The Yes Men Fix the World* (2009). In these films and in their performance work, shown both at international art exhibitions and more widely at activist venues and universities, they often impersonate corporate or governmental figures that they believe are acting in deliberately misleading ways to further the agendas of the companies or governmental organizations for which they work. The Yes Men also often create and maintain fake websites to satirize and subvert the public image of the various companies they target, with the aim of undoing these companies' careful scripting of their visual representation. In 2012, the Yes Men collaborated with Greenpeace and members of the Occupy Seattle movement to focus on issues dealing specifically with Shell's oil drilling in the Arctic Circle.

The activist work of the Yes Men speaks to the contradiction of image culture: part of this climate emergency has to do with how images of the oil industry are now much more highly managed than they were in the past. We think there is much more transparency and access in our current digital image culture than there actually is. That is why the focus is more on what we cannot see—and on how we are seduced and blinded by the benevolent images of oil company executives and their hollow philanthropic gestures.



Figure 7.4 • The Yes Lab and Greenpeace, video still from But It's Not That Polar Bear Thing, 2013. In this image of a staged media spectacle and fake PR campaign for Gazprom, the Russian gas company that has partnered with Shell, the Yes Men pretend to be corporate oil executives shaking hands over a fake agreement to donate a drugged polar bear to the city of Amsterdam out of "concern" for climate change.

In their video *Gazprom Delivers Bear to Holland* (2013; figure 7.4), the Yes Lab (an offshoot of the Yes Men) staged, in collaboration with Greenpeace and international and Russian activists forced to live abroad, an elaborate media spectacle and a fake PR campaign for Gazprom, the Russian gas company that has partnered with Shell. ¹⁹ Their over-the-top performance took place on a barge in Amsterdam and involved a drugged polar bear, a Russian child superstar, and a marching band that moved through the city's canals to the zoo, where the artists, dressed as corporate executives, gifted the drugged polar bear to the city.

The Yes Lab's work here focuses on the distasteful attempts by oil companies to fool the public and challenges the conventional monological narration of oil. The tightly scripted large-scale public relations campaigns of oil companies like Russia's Gazprom and Shell operate to convince the world that they are not responsible for the collapse of our ecosystems, that oil drilling and production are absolutely

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harmless and will positively contribute to the development of infrastructure, that they can be trusted to drill safely in the Arctic without ruining it and reducing living standards for humans and nonhumans, and that oil drilling does not speed up the melting of ice by climate change. The Yes Lab's performance pointedly mimics Gazprom's own cynical public relations campaigns (see their Environment page on their website) by trotting out the gift of a real polar bear, the global icon of climate change, as a quick way to demonstrate their apparent concern for climate change.²⁰

Though I included this work in this chapter, I question the ethics of the Yes Lab activists since their action used a drugged polar bear as a live nonhuman prop. This act might have contributed to the reality effect of the performance but should be critiqued as a practice often used by countries like China, where live animals such as pandas are offered to countries to build diplomatic relations. $^{21}\,\mathrm{The}\,\mathrm{Yes}\,\mathrm{Lab}$'s parody of Gazprom's and Shell's corporate advertising culture and corporate donations in general might have appeared to their audience as a genuine effort rather than a hollow philanthropic gesture because audiences empathize with the plight of polar bears in an apolitical way and up until recently have not held oil and gas companies accountable. The Yes Lab's parody also revealed that the mere creation of a convincing media spectacle that included actors who spoke fluently in their roles as white corporate spokesmen willing to demonstrate their low-cost philanthropic largesse was enough to garner media attention and render the public, which is already vulnerable to corporate greenwashing, completely taken in by an otherwise outrageous performance.22

Site-Specific Activism in Art and Natural History Museums: Liberate Tate, Platform London, and Not an Alternative

If the Yes Men broke new ground by incorporating performance into their activism, the same could be said for the site-based feminist art activist performances directed at art and natural history museums. This final section takes as its subject some of the guerrilla performance-art pieces by Liberate Tate, the Platform London, and Not an Alternative that draw from institutional critique in the art world but take aim at fossil fuel capitalism and its deleterious impact on art, culture, natural history, and science. Platform London and Liberate Tate are interdisciplinary British art collectives that in 2010 regularly protested British Petroleum's (BP) heavy sponsorship of British national art and culture through unauthorized performance-based interventions in museums and other sponsored



Figure 7.5 • Liberate Tate, video still of anti–fossil fuel activists in London spilling "oil" at the Tate Britain gallery's summer party, during the performance piece License to Spill, 2010.

spaces.²³ The collectives' performance work and activism considered what was at stake for the arts globally when oil sponsorship became so powerful that it potentially weakened artists' responses to environmental disasters and hindered international efforts by artists to tackle critical environmental and climate change issues in their exhibited work.

The site-specific unauthorized occupation of Tate Britain by Liberate Tate for a performance titled *License to Spill* (2010; figure 7.5) was the first protest in a six-year campaign of interventions at the Tate objecting to the cultural promotion by an oil company.²⁴ This action is unique in its focus on protesting BP's Gulf oil spill at Tate Britain in London, where BP once enjoyed a large impact on the arts; it was the leading funder of this institution. In 2010 BP was one of Tate Britain's most important sponsors, while also supporting other leading cultural institutions including the Royal Opera House, the British Museum, the National Portrait Gallery, and the Royal Shakespeare Company in London. The Lib-

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erate Tate performance *License to Spill* drew direct links between the explosion of the *Deepwater Horizon* drilling rig and the corporate sponsorship of BP in the London art world; and it was performed at the Tate Britain at the same time as worldwide audiences were following the ruinous *Deepwater Horizon* oil spill through online video feeds. ²⁵ Ironically titled *License to Spill*, the group's reenactment of BP's Gulf oil spill comprised two fake "oil" spills, one inside and the other outside Tate Britain, to disrupt the Tate Summer Party, which was intended to celebrate twenty years of BP support, soon after BP's botched response to the Gulf oil spill that year.

Like the sHell No! action, this performance also played with scale, but more metaphorically. Wearing large floral dresses and deploying overthe-top bodily femininity with humor and wit, two women artist-activists from Liberate Tate infiltrated the Summer Party and then carried out their action, using their elaborate dresses to conceal large sacks filled with molasses, which resembles oil. Calling themselves CEO "Tony Hayward" and "Bobby Dudley," the two beleaguered chief executives at BP, they began their performance in the crowded central gallery. The performance commenced when the first drips began to fall from their handbags. "Oh, I seem to have a leak," whispered one of them ironically. Soon the sacks under their dresses burst, releasing tens of gallons of "oil" onto the parquet floor. As a crowd formed around them, the two activists put on BP-branded ponchos and scrambled on all fours like housekeepers, trying to clean up the mess but using their high-heeled shoes instead of sponges and towels to pour the slick back into their handbags. But it was to no avail, and they said, "Compared to the size of the gallery this is a tiny spill, a drop in the ocean." They apologized to the astonished onlookers, explaining, "We'll definitely have it cleaned up by, say, August." This statement was meant to deliberately parody CEO Tony Hayward's infamous comments that had received widespread coverage around the world at the time. Asked about the amount of oil and dispersant flowing into the Gulf, he responded, "The Gulf of Mexico is a very big ocean. The amount of volume of oil and dispersant we are putting into it is tiny in relation to the total water volume."²⁶

The replication of an "oil" spill at Tate Britain by women performers who used bouffant dresses with handbags and high-heeled shoes as props employs satire to underscore their anger at the corporate elite's greenwashing, which minimizes the damage caused by environmental pollution or, in more extreme cases, even makes them appear environmentally friendly. The organization Platform London (affiliated with Liberate Tate) had a long-running argument with the Tate over BP's sponsorship. For

them, the co-optation of the arts by Big Oil, a process that one of their lead activists, Mel Evans, calls "artwashing" (also the title of her book), is "a serious stain on the UK's cultural patrimony." ²⁷ For Evans and her collaborators, whose writing and performances are about the public's right to imagine a world that is not dependent on fossil fuels, the ethical dilemmas caused by Big Oil's corporate sponsorship of the arts are not easy to clean up, like the stain they deliberately re-created in miniature in their performance at Tate Britain. Evans's term artwashing seems an astute description of the part museum elites seem to play here. Indeed, Liberate Tate's performance could be read in part as a response to Tate director Nicholas Serota's widely circulated comments when he was interviewed during BP's Deepwater Horizon oil spill. Serota explained, "We look for long-term partners and one of those long-term partners is BP. They have been with us for 20 years. We all recognise they have a difficulty at the moment but you don't abandon your friends because they have what we consider to be a temporary difficulty."28

The Tate did not have to abandon their "friends" in the end, since BP abandoned them in March 2016. Whereas BP played down the impact of the art activism on their decision to pull out, Mel Evans, a member of Liberate Tate, commented on this important outcome: "We think it's important that art space is protected for the public and not co-opted by an oil company." Yasmin de Silva, another member of the protest group Liberate Tate, underscored the significance of this shift: "About 30 years ago, the tide turned on tobacco sponsorship, and now the same thing is happening to the oil industry." 30

Activist protests against the presence of fossil fuel sponsors and museum board members spread to other museums in Europe but did not take place in the United States until 2014, and then they focused not on art museums but on natural history and science museums. Inspired by Liberate Tate and the Yes Men, the US activist art collective Not an Alternative brought site-based performances from the art world into direct actions in the world of natural history and science museums. ³¹ Beka Economopoulos, a cofounder of this originally Brooklyn-based collective comprising artists and activists, dressed up, like the *License to Spill* activists, but this time in professional garb to infiltrate museum professionals from natural history and science museums. The collective's goal was similar to that of Liberate Tate and Platform London: to keep museums accountable to the public and not let them be taken over by corporate climate deniers on their own boards, a particularly vexing problem, especially in the United States, that became more acute during the Trump administration. For natural history

1 9 0 and science museums, this is especially crucial since these museums traditionally advocate for basic science over applied science and represent nature as part of the commons, rather than as a mere source of resources for the extraction industries. But museums are under pressure from the lobbyists of the oil and gas companies, as discussed in chapter 4.³²

To resist this kind of pressure and censorship at these museums more forcefully, Not an Alternative created their own pop-up Natural History Museum to play with scale and to highlight the fossil fuel industry's greenwashing in science museums. The activists became "directors," created a fake "board of directors," and credentialed their own "museum" through the American Alliance of Museums. In 2015 they created a natural history "exhibit" in Atlanta for one of the world's largest conventions for natural history and science museums.33 For their installation they fabricated a diorama that referenced the already existing 2009 diorama exhibited at the actual American Museum of Natural History (AMNH) in New York, which was titled "Climate Change: The Threat to Life and a New Energy Future." But their display did not simply mimic the original. The original diorama showed a solitary polar bear cub foraging for food in a garbage dump. It called attention to how polar bears are no longer able to prey on seals for the entire year, the result of reductions in sea ice in the Arctic as a consequence of global warming. This has led to a feeding crisis for polar bears, hence the image of a cub standing in a garbage dump rather than on a shrinking ice floe (similar to the 2017 still from Paul Nicklen's "Starving Polar Bear on Iceless Land," from a National Geographic video on YouTube).34 In contrast to the original AMNH exhibit, Not an Alternative's own diorama points to the missing sociopolitical context left out of the earlier exhibit, placing an oil pipeline attributed to Koch Industries into the exhibit to comment on how increased development by oil and gas companies in the Arctic and elsewhere will speed up not only melting but also species extinction and the loss of the crucial permafrost "carbon" banks in these frozen regions (figure 7.6). Their replication of the AMNH exhibit disrupted the polar bear's seemingly apolitical nature.³⁵ Rather than have its audience sympathize with the cub who cannot find food, it refocused the conversation on a more demanding set of questions about why this is happening.

The 2015 exhibit, featuring a diorama titled "Our Climate, Whose Politics?," presented a deeper political critique than the original to emphasize how the politics within the AMNH itself were compromised by a board member, the late David Koch, a climate denier and at the time co-owner of Koch Industries, who created a situation of self-censorship in the original

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companies ahead of those of the museum's public. After this intervention the group carried out other successful actions, including one launched in March 2015 when they teamed up with 150 climate scientists to write a petition that resulted in successfully getting David Koch permanently off the board of the Museum of Natural History in New York City. ³⁶ (See figure 7.7.)

2009 exhibit, which could be seen as putting the interests of the fossil fuel

Heroic Age photographs and paintings of sublime and empty Arctic landscapes populated by polar bears are problematized by contemporary artists who are reaching for new ways to create visual disturbances to counteract the status quo. Invoking what I call critical polar aesthetics (polar here referring to a wider region in the Arctic and Antarctic beyond the poles), the political nature of polar aesthetics in these regions quite logically leads to more activist approaches. The problem of the Anthropocene and the Capitalocene is a problem of perception but also a problem of the politics of denial and the manufacturing of doubt. The Yes Men's activist art highlights the active deception involved in Gazprom's and Shell's public relations efforts (greenwashing) by creating a spectacle using comedic irony to mimic the oil companies' tactics. Liberate Tate, the British Platform London collective, and Not an Alternative use satire to draw attention to how museums silence the climate emergency owing to their reliance on funding from oil companies and museum board members like the late David Koch.

Consequently, activist art's role in defending democratic values has come into focus in a new socially engaged and participatory art that blurs the boundaries among activism, political action, and works of art. The work of Not an Alternative dares to push natural history museums to leverage their institutions as infrastructure for environmental justice in a time of climate crisis rather than preserving the interests of their board of trustees and their donors. The chapter focused on some of the artists who make evident through their activism that contemporary museums, if not challenged, can enable the same forces that are corrupting our politics and promoting authoritarianism and plutocracy. Their work critiques museums for serving as vehicles to create goodwill for wealthy board members and their corporations, who want to use museums as a fig leaf for their right-wing climate agendas and who are intent on bending the arc of public discourse to the right.





Figure 7.6 • (top) Not an Alternative, diorama from a pop-up display titled *Our Climate, Whose Politics?* at the 2015 American Alliance of Museums Annual Convention in Atlanta, Georgia. The diorama replicates an earlier climate change exhibition at New York's American Museum of Natural History—with the inclusion of a Koch Industries pipeline that changes the meaning. Photograph by Not an Alternative/American Museum of Natural History, New York. Courtesy of the artists.

Figure 7.7 • (bottom) Not an Alternative, Expedition Bus, 2015. The fifteen-passenger bus is on site for a petition delivery at the Smithsonian's National Museum of Natural History, June 15, 2015. Photograph by Not an Alternative/Museum of Natural History, Washington, D.C. Courtesy of the artists.

The chapter also focused on some of the artistic strategies that speak to the problem of perception and the way damaged polar landscapes are concealed from view. The image culture of these regions is much more highly managed and less transparent than one would expect. That is why the chapter focused in part on artists who make visible the violence of resource extraction that is ordinarily hidden from view. Political activism here involves resistance, challenging narratives of climate denial and its institutional practices by visually disrupting physical, public, private, and digital space.³⁸ Contemporary artists and activists continue to deserve attention for this kind of critical polar aesthetics that is taking place through climate activism and direct-action performances. My hope is that such critical polar art, film, and activism by engaged artists and activists provides new perceptions and affects (those of justice and responsibility) to rethink life at a time of climate breakdown to face a more entangled and interrrelational future that moves away from the fantasy of limitless growth without losing our nerve and succumbing to apathy or cynicism.



EPILOGUE

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SEEING FROM

THE FUTURE

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What felt impossible has become thinkable.

Kim Stanley Robinson, "The Coronavirus Is Rewriting Our Imaginations," *New Yorker*, May 1, 2020

As I complete this book in the fall of 2021, in the wake of the coronavirus pandemic, the dire forecasts for global warming seem more consequential and urgent. We were not ready for the pandemic at the end of 2019, even though experts had warned of its possibility decades ago. Nevertheless, effective international responses to COVID-19 (vaccines) have offered glimmers of hope. Not so with climate change.

Countries worldwide continue to pump out the emissions that cause climate change, and the world remains far off track to avoid catastrophic unraveling. A major scientific global climate study released in August 2021 concluded that countries must rapidly shift away from burning fossil fuels and stay below 1.5 degrees Celsius (2.7 degrees Fahrenheit) of warming. But according to Naomi Klein, an earlier 2018 report, largely unheeded by governments and corporations, had already made clear the baseline measures that needed to be adopted to avert catastrophe. Already, the failure to slow rising temperatures—brought on by the burning of oil, gas, and coal—has led to polar ice and glacier melt; deadly floods, fires, heat, and drought around the world; and species extinction on a massive scale. Yet, even as the impact of climate breakdown comes to be felt everywhere, government climate policy is woefully inadequate, and the urgency of the crisis is still not getting through.

In the midst of this inadequate response, however, the artists and film-makers discussed find a way to integrate climate activism, aesthetics, and

scientific fact. Using the often suppressed and largely ignored evidence of climate change in the polar regions and the Circumpolar North, the artists treat the climate crisis as an immediate emergency of the future, shifting the temporalities of planning and action to the here and now rather than to the statistical calculation of futurity of market-based neoliberal governments. This here-and-now sense of an immediate future is most clearly addressed by the artist-activists in the book who produce their works in dialogue with the climate justice movements in which they consider themselves to be participants. In some instances, the boundaries between art and activism dissolve altogether, especially for the Indigenous filmmakers whose lives depend on the fragile and stressed ecosystems of the Circumpolar North. Arctic Indigenous activist Mary Simon, discussed in chapter 3, cuts straight past the business-as-usual approach to the environment in a statement so direct, short, and true that it almost reads flatly: "If we don't have our environment we cannot survive." 4 Simon sees to the bottom of capitalism's extractivist shell game, to the bare environment. Artists and filmmakers in this book share her vision to save the very materials of value that many of the artists also use as the materials of their art: ice, earth, whalebones, and water. Many of the artists and scholars in Climate Change and the New Polar Aesthetics create an alternative voice for the future, one opposed to the seemingly inevitable colonial imaginary for which the environment is a means that supports the ends of unregulated capitalism and hyperextractivism.

Renewing Art and Politics: Molly Crabapple and collaborators

Climate artists are renewing a notion of art that is not about making money but rather about enabling us to imagine a future that escapes the grip of neoliberal capitalism and the despair that stems from the crisis of climate destruction. Instead of abandoning art museums with their considerable resources, artists are already mobilizing the power of art institutions and pushing them to divest from fossil fuels. Divestment from opioid drug manufacturers (for instance, the Sackler Trust and family) and fossil fuel companies (BP, Shell, etc.) are happening concurrently and were preceded in the 1980s and 1990s by museum divestiture from big tobacco (Philip Morris) and companies' refusal to do business with apartheid shareholders.

For artists in this book, new networks linking issues routinely kept apart in climate change discourse are also emerging through and beyond the museum sector: Amy Balkin and Andrea Bowers appear in activist programming for the climate movement; Zacharias Kunuk and Ian Mauro's

film is on their own Indigenous online media website; Roni Horn's permanent installation in Iceland, *Vatnasafn*, is in a library and also perpetually shifting to reflect changing local and global climate conditions and continually inviting local community members to contribute their weather stories to its expanding archive; Judit Hersko's artwork appears in airport galleries and virtually through performance talks at universities or through nonprofit art spaces; Katja Aglert's work has been presented at an opera house as well as at regional museums; and activist artists such as the Yes Men, Not an Alternative, and Liberate Tate work outside of museums in the streets and in other unlikely places while at the same time bringing struggles for climate justice back into these institutional spaces.

Seeking alternative venues for getting their work out was especially important for artists during the pandemic, when most museums, art galleries, art schools, and universities were shuttered and we had to rethink what it meant to be part of an arts community. We faced a smaller, more isolated, and constricted world. Yet through the pandemic more collaborative and participatory forms of art and film emerged virtually, an expression of hope that changes spawned by these crises will lead to the radical changes needed to avert catastrophe. Art and film on the climate crisis showed up in online news sites and journals as well as in activist programming for the climate movement, among other online venues. A case in point is a film with animated painting by Molly Crabapple, in collaboration with producer and cowriter Naomi Klein, writers Alexandria Ocasio-Cortez and Avi Lewis, and directors Kim Boekbinder and Jim Batt, produced a seven-minute animated film, A Message from the Future with Alexandria Ocasio-Cortez, in 2019. Klein explains that the film is a "thought experiment ... set a couple of decades from now, [that] is a flat-out rejection of the idea that a dystopian future is a forgone conclusion."6

Turning to science fiction, the short film proposes a recognizable vision of a livable future made possible by the Green New Deal. Speaking from the future, Ocasio-Cortez recounts how the climate crisis happened and the ways that people around the world ended up in a very dangerous place thanks to their politicians, governments, and corporations. The film follows the fictional story of Ileana, a girl from the outer boroughs of New York City who grows up during the "Decade of the New Deal," and speculates about how a just transition of jobs, universal healthcare, and a total overhaul of the country's energy system might affect her life as well as the lives of others in her community.

Bypassing the present political rancor and confusion about the climate crisis, Molly Crabapple's animated line drawing and watercolor

backgrounds capture, from the point of view of a young woman moving through her life, the everyday street-level transformation made possible by the Green New Deal. Drawn in real time, Crabapple's vibrant drawings show working-class people, both young and old, who are typically seen as innocent victims of global warming without agency, thriving in their neighborhoods and at work. A banner reading "You Can't Be What You Can't See" links artistic representation to political representation, showing how Ileana is inspired to enter politics by seeing women of color elected to the US House of Representatives in 2018—the same politicians who crafted the Green New Deal (figure E.1). Another scene, set under a banner reading "We Can Be Whatever We Have the Courage to See," captures not just the work involved in building a better society but also its collective pleasures. In this animated painting, Crabapple shows the contentment of elderly residents playing bridge and performing music in a flourishing neighborhood garden (figure E.2).

A Message from the Future with Alexandria Ocasio-Cortez has been viewed more than twelve million times, was nominated for an Emmy award, and became a centerpiece for the Sunrise Movement's 250-city Road to a Green New Deal tour in 2019. Aimed at a popular audience, it treads close to the naive belief in the power that the visual has to expose truth. Yet the need to see it to believe it can also be a route to a politically effective messaging strategy. The search for antecedents and tangible proof may actually work best in reverse; that is, as a projected future or vision. While most of the artists in this book offer a more complex and poetic approach to explore conceptions of beauty, troubling environmental truths, and ethical challenges that come with living in an unstable and contingent world, the film taps into a more direct approach to how vision works counterintuitively, suggesting the unseen potential of the visual, especially for politics. The film shows the future world, one that resembles the familiar present, but now illustrating the collaboration of politics and art through a vision which unleashes the unseen, missing, and suppressed potential for a broad civic response to climate crisis.

One of the most important challenges facing artists, activists, and scholars is to offer creative alternatives and suggest ways to remake and repair the world. In the *Message from the Future* video and many of the art and film works discussed, the boundaries between art and activism dissolve to generate a new polar aesthetics, part of a larger genre appropriately called "climate art." *Climate Change and the New Polar Aesthetics* contends that artists are crucially positioned to show us, through an





Figure E.1 • (top) Molly Crabapple shares a painting, You Can't Be What You Can't See, from the collaborative animated film of young girls inspired by the wave of progressive women of color elected to the US House of Representatives in 2018. Source: A Message from the Future with Alexandria Ocasio-Cortez (2019), directed by Kim Boekbinder and Jim Batt. Photograph by Lisa E. Bloom.

Figure E.2 • (bottom) Molly Crabapple, We Can Be Whatever We Have the Courage to See, still from an animated painting of an outdoor scene with senior citizens of color playing bridge in a flourishing future environment. From Boekbinder and Batt, A Message from the Future with Alexandria Ocasio-Cortez, 2019.

aesthetic and political vision, how focus must be shifted from growth and profits toward resource conservation, climate justice, the preservation of livelihoods, and the global redistribution of wealth. The new polar aesthetics is activist, progressive, antiheroic, and earthbound (humble and rooted in the ground), and often done collaboratively with local and international publics in mind, without the goal of monetary gain. Such generous and generative art plays a fundamental role in connecting and empowering the transnational climate movement. With its focus on planetary survival, it also broadens our understanding of climate breakdown to create new knowledges and networks, which I and Elena Glasberg hope will support old and recent forms of collaborative, participatory, and activist climate art.

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."
- 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.
- 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 nineteenthand 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.
- 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*;

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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 singleauthored 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.
- 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*.

- 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/.
- "New Soil Samples Prove the Arctic Is Ours: Russia," *Reuters*, September 20, 2007, https://www.reuters.com/article/us-russia-arctic-idUSL 2082113920070920. 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.
- 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.
- 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).

1 A special thanks to Anne Hemkendreis and Anna-Sophie Jürgens for inviting me to give a short version of this chapter as a key-note talk for the stimulating international online symposium titled "Heroes on Ice? Conquests and Doomsday Visions," in August of 2021 (part two of a threepart conference, Ice [St]Ages) at the University of Freiburg in Germany. Thanks also goes to the wonderful international scholars who are part of the Challenging Precarity Network, including Elizabetta Marino, who

hosted the 2020 conference "Precarious Lives, Uncertain Futures" at the University of Rome at Tor Vergata in 2020, where I presented a paper based on this chapter; and Janet Wilson, the editor of the *Journal of Post-colonial Studies*, who invited me to publish my talk as an article. Thanks to Betti-Sue Hertz, formerly director of visual arts at the Yerba Buena Center for the Arts in San Francisco and currently the director of the Wallach Art Gallery at Columbia University in New York City, for inviting me to present on this topic for a lecture series she organized on art and ecology at Hunter Point in San Francisco in 2019. My appreciation also goes to Elizabeth Leane for inviting me to participate in her conference Depths and Surfaces: Understanding the Antarctic Region through the Humanities and Social Sciences, held at the University of Tasmania in Hobart, Australia, in 2017, which also included talks by two of the artists in this chapter, Judit Hersko and Anne Noble, as well as my own presentation, "Feminist Polar Aesthetics in the Anthropocene."

- 2 See Dodds and Collis, "Post-colonial Antarctica"; Dodds, "Settling and Unsettling Antarctica"; Glasberg, *Antarctica as Cultural Critique*. See also Maddison, *Class and Colonialism*.
- 3 Brooks and Ainley, "Fishing the Bottom," 423.
- 4 Howkins, "Significance of the Frontier" and Frozen Empires.
- 5 See O'Reilly, *Technocratic Antarctic*; Glasberg, *Antarctica* as *Cultural Critique*; Leane, "Placing Women"; Rosner, "Gender and Polar Studies"; and Collis, "Australian Antarctic Territory."
- 6 Glasberg, Antarctica as Cultural Critique, xx.
- 7 Wheeler, Terra Incognita, 219.
- 8 A. Jones, Self/Image.
- 9 A. Jones, Self/Image.
- 10 Jackson, "Changing Cultural Climate."
- 11 Fox, "Every New Thing," 30. For more of Fox's writing on Antarctica, see his *Terra Antarctica*.
- 12 See Alaimo, *Exposed*; Barad, *Meeting the Universe Halfway*; Chen, "Toxic Animacies, Inanimate Affections"; and Bennett, *Vibrant Matter*.
- 13 See the first two volumes of a trilogy devoted to her photographic investigations of Antarctica: Noble, *Ice Blink*; and Noble, Panek, and Jones, *Last Road*. See also Glasberg on Noble's Antarctic photography in Bloom, Glasberg, and Kay, "Introduction."
- 14 Thanks to Michelle Erai for this insight. She is based in New Zealand, was formerly professor of gender and women's studies at the University of California, Los Angeles, and is of Maori descent.
- 15 Quoted in "Glaciers in Antarctica Less Icy Than They Once Were, Say Scientists," *NDTV*, January 14, 2017, https://www.ndtv.com/world-news/climate-change-shows-in-shrinking-antarctic-snows-1648767.
- 16 Noble, "Antarctica Nullius," http://www.dialogues.org.nz (accessed November 19, 2019; no longer available).

- 17 Liggett and Stewart, "Changing Face." On how the rise of tourism in Antarctica is disrupting its fragile environment, see Paige McClanahan, "Tourism in Antarctica: Edging towards the (Risky) Mainstream," *New York Times*, February 26, 2020, https://www.nytimes.com/2020/02/26/travel/antarctica-tourism-environment-safety.html.
- 18 See Hersko's website, http://www.judithersko.com/, for images and a full description of her Antarctic art project *From the Pages of the Unknown Explorer*. Hersko's artwork on climate change and planktonic snails is an outgrowth of her collaboration with the biological oceanographer Victoria Fabry. See also Hersko's articles "'Translating' and 'Retranslating' Data," "Pages from the Book," and "Objects."
- 19 Lüdecke and Summerhayes, *Third Reich in Antarctica*. For a book-length study that addresses the veiled role of Jewishness in the understanding of feminist art in the United States, see Bloom, *Jewish Identities*.
- 20 See Siegel, Playing with Pictures.
- 21 Hersko's work also pays homage to her mother, Anna Hersko, one of the first women filmmakers in Hungary, who passed away as Hersko was beginning this work.
- For reviews of Samaras's Antarctic photographs, see Bloom, "Polar Fantasies and Aesthetics"; Bloom, "Connie Samaras' Futures"; Carson, "V.A.L.I.S."; Cartwright, "Face of the Photograph"; Glasberg, Antarctica as Cultural Critique; Newhouse, "Connie Samaras"; Tsatsos, Connie Samaras; and Viegener, "Connie Samaras."
- 23 Philip K. Dick's *VALIS* trilogy includes *VALIS* (1978), *The Divine Invasion* (1980), and *The Transmigration of Timothy Archer* (1982). Connie Samaras borrows her artwork's series title, *V.A.L.I.S.* (vast active living intelligence system), from the *VALIS* trilogy of Philip K. Dick. See Connie Samaras, "America Dreams."
- 24 Samaras, "America Dreams."
- 25 Joyce Campbell, quoted in Megan Downing, "Joyce Campbell," Ruth Chandler Williamson Gallery, April 4, 2008, https://rcwg.scrippscollege.edu/blog/2008/04/04/joyce-campbell/. Last Light was exhibited in 2007 at the Ruth Chandler Williamson Gallery, Scripps College, Claremont, California. For a comprehensive book on Campbell's artwork, see Welchman, On the Last Afternoon.
- 26 J. Campbell, "Last Light."
- 27 Batchen, "Nothing to Photograph," 100.

Chapter 2. Reclaiming the Arctic through Feminist and Black Aesthetic Perspectives

Some parts of this chapter have been substantially revised from earlier publications, and much appreciation goes to all the editors who contributed immeasurably to the quality of my writing. Portions of the section on Katja Aglert appeared in Katja Aglert and Stefanie Hessler's *Winter*

Event—Antifreeze (2014); The section on Isaac Julien appeared in the article "Polar Fantasies and Aesthetics in the Work of Isaac Julien and Connie Samaras," published in the "Gender on Ice" special issue of Scholar and Feminist 7, no. 1 (2008); "Arctic Spaces: Politics and Aesthetics in Gender on Ice and True North" appeared in Nka: Journal of Contemporary African Art, no. 26 (2010); and "Polar Fantasies and Aesthetics in the work of Isaac Julien: True North and Fantôme Afrique" was published, for a retrospective on the work of Isaac Julien, in Geopoetics (2012).

- 1 Special thanks to Katja Aglert for inviting me to come to Sweden and hosting me in Stockholm, where I presented at Marabouparken in Stockholm on my own research and on her work, and, to Tora Holmberg for hosting me for the Salt Lecture at Uppsala University's Centre for Gender Research (2014). Thanks to Silvia Forni for the invitation to give a lecture on Isaac Julien's *True North* that focused on sexuality and science in Arctic exploration at the Royal Ontario Museum in Toronto, Canada (2017), and to my very capable respondent, Andrea Fatona. I also want to thank Adriano Alves Pinto, Solange Farkas, and Teté Martinho for inviting me to Brazil to present on Isaac Julien's work for a retrospective on his work at Associação Cultural Videobrasil in São Paulo (2012); hosting me while I was there; and publishing an earlier version of my writing on Isaac Julien.
- 2 On the crisis of manhood at the turn of the century in the US context, see Haraway, "Teddy Bear Patriarchy"; Enloe, *Making Feminist Sense*; Bederman, "Theodore Roosevelt."
- 3 See Bloom, Gender on Ice, 6.
- 4 For a critical analysis of an archive at the library of the Norwegian Polar Institute and the way it reflects a twentieth-century Norwegian masculinist world of politics and resource exploitation, see Ryall, "Gender in the Twentieth Century," 177–95.
- 5 See, for example, biographies such as Barczewski, *Antarctic Destinies*; and others reviewed in Alvarez, "S&M at the Poles." See also Farley, "By Endurance We Conquer," for an analysis on how these accounts are sometimes used by both the adventure travel industry and business management consultants to promote men's leadership skills.
- 6 Glasberg, Antarctica as Cultural Critique, xxii.
- 7 For the exhibition in Tromsø, the title of the piece changed to *Antifreeze: Rehearsals as Score.*
- 8 Aglert was also influenced by Christiane Ritter's memoir that tells the story of her time in Svalbard in 1933, *A Woman in the Polar Night*. See also the book in Swedish by Bea Uusma, *Expeditionen: Min kärlekshistoria*, in which she looks again at Solomon August Andrée's expedition. For other examples in the Scandinavian context, see the exhibition publication Holm, Seeberg, and Tøjner, *ARCTIC*; and, within it, Rosing, "Clarity in the North."
- 9 R. Scott, Scott's Last Expedition.
- 10 Bloom, Gender on Ice, 124.

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- 11 See the chapter "Making and Remaking the Polar Regions," in Dodds and Nuttall, *Scramble for the Poles*.
- 12 See Spring and Schimanski, "Melting Archive."
- 13 For more on the inherent contradictions in the notion of the Svalbard Global Seed Vault as an Arctic archive with significance for the Anthropocene, see Hennig, "Arctic Archive for the Anthropocene."
- 14 Ken Johnson, "George Brecht, 82, Fluxus Conceptual Artist, Is Dead," *New York Times*, December 15, 2008, https://www.nytimes.com/2008/12/15/arts/music/15brecht.html.
- 15 See J. Robinson, "From Abstraction to Model." For more on late eighteenth-century philosophers' use of the term *the sublime*, see Burke, *Philosophical Enquiry*; and Kant, *Critique of Judgment*.
- I am using the term *the contemporary sublime*, see Morley, "Introduction." I am using the term *the contemporary sublime* differently than Simon Morley, who does not take into account climate change or neoliberal economics in his detailed description of the term. For exhibitions that focus on the lure of the polar regions in Edwardian culture, with specific attention to the uses of the sublime in art and in the choices of the explorers themselves, see the website for the exhibition *To the Ends of the Earth: Painting the Polar Landscape*, shown at Peabody Essex Museum, Salem, Massachusetts, 2008–2009, https://www.pem.org/exhibitions/to-the-ends-of-the-earth-painting-the-polar-landscape. For more critical writings on the history of Arctic photography, see Bloom, Glasberg, and Kay, "Gender on Ice."
- 17 Aglert and Hessler, Winter Event—Antifreeze.
- 18 Katja Aglert, email correspondence with the author, June 25, 2020.
- 19 Aglert, email correspondence with the author, June 25, 2020.
- 20 Aglert, email correspondence with the author, June 25, 2020. Aglert points to the influence of the writings of Astrida Neimanis, particularly *Bodies of Water: Posthuman Feminist Phenomenology*, on her artwork on melting ice and water.
- 21 Aglert, email correspondence with the author, August 2, 2020.
- 22 On polar bear iconography, see Yusoff, "Biopolitical Economies"; Williamson, "Unfreezing the Truth."
- 23 Barthes, Camera Lucida, 91.
- 24 Interest in the Arctic is part of a growing trend for Black artists and writers. For example, see John Akomfrah's video art installations *Nine Muses* (2012) and *Vertigo Sea* (2015) for the way he juxtaposes images of human and natural history of the Arctic to deal with racial and environmental politics in his work. See the writing of Monica Miller, for example, Miller, "Taking the Temperature," and Lúthersdóttir, "Transcending the Sublime."
- 25 See Bloom, Gender on Ice, 58.
- 26 See Bloom, Gender on Ice, 127–29.

- 27 Fowler, "Negro," 49.
- 28 In the end, there was enough doubt about his claims that he was recognized by a congressional committee as an "attainer," not a "discoverer," of the pole, although he was awarded a rear admiral's pension by a special act of Congress in 1911.
- 29 See Pálsson, "Hot Bodies." Pálsson explains how Inuit women and men changed their livelihood from a community-focused one to the production of food and clothes for Peary's expedition team. Some men even risked their lives for Peary's collaborative expedition; others had their existing spousal relations disrupted when members of Peary's expedition became involved in sexual relations with local women.
- 30 See Stepto, *From behind the Veil*, 67–68; and Henson, *Black Explorer*. (When it was first published, in 1912, Henson's account was titled *A Negro Explorer at the North Pole*.)
- 31 See the work of Sámi scholar Rauna Kuokkanen (particularly Kuokkanen, *Restructuring Relations*) on the function of self-governance systems across the Arctic and the ways Indigenous self-determination relates to gender regimes and gender-based violence.
- 32 See Tobing-Rony, Third Eye.
- This larger culture includes *Nanook Revisited* (1999), made by a Canadian Film Collective; Zacharias Kunuk's *Atanarjuat* (2001); and the documentary by Kunuk and Ian Mauro discussed in chapter 3, *Qapirangajuq: Inuit Knowledge and Climate Change*.
- 34 Fowler, "Negro," 49.
- 35 Bloom, *Gender on Ice*, 99-100.
- 36 B. Robinson, Dark Companion, 225; Angell, To the Top of the World, 271.
- 37 Note that in Henson's autobiography, the Inuit men's exploits on the expeditions were not history-making Henson's exploits were was for him as an American male. See Henson, *Black Explorer*. The caption for figure 2.15 uses Peary's spelling of the Inuit men's names, while the text uses Henson's preferred spelling.
- 38 *True North* has been realized in a number of formats including: four-screen, three-screen, two-screen, and single-screen projections. Julien has also produced a series of hundred-centimeter-square color photographs, some conceived as single images and others presented as diptychs and triptychs. Also see Julien's film installations *Fantôme Créole* (2005) that combines *True North* (2004) and *Fantôme Afrique* (2005), which was filmed in Burkina Faso.
- 39 Julien, Geopoetics, 26.
- 40 Miller, "Taking the Temperature."
- 41 Foy, "Matthew Henson," 22.
- 42 Quoted in Foy, "Matthew Henson," 23.
- 43 Peary, North Pole, 272.
- 44 Peary, North Pole, 273.

- 45 See Ian Evans, "The Forgotten Indigenous Women of Robert Peary's Arctic Expeditions," *Arctic Deeply*, July 31, 2017, https://www.newsdeeply.com/arctic/community/2017/07/31/the-forgotten-indigenous-women-of-robert-pearys-arctic-expeditions.
- 46 See Counter, North Pole Legacy.
- 47 See Pálsson, "Hot Bodies."
- 48 Henson's response to the Inuit differs from Peary's, but at the same time he stresses in his memoir that he does not want to be regarded as a mere laborer like the Inuit. See Foy, "Matthew Henson," 29–32.
- For more on Henson's position vis-à-vis the involved Inuit men and on the intersecting power relations that allowed Henson to render himself more "civilized" and "cultured" than the Inuit, see Foy, "Matthew Henson," 32–33. Also see Henson, *Black Explorer*, 6, 24–25, 132–33, 137.
- 50 See Bhabha, "Of Mimicry and Man," 86.
- 51 Never is this more apparent than in the cutting-edge photography of Geraldine Moodie (1845–1945), the first female photographer of the Canadian Arctic, whose photographs foreground the Inuit in their environment, their technology, and, above all, Inuit women in both landscape and studio/indoor photographs. Her work is contemporary with and even predates Peary and Henson. See Hatfield, "Colonialism's Gaze." For more on the ways Greenland's contemporary Indigenous women artists and writers are contesting the dichotomies and essentialized identities from their past as they continue to integrate into the modernity of the present, see Thirsted, "Blubber Poetics."
- 52 Foy, "Matthew Henson," 29–32. For more on how Robert Peary used the Inuit of northwestern Greenland as the human resources for his expedition, see Harper, *Give Me My Father's Body*.
- 53 See the chapter "New Resource Frontiers," in Dodds and Nuttall, *Scramble for the Poles*.
- 54 Aglert, email correspondence with the author, June 25, 2020.

Chapter 3. At Memory's Edge: Collaborative Perspectives on Climate Trauma in Arctic Cinema

Sections of chapter 3 were included in "At Memory's Edge: Climate Trauma in the Arctic through Film," in *The Routledge Companion to Contemporary Art, Visual Culture and Climate Change*, edited by T. J. Demos, Emily Eliza Scott, and Subhankar Banerjee (2021).

- 1 For more on how Arctic cinema is quite distinct in many aspects from American and European cinematic traditions and practices, see MacKenzie and Stenport, "Polarities and Hybridities"; and MacKenzie and Stenport, "Introduction."
- 2 A special thanks to Dianne Chisholm for providing insightful feedback on my book manuscript at an early stage and for introducing me to *Attutau*-

niujuk Nunami/Lament for the Land, directed by Ashlee Cunsolo Willox, and to Subhankar Banerjee for his encouragement and support during a critical stage in both my book project and article and for recommending *That Which Once Was*, directed by Kimi Takesue. I am grateful to Hanne Hammer Stien, who invited me to give a seminar based on this chapter on Zoom for the research group Worlding Northern Art, based at UiT, the Arctic University of Norway, at Tromsø, in February 2021. Thanks to Johan Höglund, who invited me to Copenhagen for a talk in January 2020 on the topic of this chapter for Linnæus University, Sweden, through the Centre for Concurrences in Colonial and Postcolonial Studies; and to Aleksandr Andreas Wansbrough, who invited me to give an online keynote that was a shorter version of this chapter virtually for the Underground Film Festival in Sydney, Australia, in 2020.

- 3 Chisholm, "Enduring Afterlife," 214. For an overview on Arnait Video Productions that foregrounds Inuit women's perspectives, see MacKenzie and Stenport, "Arnait Video Productions." Also see the 2009 film *Before Tomorrow*, the first feature film by Igloolik's Arnait Video productions women's collective, that is the subject of Chisholm's article.
- 4 Young, At Memory's Edge; Bloom, Jewish Identities in American Feminist Art.
- 5 Hirsch, Generation of Postmemory.
- 6 Caruth, "Recapturing the Past."
- 7 Adorno, "Cultural Criticism and Society," 34.
- 8 Kaplan responds to concepts such as Rob Nixon's "slow violence" and theorizes that such violence is accompanied by its own psychological condition, what she terms "Pretraumatic Stress Disorder." See E. Kaplan, *Climate Trauma*, 1–22. See also R. Nixon, *Slow Violence*.
- 9 Bredin, "'Who Were We?" Also see MacKenzie and Stenport, "Polarities and Hybridities," 125–27.
- 10 Igloliorte, "Curating Inuit Qaujimajatuqanqit."
- 11 See Dunaway, "Reconsidering the Sublime." In chapter 4, I discuss at length how the term *wilderness* has been used historically by conservationists to dispossess Indigenous people of their rights to hunt on such land.
- 12 See Whyte, "Is It Colonial Déjà Vu?"
- 13 For an example of the way "environmentalist" and "conservationist" animal-savior narratives often have had very little understanding of the ecologies of the Arctic, see the feature-length documentary *Angry Inuk* (2016), directed by Alethea Arnaquq-Baril, which defends the Inuit seal hunt as a means for seal conservation and Inuit subsistence.
- 14 See Heise, "Coda: The Hug of the Polar Bear," in *Imagining Extinction*, 238–44.
- 15 For a more detailed article that focuses on the environmental impacts of waste in Iqaluit, the territorial capital of Nunavut, see Hird and Zahara, "Arctic Wastes."

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- See the 2015 reports of the Truth and Reconciliation Commission of Canada at http://nctr.ca/reports2.php.
- 17 Kunuk and Mauro, Qapirangajuq, 52:50.
- See Veronique Morin, "The Rise of Inuit Activism in a Changing Arctic," New Humanitarian, June 16, 2016, https://deeply.thenewhumanitarian .org/arctic/articles/2016/06/16/the-rise-of-inuit-activism-in-a-changing-arctic. See also TallBear, "Badass Indigenous Women."
- 19 Ashlee Cunsolo Willox, private correspondence, December 9, 2019.
- 20 Cunsolo Willox et al., "Climate Change and Mental Health."
- 21 See Stevenson, Life beside Itself, 92.
- For more on the shifting culture of care in Arctic Canada, see Stevenson, *Life beside Itself*, 21–48.
- On mental health issues in the Alaskan Arctic, see Ahtuangaruak, "Arctic Oil."
- 24 Vizenor, Survivance, 1.
- 25 Vizenor, Survivance, 1.
- 26 See, in particular, the ninth thesis (249) in Walter Benjamin's 1940 essay "Theses on the Philosophy of History," on the *Angelus Novus* (New Angel), a 1920 monoprint by the artist Paul Klee that Benjamin incorporated into his theory of the "angel of history."

Chapter 4. What Is Unseen and Missing in the Circumpolar North: Contemporary Art and Indigenous and Collaborative Approaches

Chapter 4 builds on my previous collaboration with Elena Glasberg, which started with the publication of the 2008 special issue of the *Scholar and Feminist* and the conference at Barnard College in 2008, followed by the publication of a single chapter titled "Disappearing Ice and Missing Data: Visual Culture of the Polar Regions and Global Warming," in *Far Field: Digital Culture, Climate Change, and the Poles*, edited by Jane D. Marsching and Andrea Polli (2012).

- 1 The desire of environmental artists such as Newton Harrison and Helen Harrison, Mierle Laderman Ukeles, and Bonnie Sherk, among others from the 1960s, 1970s, and 1980s, to draw our attention to the relation of humans to specific sites, constructed environments, and the "development" of land in order to transform public policy through artistic practice has been an important influence on some of the artists whose work is examined in this chapter. See Gonzalez, "Landing in California"; Kwon and Kaiser, *Ends of the Earth*; Weintraub, *To Life!*
- 2 R. Nixon, Slow Violence; and Banerjee, "Long Environmentalism," 62.
- 3 Subhankar Banerjee and Lois Epstein, "The Fight for Alaska's Arctic Has Just Begun," *Technosphere Magazine*, November 6, 2018, https://technosphere-magazine.hkw.de/p/The-Fight-for-Alaskas-Arctic-Has-Just-Begun-sY912LkJkUnQGKKn7QkyHt. See "Arctic Refuge Protectors:

An Open Letter from Teachers and Scholars," *The Last Oil*, March 13, 2019, https://thelastoil.unm.edu/arctic-refuge-protectors-teachers-and-scholars-letter/; and Brad Plumer and Henry Fountain, "Trump Administration Finalizes Plan to Open Arctic Refuge to Drilling," *New York Times*, August 17, 2020, https://www.nytimes.com/2020/08/17/climate/alaska-oil-drilling-anwr.html. In 2021 the refuge is still contested, but the current status has changed as the Biden administration has halted drilling. See Becky Bohrer, "Biden Plans Temporary Halt of Oil Activity in Arctic Refuge," *AP News*, January 20, 2021, https://apnews.com/article/joe-biden-us-news-alaska-wildlife-arctic-cdd89af06cb892e042782ace3 abca8eb.

- 4 See Banerjee's first published book on the Arctic National Wildlife Refuge in Alaska from his fourteen-month journey there: Banerjee, *Arctic National Wildlife Refuge*. See Ingrid Sischy, "The Smithsonian's Big Chill," *Vanity Fair*, December 2003, 242–56; Boettger, "Global Warnings."
- 5 Banerjee, "Eco-Critical Photographer."
- 6 Sischy, "Smithsonian's Big Chill," 243.
- 7 Sischy, "Smithsonian's Big Chill," 243.
- 8 Banerjee, "Terra Incognita," 189-90.
- 9 Sischy, "Smithsonian's Big Chill," 254.
- 10 Banerjee, "Land-as-Home."
- 11 Also see Ursula Biemann's *Subatlantic*, depicting a fictional woman scientist in intimate relation with the world she studies, discussed in chapter 6.
- 12 Potawatomi scholar Kyle Powys Whyte proposes in "Is It Colonial Déjà Vu? Indigenous Peoples and Climate Injustice," that Indigenous peoples' vulnerability to climate change is often framed as a result of their land-based livelihoods and geographic location, decentering the underlying reasons: capitalist extraction, burning of fossil fuels, and persisting colonial legacies.
- 13 See Cronon, "Trouble with Wilderness." Also see Finis Dunaway's concept of "imaginative geographies" in its relation to a reconsideration of the sublime. Dunaway, "Reconsidering the Sublime," 291–92.
- 14 Sischy, "Smithsonian's Big Chill," 254.
- 15 Sischy, "Smithsonian's Big Chill," 254.
- 16 For a more detailed account of the way the Smithsonian succumbed to political pressure and effectively censored Banerjee's exhibition, see Sischy, "Smithsonian's Big Chill," 254–55.
- Timothy Egan, "Smithsonian Is No Safe Haven for Exhibit on Arctic Wildlife Refuge," *New York Times*, May 2, 2003, https://www.nytimes.com/2003/05/02/us/smithsonian-is-no-safe-haven-for-exhibit-on-arctic-wildlife-refuge.html.
- 18 For filmmakers who connect various older kinds of gleaning to contemporary practices, see Agnes Varda's 2000 film *The Gleaners and I*.
- 19 See the introduction in Banerjee, *Arctic Voices*. See also Banerjee, "Land-as-Home."

- 20 James, "We Are the Ones," 262.
- 21 See Banerjee, "Resisting the War." For more on why drilling is a threat to the Porcupine caribou herd, see Ken Whitten, "ANWR Drilling Is Huge Gamble for Porcupine Herd," Daily News Miner, January 13, 2018, http://www.newsminer.com/opinion/anwr-drilling-is-huge-gamble-for -porcupine-herd/article_2c2337d0-f817-11e7-acd4-f74d938fc8bc.html. Also see Plumer and Fountain, "Trump Administration Finalizes Plan"; and Bohrer, "Biden Plans Temporary Halt."
- 22 Hannah Osborne, "NASA Has Discovered Arctic Lakes Bubbling with Methane—and That's Very Bad News," Newsweek, September 13, 2018, https://www.newsweek.com/arctic-permafrost-lakes-bubbling -methane-nasa-1119624.
- 23 In addition, as Arctic temperatures continue to warm, Indigenous people are also no longer able to freeze meat and other food in dugout underground storage in the permafrost, a natural refrigerator; the recent softening and melting of permafrost makes this no longer viable. Further, warming temperatures are contributing to deadly outbreaks of botulism, of which Alaska has the highest rate in the United States. See Kassina Ryder, "Battling Botulism: Care Urged While Preparing Traditional Arctic Foods," Arctic Deeply, July 27, 2017, https://www.newsdeeply.com/arctic /articles/2017/07/27/battling-botulism-care-urged-while-preparing -traditional-arctic-foods.
- 24 For more on the connections between these two moments, see Demuth, Floating Coast.
- 25 Suzanne Goldenberg and Damian Carrington, "Revealed: The Secret Evidence of Global Warming Bush Tried to Hide," Guardian, July 26, 2009, https://www.theguardian.com/environment/2009/jul/26/climate -change-obama-administration.
- 26 Lippard, "Lillian Ball," 22-23.
- 27 Wind-energy infrastructure development, a poster child of the green transition, is also a strain on reindeer-herding Sámi because it disrupts the reindeers' calving and migration patterns. See Normann, "Green Colonialism."
- 28 Furberg, Evengård, and Nilsson, "Facing the Limit of Resilience," 520.
- 29 Andrea Bowers, *Mercy Mercy Me*, Andrew Kreps Gallery, 525 West 22nd Street, New York, October 24-December 5, 2009, http://www .andrewkreps.com/exhibitions/andrea-bowers3.
- 30 Andrea Bowers, email correspondence with Lisa Bloom, May 19, 2021.
- 31 See Joshua Hammer, "The Making of a Legend: A Dissident's Ghost Is Still Rattling the Junta," Newsweek, December 18, 1995; and William Boyd, "In Memoriam: Death of a Writer," *New Yorker*, November 27, 1995, 51–55.
- 32 One of the videos, titled *Circle*, combines panoramic landscapes with a set of interviews and footage of four generations of women from the Arctic Village. Another, titled *Interview with Betty Ann*, tells a story about Bowers's correspondence with a woman bead artist whom she met at the

Arctic Village. These women, some of whom are part of the activist organization the Gwich'in Steering Committee, express their people's urgent need to prevent oil drilling in the Arctic National Wildlife Refuge and to be protected from global warming. A third video documents a tree-climbing lesson given to Bowers by environmental activist John Quigley, which continues Bowers's interest in choreographic movements resulting from political action.

- 33 The image of the banner was used on the cover of a handmade book titled The Day the Water Died. It commemorates an out-of-print journal that compiled personal accounts from community members who lived in the areas impacted by the *Exxon Valdez* oil spill.
- 34 See Ed Pilkington, "Shell Pays Out 15.5m over Saro-Wiwa Killing," Guardian, June 9, 2009, https://www.theguardian.com/world/2009/jun/08 /nigeria-usa. See also Hammer, "Making of a Legend"; and Boyd, "In Memoriam."
- 35 Saro-Wiwa's words still resonate today in Nigeria and elsewhere. See Okwuosa, "'Oil Is Our Doom.'" In the Alaskan Arctic, the more permissive regulatory era of the Donald Trump administration, which weakened offshore safety regulations, reminds us of older spills; the cleanup of the Exxon Valdez has taken more than a quarter of a century. According to a report on the twenty-fifth anniversary of the spill, "Thousands of gallons of Exxon Valdez oil still pollute the beaches." See Marybeth Holleman, "After 25 Years, Exxon Valdez Oil Spill Hasn't Ended," CNN, March 25, 2014, https://www.cnn.com/2014/03/23/opinion/holleman-exxon-valdez -anniversary/index.html.
- 36 The half-hour documentary, *Annie Pootoogook* (2006), was directed by Katherine Marcia Connolly.
- 37 See Igloliorte, "Annie Pootoogook." For more on how domestic abuse is a prominent theme in Pootoogook's work, see Morgan-Feir, "Revisiting Annie Pootoogook."
- 38 Annie Pootoogook, quoted in White, "Cutting the Ice," 27.
- 39 For other Indigenous artists who focus on ecological breakdown in their artwork, see Gagné, "In Spirit." For more on the ongoing state violence against environmental activists, see Sze, Environmental Justice.
- 40 L. Nixon, "Stories Not Told," 1.
- 41 See White, "Cutting the Ice," 27.
- 42 L. Nixon, "Stories Not Told," 48.
- 43 L. Nixon, "Stories Not Told," 48.
- 44 For more on the self-serving Canadian market in Inuit art (supporting Nixon's critique), see Catherine Porter and Sergey Ponomarev, "Drawn from Poverty: Art Was Supposed to Save Canada's Inuit. It Hasn't," New York Times, October 19, 2019, https://www.nytimes.com/2019/10/19 /world/canada/canada-Indigenous-art.html.
- 45 Cone, Silent Snow. Also see Hird and Zahara, "Arctic Wastes."

- 46 Aporta, "From Map to Horizon."
- 47 Porter and Ponomarev, "Drawn from Poverty."
- 48 L. Nixon, "Stories Not Told," 48.

Chapter 5. Viewers as Citizen-Scientists: Archiving Detritus

Chapter 5 builds on my previous collaboration with Elena Glasberg, which started with the publication of the 2008 special issue of *Scholar and Feminist* 7, no. 1 and the conference at Barnard College in 2008, followed by the publication of a single chapter titled "Disappearing Ice and Missing Data: Visual Culture of the Polar Regions and Global Warming," in *Far Field: Digital Culture, Climate Change, and the Poles*, edited by Jane D. Marsching and Andrea Polli (2012). An earlier version of the section on Amy Balkin and her contributors was included in "Archives of Knowledge and Endangered Objects in the Anthropocene: From Chernobyl to Polar Landscapes in the Work of Lina Selander and Amy Balkin," my chapter in *Arctic Archives: Ice, Memory, and Entropy*, edited by Susi K. Frank and Kjetil A. Jakobsen (2019).

- 1 For more on the way contemporary art has turned to visualizing the ambivalent relationship among waste, ecology, and a global economic regime, see Boetzkes, *Plastic Capitalism*.
- 2 Quoted in "Journey to the Library of Water," in Lingwood and van Noord, *Roni Horn*, 16; it also appears on the new Artangel website (2007), https://www.artangel.org.uk/library-of-water/journey-to-the-library-of-water/.
- 3 Horn, Island Zombie, 1.
- 4 See Horn's handmade book featuring a series of life-size natural science specimen-like photographs of Icelandic lava stones. Horn, *To Place*.
- 5 A People's Archive of Sinking and Melting is actually one of a number of conceptual archives made by artists from the United States for public use. Some of the more well-known ones include the Center for Land Use Interpretation's digital Land Use Database (see http://clui.org) and the Museum of Jurassic Technology in Los Angeles (see https://www.mjt.org).
- 6 Amy Balkin, "What Will Have Been: Interview on *A People's Archive of Sinking and Melting*," interview by Dana Kopel, *Brooklyn Rail*, June 2014, https://brooklynrail.org/2014/06/art/what-will-have-been-interviews -on-a-peoples-archive-of-sinking-and-melting.
- 7 Nixon, Slow Violence.
- 8 In all, this is a very small sample of the contributors to this ongoing archive of approximately two hundred collected objects from over eighteen diverse countries and regions, such as Antarctica, Mexico, and Cape Verde. The archive is often displayed at libraries and in galleries, and it is available online at https://sinkingandmelting.tumblr.com/; it is or has been exhibited at the Prelinger Library, San Francisco; Ballroom Marfa, Marfa, Texas; the Museum für Neue Kunst, Freiburg, Germany; the Rauschenberg Foundation Project Space, New York; Southern Exposure, San

- Francisco; Science Gallery, Dublin, Ireland; Anderson Gallery, VCUarts, Richmond, Virginia; and the Austrian Cultural Foundation, New York.
- 9 Chris Mooney, "Antarctic Ice Loss Has Tripled in a Decade. If That Continues, We Are in Serious Trouble," Washington Post, June 13, 2018, https:// www.washingtonpost.com/news/energy-environment/wp/2018/06/13 /antarctic-ice-loss-has-tripled-in-a-decade-if-that-continues-we-are -in-serious-trouble/. For ongoing coverage of the Thwaites glacier, see the website of the International Thwaites Glacier Collaboration, https:// thwaitesglacier.org/.
- 10 See the interview with Neus in Kopel, "What Will Have Been."
- 11 Neus's statement appears in Kopel, "What Will Have Been."
- 12 See Shearer, "Social Construction."
- 13 See Shearer's contribution to Balkin's archive and statement: "Carved Whale Vertebra," A People's Archive of Sinking and Melting, March 9, 2013, https://sinkingandmelting.tumblr.com/post/44996671860/carved -whale-vertebra-christine-shearer. To get attention for their predicament in 2008, Shearer helped the village sue twenty-four oil companies, including—ultimately unsuccessfully—Exxon Mobil in US district court in 2009, arguing that the companies' fossil fuel emissions were responsible for climate change and that they had knowingly misinformed the public about this fact. The village of Kivalina was denied legal standing to bring the case because the judge argued that global warming is too ubiquitous to be "fairly traceable" to the defendants' emissions, as required for standing. This lawsuit has now become one of the models for New York City's lawsuit against the oil companies for Hurricane Sandy.
- 14 Demuth, Floating Coast, 25.
- 15 In Saying Water, a 2013 spoken performance, Horn asks that we "recognize the water in ourselves." See Horn, "Roni Horn: Saying Water." See also Horn, *Some Thames*.
- 16 Horn, Roni Horn, 20.
- 17 Posted to the *Vatnasafn* website (once maintained by Artangel), https:// www.artangel.org.uk/project/library-of-water/ (accessed December 12, 2017; no longer available).
- 18 *Vatnasafn* website, https://www.artangel.org.uk/project/library-of-water/ (accessed December 12, 2017; no longer available).
- 19 Horn, Roni Horn, 166.
- 20 See Morton, Dark Ecology.
- See "Anatomy and Geography," in Horn, Roni Horn, 37.
- 22 Horn, Island Zombie, 228.
- 23 Horn, "Roni Horn: Saying Water."
- 24 Horn, "Roni Horn: Saying Water."
 - 25 Melville, *Moby Dick*. Queequeg's account of Rokovoko, as presented in chapter 12 ("Biographical"), https://www.gutenberg.org/files/2701.

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- 26 In the early 2000s, Horn took a public stance against building of the Karahnukar dam. The massive dam—which was eventually built and opened in 2009—flooded about a thousand square miles of land in uninhabited central Iceland that dam proponents argued were wasteland and better used to generate needed electricity. But Horn and others considered the land a precious wilderness. Horn takes the concept of wilderness further, obliquely linking it to inner geography as "nowhere . . . a non-renewable resource, deeply vulnerable to overuse and inappropriate occupation." Horn, *Roni Horn*, 108.
- 27 Le Guin, "Sur," 265.
- 28 See Horn, "Roni Horn: Saying Water."

Chapter 6. The Logic of Oil and Ice: Reimagining Documentary Cinema in the Capitalocene

Portions of chapter 6 appeared as "Invisible Landscapes: Extreme Oil and the Arctic in Experimental Film and Activist Art Practices," in *Arctic Environmental Modernities: From the Age of Polar Exploration to the Era of the Anthropocene*, edited by Lill-Ann Körber, Scott MacKenzie, and Anna Westerståhl Stenport (2017).

- A special thanks to Om Dwinedi for encouraging me to join the Challenging Precarity International Network and for inviting me to present an earlier version of this chapter for the conference Rethinking the Global South: Literatures, Cultures, and Media at Shri Ramswaroop Memorial University, Lucknow, India, in 2019. I would also like to thank Lisa Cartwright, who invited me to present on artists in this chapter for the Feeling Photography conference she organized at the University of California, San Diego, in 2016, and for including me later that year to join her for the panel, "Science and Technology through Critical Art Practice," that she and Merete Lie organized for the 4S EASST conference Science and Technology by Other Means: Exploring Collectives, Spaces and Futures, held in Barcelona, Spain, August 31–September 3, 2016.
- 2 Nixon, Slow Violence, 1-45.
- 3 Nixon, Slow Violence, 2.
- 4 Biemann's video installations have been exhibited in Venice, São Paulo, Gwangju, Sharjah, Shanghai, Istanbul, and Montreal. All videos by Biemann and Longfellow in this chapter are available through open access on Vimeo. *Subatlantic* was partially funded by Cape Farewell, which she joined for the marine exploration in the Shetland Islands. But the video production and her second trip to Greenland, where she did most of the shooting for *Subatlantic*, were paid for by the Volkard Foundation of Switzerland.
- 5 Some of Biemann's earlier films include *Performing the Border* (1999), *Contained Mobility* (2004), *Black Sea Files* (2005), and *Egyptian Chem-*

istry (2012). Also see her more recent video, *Acoustic Ocean* (2018), presented through the scientific perspective of an Indigenous woman scientist.

- 6 Biemann, Mission Reports.
- 7 Amrith, Crossing the Bay.
- 8 In private correspondence on February 14, 2018, Biemann made clear that the minaret, a religious medium, is now used for gathering people to shelters rather than to mosques.
- The tar sands extractive zone in Alberta is inhabited by many Indigenous nations (it is not absent of human figures). The impacts of tar sands extraction are very real for Indigenous peoples in Canada while also affecting faraway places like Bangladesh, as Biemann highlights. See the lectures by Ursula Biemann, "Forest Law" (time stamp 2:42:00) and Subhankar Banerjee, "Rights of Nature Says Who" (time stamp: 2:15:43). Both were presented for the Rights of Nature conference organized by T. J. Demos in the United Kingdom that took place on January 24, 2015, at Nottingham Contemporary, available to view on YouTube. (3:40:00), https://www .youtube.com/watch?v=07dYXGJgLB8. Also see my short coauthored article that makes the comparison between "Forest Law" and Deep Weather discussed in this chapter: Lisa E. Bloom, Iris Morrell, and Ariel Hoage, "Forest Law," Brooklyn Rail, February 2019, https://brooklynrail.org /2019/02/artseen/Forest-Law.
- 10 See Amrith, Unruly Waters.
- 11 Parenti, Tropic of Chaos, 8.
- 12 Biemann's research for this film and her work with a climate scientist was partially funded by Cape Farewell, https://www.capefarewell.com/projects/. For more on the kinds of artists the organization has supported, see Buckland, Burning Ice. Cape Farewell's archives are housed at the Nevada Museum of Art.
- 13 Biemann's own writing quotes feminists such as Barad, who writes about "intra-active matter" in all its entangled webs and complexity. See Barad, Meeting the Universe Halfway. See also Ursula Biemann, "Late Subatlantic: Science Poetry in Times of Global Warming," L'Internationale, November 12, 2015, http://www.internationaleonline.org/research/politics _of_life_and_death/45_late_subatlantic_science_poetry_in_times_of _global_warming.
- See Biemann's *Becoming Earth* (2021), a website that gathers a decade of her ecological videos and writing: https://becomingearth.unal.edu.co/home.
- 15 Longfellow teaches in the Communication and Culture Department at York University in Toronto. She is coeditor of a 1999 anthology on Canadian women filmmakers. See Armatage et al., Gendering the Nation.
- 16 Longfellow's Carpe Diem pokes fun at the extraordinary cynicism behind the corporate greenwashing that male oil executives perform for the public; in the film, the executives are confronted with having to explain

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- Gillian Steward, "Tailings Ponds a Toxic Legacy of Alberta's Oilsands," *Star*, September 4, 2015, https://www.thestar.com/news/atkinsonseries /2015/09/04/tailings-ponds-a-toxic-legacy-of-albertas-oilsands.html.
- 18 Longfellow, "Extreme Oil," 30.
- 19 Longfellow, "Extreme Oil," 30.
- For more on how there has been an easing of Obama-era safety regulations for the offshore oil industry in the United States put in place after the Deepwater Horizon tragedy, see Eric Lipton, "Trump Rollbacks Target Offshore Rules 'Written with Human Blood," *New York Times*, March 11, 2018, https://www.nytimes.com/2018/03/10/business/offshore-drilling -trump-administration.html.
- The images in Longfellow's *Global Offshore* are part of a longer visual history of Indigenous whaling. For an example of this history, see the work of Alaska photographer Bill Hess. Hess, *Gift of the Whale*.
- 22 Marks, Skin of the Film.
- Indigenous whaling for subsistence is very different from the images of whales in anti-whaling campaigns that respond to specific conflicts with pro-whaling countries and organizations that practice commercial whaling, overexploiting the whale stock.
- 24 Debord, Society of the Spectacle.

Chapter 7. Critical Polar Art Leads to Social Activism: Beyond the Disengaged Gaze

- 1 Glasberg, Antarctica as Cultural Critique, 132.
- 2 See LeMenager, "Occupy Climate." Also see McLagan and McKee, introduction.
- The art field has seen much concern over the influence of trustees and patrons on museum programs and collections, as museums frequently showcase the collections of their trustees and the artists that their trustees collect. See Fraser, 2016 in Museums. For a short but partial overview on institutional critique, see Balasz Takac, "Reading into the Institutional Critique, Then and Now," Widewalls, December 8, 2019, https://www.widewalls.ch/magazine/institutional-critique-history-context. For an analysis of climate activist art groups, see the chapter "The Great Transition: The Arts and Radical System Change," in Demos, Beyond the World's End, 163–93. See also Mahoney, "From Institutional to Interstitial Critique." For more on the activist group Decolonize This Place, see Hakim Bishara and Ilana Novick, "Decolonize This Place Launches 9 Weeks of Art and Action with Protest at Whitney Museum," Hyperallergic, March 2019, https://hyperallergic.com/491418/decolonize-this-place-nine-weeks-launch/.

- See Burtynsky *Manufactured Landscapes*. More recently, he made a feature documentary with Jennifer Baichwal and Nick de Pencier titled *Anthropocene: A Human Epoch* (2018). I find this documentary less disengaging because of the included commentary, which is more critical than images speaking for themselves. See also the book by Edward Burtynsky, Jennifer Baichwal, and Nick de Pencier, *Anthropocene*, that develops some of the ideas in the film further.
- 5 Mitchell, Rees, and Roth, Burtynsky Oil.
- 6 Also see Peter Mettler's film *Petropolis: Aerial Perspectives on the Alberta Tar Sands* (2009), discussed briefly in Chapter 5. The film was the first funded by Greenpeace Canada and made visible aerial views of the Tar sands site, which previously had been censored.
- Oliver Wainwright, "Edward Burtynsky on His Ravaged Earth Shots: We've Reached Peak Everything," *Guardian*, September 15, 2016, https://www.theguardian.com/artanddesign/2016/sep/15/edward -burtynsky-photography-interview.
- 8 This photograph of the brilliant red runoff from nickel tailings snaking through a blackened landscape also became the signature image of Burtynsky's *Manufactured Landscapes*, which was made into a film in 2008.
- For a stronger critique of Burtynsky, readers might be interested in the way T. J. Demos questions what it means for artists to aestheticize industrial pollution and make it terrifying. See Demos, *Against the Anthropocene*, 65.
- 10 For another more engaged anticolonial approach than Burtynsky's that includes critical writing with photography, see McClintock, "Monster."
- 11 For more on the Idle No More movement, see Coates, #IdleNoMore.
- For more on sHell No!, which joined with the larger 350.org whose mission is to build a diverse grassroots movement to address the cause of climate disruption through climate-justice based solutions, see https://350pdx.org/blog/archive-pages/shell-no/ (accessed October 27, 2021).
- See the chapter "Blockadia: The New Climate Warriors," in Klein, *This Changes Everything*, 293–337.
- 14 Hank's activism is presented on the Indigenous Environmental Network website, https://www.ienearth.org/shell-no-indigenous-activists-to-confront-shell-to-end-arctic-drilling-at-shareholder-meetings-in-neth erlands-and-london/ (accessed October 27, 2021). It originally appeared on the Idle No More website but has since been taken down. Idle No More is one of the few sites that includes Indigenous groups in both Canada and the United States; Idle No More is Canada's largest Indigenous mass movement.
- 15 See TallBear, "Badass Indigenous Women."
- 16 This includes closing down fossil fuel extraction points and energy pipelines throughout the United States, Canada, and Australia, including the protest camp called Sacred Stone, assembled by members of the Standing Rock Sioux tribe in North Dakota in 2017.

- 17 For more on the ways that apocalyptic narratives and (pseudo) postpolitical environmentalism are not constructive, see J. Wilson and Swyngedouw, Post-political.
- 18 Some of the Yes Men's projects on the oil industry include a 2007 performance in Calgary, Alberta, called Vivoleum, in which they posed as ExxonMobil and National Petroleum Council representatives; a 2009 performance in which they impersonated the Canadian environment minister, Jim Prentice, at the United Nations Climate Change Conference in Copenhagen; a 2010 video released on YouTube with the title "Shell: We Are Sorry," in which they impersonated an executive of Royal Dutch Shell, apologizing to the people of the Niger Delta for ruining their land, water, and communities.
- 19 The Yes Men's video, "Gazprom Delivers Bear to Holland," from August 21, 2013 is available on YouTube: http://www.youtube.com/watch?v =R9bdeMq-iFQ.
- 20 See "Environment," Gazprom, accessed March 31, 2021, https://www .gazprom.com/nature/.
- 21 See Wikipedia, s.v. "Panda Diplomacy," last modified August 22, 2021, 15:52 (UTC), https://en.wikipedia.org/wiki/Panda_diplomacy.
- 22 For more details on what happened in the aftermath of this performance piece, see "Insane PR Circus Rocks Holland—but It's Not That Polar Bear Thing," Actipedia, August 22, 2013, https://actipedia.org/project /insane-pr-circus-rocks-holland%E2%80%94-its-not-polar-bear-thing. Many observers accepted the action as a publicity event organized by Gazprom, not by the Yes Lab and Greenpeace, as evidenced by the reaction of New Zealand's Auckland zoo's spokesperson who said that it would not be receiving a polar bear through Gazprom's Adopt-a-Bear program. In addition, there was also an outcry by musicians and various other celebrities who were angry that "Gazprom" was using Moby's famous song in a PR event. For more on how Russia's war on Ukraine is reshaping climate activism against Russia's Gazprom, see Zoe Tidman, "Disrupting Russia's Gazprom 'Could End War Tomorrow', Extinction Rebellion Ukraine Founder Says," Independent, March 18, 2022, https://www.independent .co.uk/climate-change/news/extinction-rebellion-ukraine-war-fossil-fuels -b2038832.html.
- 23 For more on the activist group Platform London, founded in 1983, see its website, https://platformlondon.org/about-us/ (accessed October 21, 2021). Liberate Tate does not presently have a website, but for a list of their artwork and activism see the Wikipedia entry "Liberate Tate," accessed October 21, 2021, https://en.wikipedia.org/wiki/Liberate_Tate.
- 24 Emma Mahoney argues that *License to Spill* became the catalyst that has since grown into a new iteration of institutional critique in which artist-activist collectives infiltrate the museum in order to open spaces of critique from below. See Mahoney, "From Institutional to Interstitial Critique," 409-10.

- 25 See the performance *License to Spill*, YouTube, https://www.youtube.com/watch?v=L_z7IBozDKU (accessed March 5, 2018).
- 26 Tim Webb, "BP Boss Admits Job on the Line over Gulf Oil Spill," *Guardian*, May 13, 2010, https://www.theguardian.com/business/2010/may/13/bp-boss-admits-mistakes-gulf-oil-spill.
- Evans is quoted in Stanley Reed, "BP to End Sponsorship of Tate Museums," *New York Times*, March 11, 2016, C-6, https://www.nytimes.com/2016/03/12/business/energy-environment/bp-to-end-sponsorship-of-tate-museums.html.
- "Interview: Sir Nicholas Serota," by Julia Weiner, *Jewish Chronicle*, July 8, 2010, https://www.thejc.com/culture/interviews/interview-sir-nicholas-serota-1.16648.
- 29 Quoted in Reed, "BP to End Sponsorship."
- 30 Quoted in Reed, "BP to End Sponsorship."
- Other activist art collectives include Art Not Oil, BP or Not BP, Gulf Labor, Liberate Tate, the Natural History Museum, and Occupy Museums, among others. For more on Not an Alternative and other collective work, see Not an Alternative, "Institutional Liberation."
- 32 See discussion of Subhankar Banerjee's photographs being censored at the Smithsonian Museum during the George W. Bush's presidency in Sischy, "Smithsonian's Big Chill," 254.
- Their first exhibit was *Grand Opening* at the Queens Museum in 2014, timed to correspond with the People's Climate March.
- 34 See Sarah Gibbens, "Heart-Wrenching Video Shows Starving Polar Bear on Iceless Land," *National Geographic*, December 8, 2017, https://news.nationalgeographic.com/2017/12/polar-bear-starving-arctic-sea-ice-melt-climate-change-spd/. For a critique of this video, see "Viral Video of Emaciated Polar Bear May Not Be What It Seems, Nunavut Bear Monitor Says," CBC, December 11, 2017, https://www.cbc.ca/radio/asithappens/as-it-happens-monday-edition-1.4442887/viral-video-of-emaciated-polar-bear-may-not-be-what-it-seems-nunavut-bear-monitor-says-1.4442892.
- For more on polar bear iconography, see Williamson, "Unfreezing the Truth"; and Yusoff, *Bipolar*.
- For further images and the ongoing activist work of Not an Alternative, see the website of the Natural History Museum, http://thenaturalhistory museum.org. On activist efforts to remove Rebekah Mercer from the board of the Museum of Natural History in New York, see Serge F. Kovaleski, "David H. Koch Leaves Natural History Board," *New York Times*, January 20, 2016, https://artsbeat.blogs.nytimes.com/2016/01/20/david-h-koch-leaves-natural-history-museum-board/; and Alexander C. Kaufman, "The Mercers, Trump's Billionaire Megadonors, Ramp Up Climate Change Denial Funding," *Huffington Post*, January 25, 2018, https://www.huffingtonpost.com/entry/mercers-climate-denial_us_5a6a4661e4b06e253265e832.

- Not an Alternative emphasizes that it seeks to critique what Fred Turner calls the "democratic surround" (the term is the title of Turner's 2013 book). Steve Lyons, personal correspondence with the author, May 10, 2021. See also Lyons and Bosworth, "Museums."
- See Bill McKibben, "The Movement to Divest from Fossil Fuels Gain Momentum," *New Yorker*, December 21, 2017, https://www.newyorker.com/news/daily-comment/the-movement-to-divest-from-fossil-fuels-gains-momentum. For more on the younger generations engaging in strikes and divestment campaigns, see Bratman et al., "Justice Is the Goal"; Grady-Benson and Sarathy, "Fossil Fuel Divestment"; and Tessa Stuart, "A New Generation of Activists Is Taking the Lead on Climate Change," *Rolling Stone*, April 26, 2019, https://www.rollingstone.com/politics/politics-features/climate-change-school-strike-825719/.

Epilogue: Speaking from the Future

Special thanks to Elena Glasberg for her excellent editorial advice and her ongoing support as I was completing the final manuscript.

- 1 Robin Marantz Henig, "Experts Warned of a Pandemic Decades Ago. Why Weren't We Ready?," *National Geographic*, April 9, 2020, https://www.nationalgeographic.co.uk/science-and-technology/2020/04/experts-warned-of-pandemic-decades-ago-why-werent-we-ready.
- 2 For more on the August 2021 *Global Climate Report*, accessed October 21, 2021, see: https://www.ncdc.noaa.gov/sotc/global/202108l. Also, see the 2022 report by the United Nations Intergovernmental Panel on Climate Change: https://www.ipcc.ch/report/ar6/wg2/ (accessed March 24, 2022).
- 3 Klein, On Fire, 25.
- 4 Mary Simon's statement appears in the Indigenous film discussed in chapter 3, *Qapirangajuq: Inuit Knowledge and Climate Change*.
- 5 See Not an Alternative, "Institutional Liberation"; and Mahoney, "From Institutional to Interstitial Critique."
- 6 Boekbinder and Batt, "Message from the Future." For the follow-up short online film from 2020 that addresses COVID-19, see Batt and Boekbinder, "Message from the Future II."



- An Angry Inuk (2017), DVD, Canada, 1 hour 22 minutes
 Alethea Arnaquq-Baril, dir. The documentary challenges anti-sealing campaigns in the Canadian Arctic. Accessed July 6, 2020. https://vimeo.com/ondemand/angryinuk.
- Annie Pootoogook (2006), DVD, Canada, 24 minutes
 Marcia Connolly, dir. An intimate portrait of Cape Dorset/Kinngait artist
 Annie Pootoogook as she prepares for her first solo exhibition at the Power
 Plant Center for Contemporary Art in Toronto. Accessed January 31, 2022.
 https://www.sitemedia.ca/films.
- The Anthropocene: The Human Epoch (2012), film, Canada, 1 hour 27 minutes Jennifer Baichwal, Nicholas de Pencier, and Edward Burtynsky, dirs. The filmmakers traveled around the world to document the impact of humans on the planet, disrupting the totalizing perspective of the extraction industries, which view these regions as a mere resource to exploit. Accessed September 5, 2018. https://www.amazon.com/Anthropocene-Human-Epoch-Alicia-Vikander/dp/B081TKBLPS.
- Atanarjuat: The Fast Runner (2002), DVD, Canada, 2 hours and 52 minutes Zacharias Kunuk, dir. This is the first feature film made in Inuktitut and depicts Inuit traditions, oral history, and Arctic peoples and environments. Accessed February 1, 2022. https://putlockers.fm/watch/gdVVJRdD-atanarjuat-the-fast-runner.html.
- Attutauniujuk Nunami/Lament for the Land. (2014), video, Canada, 36 minutes Ashlee Cunsolo Willox, dir. By weaving together the voices of twenty-four Inuit people from Nunatsiavut, Labrador, the work documents the psychological effects of ecological loss among the Inuit. YouTube. Accessed September 21, 2014, https://www.youtube.com/watch?v=yi7QTyHERjY.

Before Tomorrow/Le jour avant le lendemain (2009), videodisc, Canada, 1 hour 33 minutes

Marie-Hélène Coisineau and Madeline Ivalu, dirs. This film, based on a Danish novel set in premodern Greenland in the 1840s, tells the story of a smallpox outbreak in Nunavik and takes a woman-centered perspective on Inuit culture while also embodying feminist collective practice in its mode of production. Accessed February 1, 2022. http://www.isuma.tv/beforetomorrow.

Black Sea Files (2005), synchronized 2-channel art video, Switzerland, 43 minutes

Ursula Biemann, dir. This experimental video essay traces the construction of the British Petroleum (BP) Caspian Sea Pipeline across the Caucasian Corridor and was installed for the collaborative art and research project B-ZONE, Accessed January 31, 2022. https://www.geobodies.org/art-and-videos/black-sea-files.

Blade Runner 2049 (2017) film, USA, 2 hours 43 minutes

Denis Villeneuve, dir. Based on the Neo-noir science fiction book, *Do Androids Dream of Electric Sheep?*, by Philip K. Dick, the film is a sequel to the 1982 film *Blade Runner* (Ridley Scott, dir.). The film, set in Los Angeles in the near future in 2049, expands on the original's dystopian focus and updates its treatment of racial and sexual politics in a future city that lacks all connection to the natural world. Amazon Prime Video. Accessed March 10, 2022. https://www.amazon.com/Blade-Runner-2049-Ryan-Gosling/dp/B0765L85F8.

Carpe Diem (2010), experimental film, Canada, 6 minutes

Brenda Longfellow, dir. Aboard a direct flight to Fort McMurray, the capital of the Alberta tar sands, a fictitious oil company executive finds his world collapsing around him in this operatic comedy that uses humor and irony to offer an original approach to understanding oil. Vimeo video. Accessed March 10, 2022. https://video.search.yahoo.com/search/video?p=Brenda+Longfellow %2C+carpe+diem%2C+film&fr=yhsiba1&fr2=p%3As%2Cv%3Av%2Cm %3Asb%2Crgn%3Atop&ei=UTF8#id=1&vid=2d7d450811f3f6750d1a3b565 co544db&action=view.

Contained Mobility (2004), video essay, Switzerland, 20 minutes
Ursula Biemann, dir. This experimental art video investigates questions
around migration around mobility, technology, and identity. Video Data Bank,
School of the Art Institute of Chicago. Accessed January 31, 2022. https://
www.vdb.org/collection/browser-artist-list/contained-mobility.

Dead Ducks (2012), film, Canada, 19 minutes 9 seconds

Brenda Longfellow, dir. This dark, experimental short film weaves an innovative mix of fictional reenactment, animation, documentary footage, and an orchestral score to explore the collision of oil culture with the natural world. It is inspired by the true story of the 1,600 ducks who landed on the Syncrude tailing pond in the Alberta tar sands during their spring migration in 2008, and who perished in a mass of toxic bitumen. Accessed January 31, 2022. https://www.cultureunplugged.com/documentary/watch-online/play/12118 /Dead-Ducks.

Deep Weather (2013), video essay, Switzerland, 9 minutes
Ursula Biemann, dir. The focus of this experimental art video is Indigenous communities on the front lines of environmental and climate disaster. It makes imaginable a crisis that is geographically dispersed and complex, and that often punishing those least able to respond and recover. Vimeo Video. Accessed January 31, 2022. https://vimeo.com/90098625.

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Fantôme Afrique (2005), triple-screen video, UK, 17 minutes
Isaac Julien, dir. The video installation includes archival footage from early colonial expeditions and landmark moments in African history. Shot in Burkino Faso, the video includes dancer Stephen Galloway (and actress Vanessa Myrie), who appears as a trickster/phantom figure and "witness" to this encounter between local and global cultures, where the ghosts of history linger today. Accessed January 31, 2022. https://www.isaacjulien.com/projects/fantome-afrique/.

Fantôme Créole (2005), four-screen video, UK, 23 minutes 27 seconds
Isaac Julien, dir. In this video installation combining two works, *True North*(2004), filmed in the Arctic landscapes of Iceland, and *Fantôme Afrique*(2005), filmed in Burkina Faso, dancer Stephen Galloway and actress Vanessa
Myrie link the landscapes of the Arctic North to the arid South. Accessed January 31, 2022. https://www.isaacjulien.com/projects/fantome-creole/.

Gazprom Delivers Polar Bear to Holland (2013), video, Holland, 2 minutes 12 seconds

The Yes Men, dirs. The Yes Men document their fake PR campaign for Gazprom, the Russian gas company that has partnered with Shell, when they pretend to be corporate oil executives who set up a fake agreement to donate a drugged polar bear to the city of Amsterdam out of "concern" for climate change. YouTube. Accessed March 10, 2022. http://www.youtube.com/atch?v=R9bdeMq-iFQ.

The Gleaners and I (2000), film, France, 1 hour 22 minutes
Agnès Varda and Joanna Bruzdowicz, dirs. This French documentary film
connects older kinds of gleaning to contemporary practices. Amazon Prime
Video. Accessed March 10, 2022. https://www.amazon.com/Gleaners-I
-English-Subtitled/dp/B00WU2YNOU.

License to Spill (2010), video, UK, 9 minutes 39 seconds

Liberate Tate, dirs. This work documents the June 2010 "Oil Spill" protest at
London's Tate Modern Summer Party celebrating twenty years of BP financial
support to the gallery. It is the first protest in a six-year campaign of interventions objecting to the cultural promotion of an oil company that once enjoyed
a large impact on the arts as the leading funder of the Tate. Vimeo video. Accessed January 31, 2022. https://vimeo.com/45435669.

Manufactured Landscapes (2007), videodisc, Canada, 86 minutes

Jennifer Baichwal, Peter Mettler, Nicholas De Pencier, and Daniel Iron, dirs.

This documentary film's subject is Edward Burtynsky's large-scale photographic works featuring landscapes transformed by industry: quarries, recycling yards, factories, mines, and dams. Accessed February 1, 2022. https://www.mercuryfilms.ca/manufactured-landscapes.html.

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?v=MqJtQ4joGO4.

A Message from the Future with Alexandria Ocasio-Cortez (2019), video, USA, 7 minutes 35 seconds

Kim Boekbinder and Jim Batt, dirs. Produced by Naomi Klein; written by Alexandria Ocasio-Cortez and Avi Lewis; illustrated by Molly Crabapple. The film turns to science fiction to propose a humble, recognizable vision of a livable future made possible by the Green New Deal. *The Intercept*. Accessed March 10, 2022. https://theintercept.com/2019/04/17/green-new-deal-short-film-alexandria-ocasio-cortez/.

A Message from the Future II: The Years of Repair (2020), video, USA, 8 minutes 58 seconds

Kim Boekbinder and Jim Batt, dirs. Produced by Naomi Klein; written by Opal Tometi and Avi Lewis; illustrated by Molly Crabapple. This short science fiction film presents a future world that tackles both climate change and COVID-19 and foregrounds acts of care. It is told from the perspective of frontline workers and activists. *The Intercept*. Accessed March 10, 2022. https://theintercept.com/2020/20/01/naomi-klein-message-from-future-covid/.

Nanook of the North (1922), silent film, USA, 1 hour 18 minutes

Robert J. Flaherty, dir. One of the best-known documentaries of the silent era
and the subject of controversy for its colonial perspective, this film presents
the life of an Eskimo family pitting their strength against a vast and inhospitable Arctic. YouTube. Accessed April 8, 2022. https://www.youtube.com
/watch?v=lkW14Lu1IBo.

Nanook Revisited (1994), film, Canada, 60 minutes

Claude Massot, dir. The filmmaker revisits Robert Flaherty's Nanook of the
North (1922) and its documentation of Nanook, the Inuit hunter, and Inuit
traditions. Massot learns that Flaherty staged much of what was filmed, sired
children to whose future he paid no heed (as detailed in the 2008 film Martha
of the North, directed and written by his granddaughter, Marquise Page), and
is himself now part of Inuit myth. Princeton, NJ: Films for the Humanities.
YouTube. Accessed September 30, 2021. https://www.youtube.com/watch

The Nine Muses (2012), videodisc, UK, 1 hour 34 minutes
John Akomfrah, dir. Structured as an allegorical fable set between 1949
and 1970, this work comprises nine overlapping musical chapters that mix
archival material with original scenes in a stylized retelling of the history of
mass migration to postwar Britain through the lens of the Homeric era.
YouTube. Accessed February 1, 2022. https://www2.bfi.org.uk/archive
-collections/archive-projects/artist-archive/three-case-studies/john
-akomfrah-nine-muses.

Offshore (2018), interactive online video, Canada, 1 hour 11 minutes

Brenda Longfellow and Glenn Richards, dirs. This feature-length interactive pseudodocumentary reinvents documentary practices by focusing on the ways oil spills and disasters from deep-water oil drilling are the norm. The directors' experimental approach evokes the horror genre, emphasizing that her

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subjects are always at risk at these selected sites. Accessed March 10, 2022. http://offshore-interactive.com/site/.

Performing the Border (1999), video essay, Switzerland, 43 minutes
Ursula Biemann, dir. With this video essay set in the Mexican-US border town
Ciudad Juarez, the border is considered as a discursive construction articulated through the crossing of people and the power relations of the two nations. Vimeo. Accessed January 31, 2022. https://vimeo.com/74185298.

Petropolis: Aerial Perspectives on the Alberta Tar Sands (2009), DVD, Canada, 15 minutes 26 seconds

Peter Mettler dir. This first film funded by the activist organization Greenpeace Canada makes visible aerial views of the Tar Sands site, previously censored and out of sight. 43 minutes (condensed version created for Neil Young's 2014 Honor the Treaties music tour). Vimeo. Accessed January 31, 2022. https://vimeo.com/84170239.

Qapirangajuq: Inuit Knowledge and Climate Change (2010), video, Canada, 54 minutes 7 seconds

Zacharias Kunuk and Ian Mauro, dirs. This is the first feature film about climate change in the Arctic that provides on-the-ground local evidence of the impacts of, and adaptations to, climate change in the present. It is in the Inuit language, Inuktitut. Accessed February 11, 2020. http://www.isuma.tv/inuit-knowledge-and-climate-change/movie.

Roni Horn: Saying Water (2012), video, USA, 39 minutes 11 seconds
Roni Horn, dir. In a monologue based on her associations with water, Roni
Horn includes tales of sex and murder. YouTube. Accessed May 21, 2013.
https://www.youtube.com/watch?v=fkvoe7s1NVg.

Subatlantic (2015), video essay, Switzerland, 11 minutes 29 seconds
Ursula Biemann, dir. This experimental filmic essay combines science fiction
and documentary to focus on the volatile period of the current climatic age
of the Holocene. Vimeo. Accessed January 31, 2022. https://vimeo.com/123399928.

That Which Once Was (2011), HD video, USA, 20 minutes

Kimi Takesue, dir. In this experimental dystopian science fiction film starring

Inuit actor Natar Ungalaag and made for the US public television series

Futurestates, the focus is on climate trauma. Vimeo Work Sample (5:07).

Accessed March 10, 2022. https://vimeo.com/32493405.

True North (2004), three-screen video, UK, 60 minutes
Isaac Julien, dir. Inspired by the story of Black American polar explorer,
Matthew Henson (1866–1955), the video installation foregrounds how issues
of colonialism, nationalism, gender, and sexuality have shaped the structures
of human labor that underwrite Black experiences and imagination in the
setting of the Arctic during the early days of polar exploration. Accessed
March 10, 2022. https://www.isaacjulien.com/artworks/https://www
.isaacjulien.com/projects/true-north/.

Vertigo Sea (2015), three-channel video, UK, 48 minutes
John Akomfrah, dir. The film triptych installed at MAC (Musée d'Art Contemporain de Montréal) explores the ocean as a setting for the still-unfolding histories of colonialism, migration, slavery, and environmental change. Accessed January 25, 2022. https://macm.org/en/exhibitions/john-akomfrah-vertigo-sea/.

Winged Migration (2001), film animation, USA, 1 hour 29 minutes
Jacques Cluzard, Jacques Perrin, and Michel Debats, dirs. By following bird
migrations over seven continents, using computer-generated birds to bring
the viewer close to their faces, the film generates sympathy with an animal
protagonist. Accessed February 1, 2022. https://www.amazon.com
/Winged-Migration-Philippe-Labro/dp/B000MQ7B1I.

Winter Event-Antifreeze (2009), video, Sweden, 6 minutes 31 seconds

Katja Aglert, dir. This HD video builds on the documentation of a series of performances by Katja Aglert in the Svalbard archipelago in Norway, in which she holds in her hands pieces of ice until they melt into water. The performances are interpretations of the 1960s score Winter Event-Antifreeze by Fluxus artist George Brecht (1926–2008). Inspired by the discourse of Gender on Ice (1993) by Lisa Bloom, the work dissects such issues as clichés of masculinity, heroic myths, and the traditional sublime in order to examine a different narrative of the arctic context. YouTube. Accessed March 25, 2022. https://www

.youtube.com/watch?v=3IzNsbtbnmo.

The Yes Men (2003), film, USA, 1 hour 23 minutes
Dan Oman, Sarah Price, and Chris Smith, dirs. The makers of this film use parody to reimagine institutions such as the World Trade Organization, critiquing its dominant force in global trade. Amazon Prime. Accessed April 12, 2022. https://www.amazon.com/Yes-Men-Mike-Bonanno/dp/B002BTT1SK.

The Yes Men Fix the World (2009), film, USA, 1 hour 30 minutes

The Yes Men, dirs. Two activists document their activities as they stage a series of public hoaxes designed to take on big business and, to a lesser extent, government. Vimeo. Accessed April 12, 2022. https://vimeo.com/130013994?gclid=EAIaI!obChMlqK7p7-f_9glVgtzlCh2hk!lrEAAYASAAEg JuV_D_BwE.

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