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# Introduction

Christopher P. Heuer and Rebecca Zorach

In the realm of social ecology, Donald Trump and his ilk—another form of algae—are permitted to proliferate unchecked.

—Felix Guattari, "The Three Ecologies" (1989)

In November 1971, the brand-new Environmental Protection Agency announced a massive photographic project, DOCUMERICA. For the next seven years, the EPA would send photographers around the country to photograph the environment—broadly understood—of the United States. Photographers imagined "environment" not only as natural, but also as social and architectural. One of Bruce McAllister's photographs for the project served as the cover image for the program of the conference on which this volume is based (fig. 1). The photo captures a

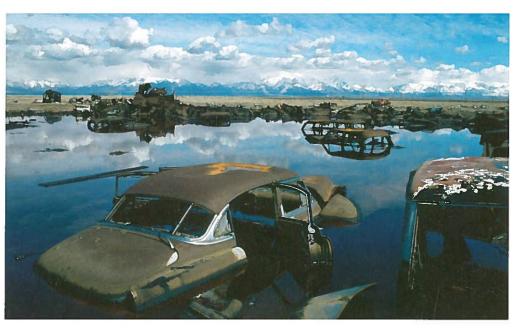


Fig. I. Bruce McAllister (American, b. 1946), "Abandoned automobiles and other debris clutter an acid water- and oil-filled five-acre pond; it was cleaned up under EPA supervision to prevent possible contamination of [the] Great Salt Lake and a wildlife refuge nearby," April 1974, from DOCUMERICA: The Environmental Protection Agency's Program to Photographically Document Subjects of Environmental Concern, 1972–77

# The Entropic History of Ice

Maggie M. Cao

In a recent work called *The Distance Between What We Have and What We Want* (*Arctic Ice Project*), the New York–based Bahamian artist Tavares Strachan harvested a 4.5-ton block of ice in Alaska and sent it by FedEx to his native Nassau, where it was kept frozen through a hot summer in a solar-powered freezer (fig. 1). For Strachan, ice is a powerful medium, with certain sculptural qualities. Thus encased, it recalls a minimalist cube behind gallery glass. Yet ice is not so much a material as a *state*—one defined by tenuous chemical bonds, which means that Strachan's rigid block is constantly at entropic risk of melting, losing its ideal form or altogether vanishing.

In Strachan's piece, the potential ruination of the encased ice block speaks to both dark futures and troubling pasts. In its aesthetic, sculptural qualities, the artwork gestures toward environmental crisis—a topic often communicated today



**Fig. 1.** Tavares Strachan (Bahamian, b. 1979), *Chamber with Ice: Elevator for the Reversal of Up and Down*, 2006, in The Distance Between What We Have and What We Want. Ice, refrigeration unit, solar panels, fans, flags, battery system,  $96 \times 120 \times 96$  in.  $(243.8 \times 304.8 \times 243.8 \text{ cm})$ 

though images of majestic glaciers and stunning icebergs. Indeed, the ecological catastrophes on our horizon have led to a growing global consciousness about the material conditions of ice—we think of it as melting now more than ever. Yet the *geographies* of Strachan's piece ask us to look not forward, but back to our colonial pasts. The ice block's southbound route inverts the trajectory usually taken by perishable commodities—ones that travel in cooled containers not unlike the artist's. Moreover, the delicate technological equilibrium achieved in Nassau maps the ironic intimacy between the frigid North and torrid South that has long governed our global economy.

Although treating ice as *medium* is a more recent development in the history of art, a recognition of the unique aesthetic power of ice as *matter* is not. What follows is an attempt to locate the origins of the technological and commercial conditions thematized in *Arctic Ice Project*. I want to suggest that the historical encounters to which Strachan's artwork gestures, particularly in its spatial traversals, originate in an earlier moment when ice similarly loomed large: mid-nineteenth-century America, the heyday of Arctic exploration and global shipping.

Nineteenth-century artists and writers attempting to visualize the northern reaches of the hemisphere in paintings, prints, photographs, and prose imagined ice as an artistic material full of contradictions. In its seeming solidity yet ever-present liquidity, ice accumulated aesthetic, economic, and political meanings for Americans. In suggesting that Strachan's work gestures toward this history, I want to do more than offer an interpretation of his artwork by way of historical digression. Rather, I want to suggest that nineteenth-century encounters with frozen matter share with contemporary interventions by Strachan and other artists an awareness of ice as a material embedded in technological and economic concerns as well as natural and ecological ones.

As such, the history of ice presented here reveals the intersection of environmental and political imperialisms that have long fueled our dreams and fears of entropy. The melting Arctic is entropic in the simple sense. A nineteenth-century term from the laws of thermodynamics, "entropy" describes the tendency for matter in a closed system to reach a stable equilibrium: ice melts as the temperature of Earth's ecosystem increases. But the history recounted here is entropic in an expanded sense as well, for entropy also implies matter's tendency toward decay and formlessness. As such, the "entropic" supplies this history of ice with a fitting set of oppositions—of stability and chaos, passivity and agency, cold and hot—that

expose the undercurrents of colonialism and racial politics in the aestheticizing of frozen worlds both then and now.

## Picturing the Arctic

In the summer of 1859, the renowned American landscape painter Frederic Edwin Church and the art writer Louis Legrand Noble set out on a voyage "after icebergs." Their destination was the icy bays of Labrador and Newfoundland, where, as Noble later explained in his travel chronicle, icebergs and facilities for "studying and sketching them" abound.<sup>2</sup> Upon their return, Church undertook to paint his mammoth 1861 canvas *The Icebergs*, a panoramic rendering of a watery cove framed by towering cliffs, tunnels, and shelves, all of shimmering ice (fig. 2). The corresponding textual narrative, *After Icebergs with a Painter*, published by Noble that same year, was no less dramatic with its over three hundred pages of sublime and picturesque prose.

Church and Noble were among the many nineteenth-century Americans who ventured north to examine the continent's icebound regions. Mass culture enthusiasm for the Arctic had reached a fever pitch by the 1850s in the wake of several well-publicized commercial and scientific expeditions.<sup>3</sup> When the scientist Elisha Kane published his *Arctic Explorations*, an immensely popular account of the second Grinnell Expedition in 1855, it was said to have joined the Bible on "every parlor table in America." And when Kane died two years later, his funeral



Fig. 2. Frederic Edwin Church (American, 1826–1900), The Icebergs, 1861. Oil on canvas,  $64 \frac{1}{2} \times 112 \frac{1}{2}$  in. (163.8  $\times$  285.7 cm). Dallas Museum of Art. Gift of Norma and Lamar Hunt (1979.28)



Fig. 3. Frederic Edwin Church, The Heart of the Andes, 1859. Oil on canvas,  $66 \ \% \times 119 \ \%$  in.  $(168 \times 302.9 \ cm)$ . The Metropolitan Museum of Art, New York. Bequest of Margaret E. Dows, 1909 (09.95)

train was met at nearly every platform from New Orleans to Philadelphia by a memorial delegation that is said to rival only Lincoln's in the nineteenth century.<sup>5</sup>

Ever an enterprising artist, Frederic Church no doubt had aims to create the next Arctic masterpiece. Church's northbound journey followed the completion of his colossal South American landscape *Heart of the Andes* (fig. 3), which debuted with roaring success in New York and was poised to go on national tour (it would quickly become the most popular display of a single artwork in the Civil War era). For his Arctic showpiece, Church incorporated signature elements of his landscape practice—dramatic topography and richly delineated detail. Yet these visual strategies, for which he had been praised in the reception of *Heart of the Andes*, only confounded viewers when transplanted from the fecund tropics to the frozen world. While beholders of *The Icebergs* today may be particularly attuned to its excess—the blindingly turquoise glowing caves and endless glimmering bluffs and spires arrayed across the nine-foot-wide canvas—period critics were troubled by the picture's blankness and formlessness.

"One hardly knows what to say about it," began a critic for the *Boston Transcript*, who found it "difficult to realize that it [the painting] is a representation of nature." Another reviewer noted that "it will require some time to get even on speaking terms of the 'Icebergs." The scene resembled that "day of creation when the Earth was without form and void," mused another. For these viewers,

the lack of human narrative in such an otherworldly landscape was troubling. "No trace of human associations whatsoever," reads one review, leads to "a complete abnegation of extrinsic interest." (The broken mast in the foreground—suggesting a human footprint—was only added later, in 1863, perhaps in response to such criticism). With so much to look at, nineteenth-century viewers apparently found nothing to see.

The anxieties displayed by Church's critics betray the fact that Americans consumed Arctic expeditions in the nineteenth century in the form of narratives. It was narrative—the publication of memoirs, the circulation of images, and the delivery of touring lectures—that turned countless failed expeditions into heroic feats. On another level, the lack of eventfulness in Church's painting recalled genuine fears associated with Arctic encounters, which were liable to end in bodily disappearance—men lost, or worse, devoured in desperate acts of cannibalism. Most famously, the British explorer Sir John Franklin and his crew had disappeared without a trace in 1845, prompting dozens of rescue missions in subsequent decades that retrieved little but frozen relics of their tragic fate.<sup>9</sup>

The Arctic proved a unique challenge to nineteenth-century painters trained in the conventions of landscape, a genre whose narratives of masculine heroism were bound up with the culture of exploration. Following Church, the American artist most associated with the Arctic was William Bradford, who in 1869 organized a similar artistic expedition to the coast of Greenland. Trained as a marine painter, Bradford would go on to build a successful career painting Arctic scenes, which unlike Church's were populated with incident and story line. 10 The problem of unnatural formlessness, while avoided in the paintings themselves, nevertheless defined Bradford's experience in the Arctic itself. Particularly revealing is the artist's travel narrative, published in the form of a lavish, limited-edition album entitled The Arctic Regions. In it, Bradford discusses endless optical failures, particularly as they relate to ice and states of matter in general. In one instance, the artist describes seeing "far away on the eastern horizon . . . a low-lying cloud, which some thought another fog bank," though it would later prove to be land. Elsewhere he notes that it is "difficult to distinguish an iceberg from the dark grey rocks in the background." The Arctic, he resolved, was the "complete reversal of the whole order of nature." Ice, in Bradford's account, was particularly troubling and more akin to optical illusion than natural specimen. In their "multiform varieties of mass and outline," Bradford wrote, they resembled "the quick-changing views of a kaleidoscope."11 Echoing the paradoxical view taken by Church's critics—that a monumental canvas filled with rich details could add up to void and nothingness—Bradford would conclude that Arctic ice was "bewildering" in the "infinite variety of their sameness." <sup>12</sup>

No doubt encounters with the frozen world have long destabilized aesthetic and geographic certainties. For centuries, explorers of the Far North returned to recount landscapes rampant with optical ambiguities and illusions impossible to picture. <sup>13</sup> In nineteenth-century America, artists had to contend not only with these visual challenges but also with their economic implications. For what is unique about this historical moment is that the perceptual paradoxes associated with ice were newly politicized in geographic terms. The American fervor for all things Arctic coincided with an economic globalization that demarcated temperate North and torrid South and, along with it, cold and hot matter.

### Ice Breaking

When William Bradford painted scenes like his 1871 An Arctic Summer: Boring Through the Pack in Melville Bay (fig. 4), he underscored the fact that icescapes were a subject with global reach. With the inclusion of a tall ship "boring through"



Fig. 4. William Bradford (American, 1823–1892), An Arctic Summer. Boring Through the Pack in Melville Bay, 1871. Oil on canvas, 51 <sup>3</sup>/<sub>4</sub> × 78 in. (131.4 × 198.1 cm). The Metropolitan Museum of Art, New York. Gift of Erving and Joyce Wolf, in memory of Diane R. Wolf, 1982 (1982.443.1)

pack ice, as the title tells us, Bradford capitalized on an international, scientific obsession of the day: the hunt for the fabled Northwest Passage, the shortest route between Euro-American ports and trade destinations in East and South Asia. Thus, breaking through Arctic ice, which Bradford's ship is poised to do, meant clearing a route to the tropics. Looking north meant thinking south.

Accounts of a Northwest Passage have circulated since the sixteenth century, but it was pursued with greatest fervor in the nineteenth. 14 A new sea route over North America would drastically reduce costs and time in transpacific shipping, which then required sailors to round Cape Horn at the tip of South America. The British were the most ambitious explorers in the first half of the nineteenth century, followed by the Americans in the century's latter half. Between 1850 and 1910, more than two dozen US-based expeditions entered the Arctic Circle. Though traveling under the guise of humanitarianism (to recover Franklin's lost expedition), each was in hot pursuit of the very same seafaring route that Franklin had so tragically failed to locate. 15 Summing up the Anglo-American tradition of Arctic exploration in 1871, Matthew Maury, the author of Physical Geography of the Sea, the standard oceanography text of the period, observed: "Whatever may have been the immediate object of these various expeditions, whether to enlarge the fields of commerce, to carry the Bible, to spread civilization, to push conquest, or to bring back contributions of science, it has never lost sight of the promise made by Columbus of a western route to India."16

The possibility of a Northwest Passage structured nineteenth-century understandings of the Arctic's relationship to the rest of the globe. Dreams of global connectedness *sans* ice emerged in all aspects of culture. In 1826, John Cleves Symmes, a war hero turned trader living in the then-frontier settlement of St. Louis, publicized his theory that a hollow inner Earth connected the two poles: if you went far enough northward, he theorized, you would be transported through a hollow shaft to the other side of the world. While the Earth's hollowness had some mathematical precedent, Symmes was the first to propose an expedition to explore what he thought was a habitable inner sphere via the North Pole. As an early American engaged in commerce across distances (he operated an Indian trading post at the frontier), Symmes, perhaps not surprisingly, turned to the rhetoric of globalization to promote his plan. In the treatise he produced with his collaborator James McBride, Symmes argued that such an expedition would be of "immense advantage to our commerce and national prosperity." Though outlandish, the Hollow Earth theory generated considerable popular press atten-

tion and was cited as a primary motivation for a government-funded expedition to the South Pole.<sup>19</sup>

Less eccentric theories of a habitable Far North also circulated. Geographers hypothesized that a warm, open sea flowed over the Earth's poles just beyond the subarctic regions. Such balmy polar seas were richly imagined in literary accounts such as Edgar Allan Poe's The Narrative of Arthur Gordon Pym of Nantucket. In this 1838 novel, a Nantucket sailor encounters steamy, milky currents and white, ashen rain as he drifts in the Pacific toward the Southern Pole.<sup>20</sup> In the topsy-turvy world of Poe's fiction, the visual blankness associated with the icebound Arctic is populated with the exotic tropes of tropical exploration: the dark-skinned native and his mysticism. By the 1850s, numerous scientific studies were marshalled to prove the existence of more hospitable climes beyond the ice-jammed seas, which had time and again forced explorers to retreat. Observations about the circulation of deep-water currents, high-atmosphere airflows, and animal migrations between the poles and the equatorial regions provided further assurance that the Northwest Passage was more than maritime mythology.<sup>21</sup> Indeed, a best-case scenario would reveal a veritable tropics at the cardinal ends of the Earth. Thus, in claiming that warm, equatorial flows made the frozen North navigable, scientists neatly tied the Arctic (an imaginary tropics) to the true, equatorial tropics in a scientific defense of economic ambitions.

# Ice Making

It is no coincidence that the global shipping of perishable commodities dates back to these most self-assured decades of Arctic exploration. As Church and Bradford painted the Arctic, the American ice industry was booming. <sup>22</sup> Large-scale harvesters hacked blocks of ice out of frozen rivers and lakes throughout the Northeast to literally supply the tropics with cold. As the historian of science Rebecca Woods has argued, cold, when harnessed as a technology and commodity, cheats both time and distance, connecting the food chains of North with South, temperate zones with tropical latitudes, metropoles with rural and colonial outposts. <sup>23</sup> It was with the commodification of ice that the tropics became the lifeline of our modern way of life.

In the early to mid-nineteenth-century United States, cold technologies revolved around the management of the material conditions of ice. Ice may have been a renewable resource acquired at no cost, but early entrepreneurs were well aware of its entropic properties. A pioneer in the ice trade, Frederic Tudor

(a.k.a. the "Ice King") blamed his initial failures on the absence of environmental controls in his system. Only after investing in cargo-hold insulation and storage depots—the infrastructure and technology for keeping ice frozen—did he meet financial success.<sup>24</sup>

By the 1820s, ice had become an international commodity shipped as far as China and India. American ice companies imagined the global reach of their product from the outset when they identified the Caribbean as their key market. Tudor's first business venture involved sending a cargo of ice to Martinique; he then shifted his focus to establishing a monopoly in Havana. In a draft business plan, he offered investors assurance of the company's "advance in extending . . . [service] to all the tropical places."<sup>25</sup>

Arctic ice and commodity ice carried shared ambitions in the nineteenth century. Both their geographies were bidirectional—linking frozen North and tropical South. In the metropolitan Northeast, cities like New York and Boston, where Church and Bradford were exhibiting their Arctic landscapes, viewers likely connected the otherworldly scenery pictured on their canvases with the commodity harvested from their local rivers and ponds. In Noble's account of Church's expedition, sea ice in Labrador is described as akin to "our summer cakes, handed in by the ice-man." Meanwhile, accounts of industrial ice trading evoked the landscapes of the Arctic. In an article about ice-harvesting technologies, the *Journal of the Franklin Institute* described one innovator in the trade as "the great transporter of icebergs to the torrid regions." (And one did literally serve as the other in that mariners regularly harvested polar ice for storage in ship holds as a source of drinking water when on route to warmer seas.)

The irony in these nineteenth-century encounters is that the commodification of winter ice enabled the very transnational connectedness that polar ice geographically hindered. Both quests for more efficient, global commodity circulation were attempts in environmental and material control—the one icing, the other de-icing, we might say. And neither of these ambitions proved easy to realize. Explorers and mercantilists underestimated the material assertiveness of ice itself—that in melting, it speeds decay, and that in freezing, it entraps and kills. It took many trials before the so-called Ice King mastered the transporting of perishable goods in cargo holds. He eventually patented a method for packing ice with "non-conducting materials" that prevented "wasting, melting, and decaying." On the *anti-freeze* front, we might say that nineteenth-century American expeditions found neither a warm polar sea nor Sir John Franklin's ships safe and sound.

They returned instead only with rumors of the lost crew's resort to cannibalism, the most dreaded end conceivable in maritime culture. (In fact, Franklin's ships were discovered only in recent years, in part because of melting sea ice in northern Canada.<sup>29</sup>) By the opening of the next century, Arctic exploration had shifted from searching for open routes to conquering the magnetic pole, and ice harvesting had largely been replaced by chemical-based compressed air refrigeration. And with that, the era of managing the material conditions of ice would end.

## Ungrounding

It was precisely the nineteenth century's preoccupation with managing ice that shaped the way Arctic landscapes were perceived. Unlike Bradford's paintings of de-icing in action, Church's *Icebergs* was deemed unmanageable because it presented matter in a state of variability and volatility without signs of material control. In declaring itself a landscape painting, this absence was further compounded, for landscape was the American genre most associated with constructing narratives of industrial advancement tied to nature.<sup>30</sup>

The American discourse on landscape imagined a viewer in possession of land through his visual control from a privileged point, often in the picture's middle ground. In 1849, a critic in the *Bulletin of the American Art-Union* advised painters to include in their compositions "an open space on which the vision may rest—a patch of lawn or broad surface of rock . . . the place where we must be . . . an open place, where at least we may stand . . . this rule is of the first consequence." In other words, the ideological machinery of nineteenth-century landscape relied on the illusion of solid earth because such fixed positions enabled viewers to imaginatively participate in narratives of national progress. Nowhere is this trope more visible than in Asher B. Durand's aptly entitled *Progress: The Advance of Civilization* (1853; fig. 5), a painting in which figures moving along the winding waterside path from foreground to background, in wagons, boats, and then trains, naturalized a narrative of westward expansion tethered to technological evolution.

Both Church and Bradford sought to connect ice to the physically sound matter of more familiar, terrestrial landscapes. Although his painting was lacking in narrative, Church still imagined *Icebergs* in earthbound terms borrowed from his earlier landscapes. In a broadside accompanying the painting's exhibition, the author, likely Church himself, locates the viewer at a privileged viewpoint commanding the surrounding space. "The spectator is supposed to be standing on



Fig. 5. Asher B. Durand (American, 1796–1886), Progress: The Advance of Civilization, 1853. Oil on canvas,  $48 \times 72$  in. (121.9  $\times$  182.9 cm). Location unknown

the ice," the narrative begins; "imagine an amphitheater, upon the lower steps of which you stand, and see the icy foreground at your feet, and gaze upon the surrounding masses, all united in one beneath the surface of the sea." The text provides assurance of the spectator's all-encompassing vista and describes ice as a conquerable surface within a navigable landscape, solid despite appearances.

Church's textual description attempts to provide the same grounded security offered by the compositional details of Bradford's paintings. Omnipresent in Bradford's compositions are the icebreaking and sealing vessels that penetrate the otherwise frozen landscape—details that reinforce narratives of maritime conquest. Painting on a much smaller scale than Church, Bradford also relied on color to construct ice in more familiar, terrestrial terms. The golden and red hues of his ice fields at sunset and sunrise deflect the problem of blankness and vacuity viewers associated with Arctic conditions and found troubling in the cool, unearthly chromatic effects of Church's *Icebergs*.

Both artists, no doubt, were also contending with the very un-landed nature of the Arctic itself. Like the wetland, the other ontologically unstable environment of the American nineteenth century, the Arctic was neither fully land nor water. This troubling in-betweenness was what made swamps and marshes

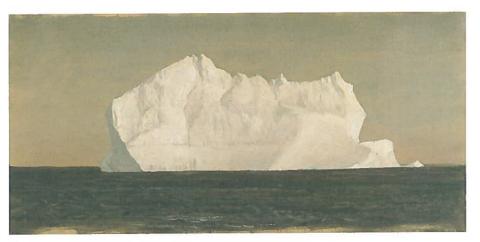


Fig. 6. Frederic Edwin Church, *Floating Iceberg*, 1859. Brush and oil paint, graphite on paperboard, 7  $^{3}$ /s  $\times$  14  $^{3}$ /4 in. (18.7  $\times$  37.5 cm). Cooper-Hewitt National Design Museum, New York. Gift of Louis P. Church (1917-4-296-a)

simultaneously wasteland and resource (if, that is, they were drained or dried out for building and agriculture). 33 Similarly, the Arctic was both a vast emptiness and potentially exploitable, though that exploitation involved turning solid to liquid rather than the other way around. This ambivalence of the Arctic landscape surfaces in the preparatory studies that both Bradford and Church produced during their respective expeditions. In Church's *plein air* sketches painted in Labrador, icebergs are isolated against blank backgrounds of sea and sky (fig. 6). While rich in textural and geometric detail, they float free like frigid islands, dramatically untethered to anything resembling firm ground. Back in the studio, Church would stitch together the textures and colors of these carefully observed specimens into a recognizable topographical setting for *Icebergs*: an inlet framed by towering cliffs, not unlike the grounded ones he and his fellow landscapists were famous for.

Bradford's work follows a similar pattern. His album *Arctic Regions* focuses, like Church's sketches, on monumental floating icebergs photographed by hired professionals (fig. 7), while his later paintings render ice as a surface on which to stand. Both Church's oil sketches and Bradford's photographs are mute renderings that confirmed the anxieties of period viewers. As one astute critic of Church's *Icebergs* noted: "In painting a scene, *where only water, in . . . its various forms . . .* is represented, many of the ordinary rules of painting are reversed." Turning away from painting altogether for his travel album, Bradford explained that ice, in its "wild, rugged shapes, indescribable and ever-changing, baffle all





Fig. 7. William Bradford, plate from Arctic Regions, 1873. Albumen print. Rare Folio ND237 B6965a. Clark Art Institute Library, Williamstown, Massachusetts

description and nothing can do them justice but the sun-given powers of the camera."35 While Church's and Bradford's paintings of the Arctic may have mimicked terrestrial landscapes in composition or visual effects, the genre's conventions ultimately proved incompatible with the material qualities of ice. Despite their best efforts to turn the Arctic into a proper landscape, ice offered neither the stable vistas nor that solidity underfoot on which imagined possession and conquest narratives relied. After all, it was not ice but its absence (a de-icing) that would constitute progress when it came to conquest of the Far North.

# "Seeing-in"

To make sense of ice—to transform a troubling material into a manageable one nineteenth-century artists and writers drew upon its resemblance to the solid materials of sculpture and architecture. Whereas Church's painting may have been mute to viewers, the text penned by his travel companion Noble offered viewers an endless stream of metaphors that gave ice legibility. For Noble, ice is everything but ice, so much so that toward the end of his narrative, he appears exacerbated by the premise:

It is a combination of Alp, castle, mosque, Parthenon and cathedral. It has peaks and slopes; cliffs, crags, chasms and caverns; lakes, streams and waterfalls. It has towers, battlements and portals. It has minarets, domes and steeples; roofs and gables; balustrades and balconies; fronts, sides and interiors; doors, windows and porches; steps and entrances; columns, pilasters, capitals and entablatures; frieze, architrave and comice; arches, cloisters, niches, statuary and countless decorations; flutings, corrugation, carvings, panels of glassy polish and in the rough; Greek, Roman, Gothic, Sarcenic, Pagan, Savage. It is crested with blades and needles; heaped here and there with ruins, blocks and bowlders [sic], splintered and crumbling masses.<sup>36</sup>

Noble's glutted text may be excessively verbose, but it uses rhetoric common to many nineteenth-century accounts of the Arctic. Bradford turned to similar metaphors in his narrative. Ice, he wrote, gave "scope for the imagination to picture forth all things wonderful and strange, whether it be gigantic form of man or beast, crenellated castle wall or donjon deep."37

Such descriptions focus on chance resemblances, specifically "seeingin"—an imaginative or associational mode of perception dating back to antiquity and most often applied to immaterial substances such as clouds and smoke. 38 Leon Battista Alberti had proposed that such accidental visual resemblances were associated with the birth of art itself—that sculpture began when humans found objects whose appearance needed only "slight alteration" to become a striking imitation of something else.<sup>39</sup> In the nineteenth century, this mode of perception was aligned not with landscape painting—a genre associated with empirical vision and concrete details—but with the then-popular art form of ideal sculpture, Neoclassical marbles depicting literary, historical, and mythical figures. In their metaphorheavy rhetoric, Arctic narratives regularly evoked connections between ice and sculpture, highlighting the chromatic and textural affinities between marble and frozen water. Bradford, for instance, described icebergs rising from the sea as "perfectly smooth, and white as the purest marble, well-proportioned and as finely rounded by the action of the water as if fashioned by the chisel of a sculptor."40

Moreover, the discourse of chance perception, so pervasive in nineteenth-



Fig. 8. Edward Brackett (American, 1818–1908), Shipwrecked Mother and Child, 1848–51. Marble,  $72 \times 33^{1/8} \times 23^{1/2}$  in. (182.9  $\times$  84.1  $\times$  59.7 cm). Worcester Art Museum, Worcester, Massachusetts. Gift of Edward Augustus Brackett (1904.64)

century Arctic narratives, modeled a mode of looking specifically associated with marble sculpture. Exhibition pamphlets and etiquette manuals codified sculptural sight as an associational practice, a kind of "seeing-in" that, as Joy Kasson has argued, facilitated a viewer's access to an artwork's allegorical meaning. Instructing viewers on proper behavior before Edward Brackett's *Shipwrecked Mother and Child*, a work about maritime disaster (1848–51; fig. 8), the sculptor Horatio Greenough suggests the following: "Sit quietly on the several sides of the room, and even there survey it with half-closed eyes. The work is of marble: it is vain that you will seek aught else by crowding upon it. By remaining at a proper distance, you will find that it is no longer marble, but poetry." In other words, to see beyond the meaningless, stony surface, a spectator had to purposefully reduce his or her visual acuity.

While surveying artworks from afar, viewers of ideal sculpture used precisely the opposite skill set that they would have needed for looking at landscape painting. Spectators of landscape were instructed not to look from afar but to approach the canvas (Church even encouraged visitors to bring their opera glasses to his exhibitions to facilitate this up-close scrutiny). 44 Nineteenth-century accounts

of the Arctic, which so indulged seeing-in, evoked not the meticulous inspection of the landscape enthusiast but the distant, passive gaze of the student of sculpture.

To see ice as sculpted stone rather than frozen water entangled the Arctic in marble's racial ideologies. Nineteenth-century American sculptors invested heavily in marble's natural whiteness because it facilitated the sublimation of sensual flesh that risked curtailing a work's allegorical meaning. Artists disparaged their artistic predecessors for using pigments to tint their surfaces, and critics deemed the practice "a ghastly thing" and a "falsification . . . without any adequate motive." As Charmaine Nelson has shown, this rejection of color by Neoclassical sculptors follows a colonial logic, pitting the pure, restrained, noble White body against the sensuous, unruly Black body, which was rarely a subject of ideal

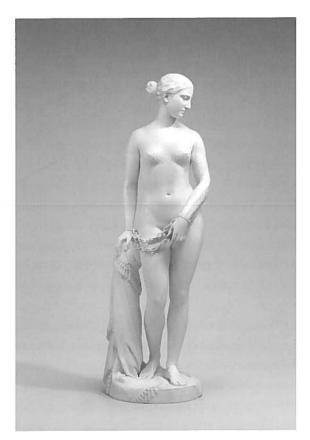


Fig. 9. Hiram Powers (American, 1805–1873), *The Greek Slave*, modeled 1841–43, carved 1846. Marble, 65  $^{15}/_{16}\times$  20  $^1/_4\times$  18  $^1/_2$  in. (167.4  $\times$  51.4  $\times$  47 cm). National Gallery of Art, Washington, DC. Gift of William Wilson Corcoran (2014.79.37)

sculpture, even after emancipation.46 Seeing with halfclosed eyes also favored marble's intangible whiteness—a smooth, flawlessness that pushed sculpture toward poetic abstraction rather than coarse materiality. Indeed, when the most famous marble sculpture of the nineteenth century, Hiram Powers's Greek Slave (fig. 9), toured the antebellum South, it was almost universally praised for its portrayal of ideal femininity rather than read as a critique of the institution of slavery (as it had been by Northern abolitionists).<sup>47</sup>

The racial ideologies of marble became ever more acute during the Civil War. When Union soldiers defaced a Hiram Powers

bust of secessionist John C. Calhoun in North Carolina's senate chamber during occupation, they chose to cover it with black ink. An army doctor recorded in his memoir that he came across the vandalized bust with an inkwell crowning his head. Black fluid had "descended in copious streams over the face" and "besmutted the features," he wrote. Racially motivated iconoclasm had put the "Father of Secession" in blackface. 48

Images of ice cannot be divorced from these contested geographies. To passively admire icebergs from afar as marble palaces was also to sublimate the racial implications of ice into the aesthetics of smooth, shimmering surfaces. Questions of race, as Martin Berger has suggested, animate even those nineteenth-century cultural products without obvious racial imagery, even Arctic landscapes. 49 When Church debuted his *Icebergs* at a New York gallery less than two weeks after the outbreak of the Civil War, he chose a politicized title, The North: Church's Picture of Icebergs (only later did he rebrand it with the simple descriptive title we know today.) Church, a staunch Unionist, no doubt wanted viewers to contemplate questions of racial and geographical politics in so naming his painting.<sup>50</sup> He reinforced an alignment of Arctic North with the Union and tropical South with the Confederacy, which emerged out of Arctic exploration itself. The scientist Isaac B. Hayes, who returned from an Arctic voyage in 1861, for instance, described his mission as one of carrying "the flag of our Republic, with not a single star erased from its glorious Union, to the extreme Northern limits of the earth."51 The Confederate South, meanwhile, was coded as tropical, filled with swamps that bred epidemics and harbored runaways. Politically, the slave economy linked the Confederacy to the veritable tropics, particularly the Caribbean, and not just during the Triangle Trade. Just prior to the Civil War, Southerners had tried but failed to realize their dream of a tropical slave empire in Cuba, Mexico, and Central America.<sup>52</sup>

In the Civil War era, ice may have been righteously tethered to Union politics by Church and others, but it can hardly be pardoned from problematic racial constructs. As a commodity, it was a colonizing material, quite literally. Based in the Northern states, the American ice industry's largest international markets were colonial outposts with significant Euro-American populations: the Caribbean and India. There, ice was a luxury good intended only for the White populations of these tropical locales. To set up a successful ice business, one Boston entrepreneur spent time visiting with local governments of a dozen Caribbean islands seeking exclusive rights to sell only to "resident foreigners." <sup>53</sup> Ice was seen

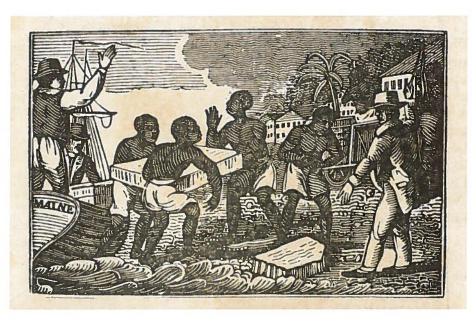


Fig. 10. Detail of "Ship to Shore in the Tropics, 1828," published in A System of School Geography Chiefly Derived from Malte-Brun, by Samuel G. Goodrich (1836). The Henry E. Huntington Library and Art Gallery, San Marino, California (RB 117650)

as incompatible or unfit for those native to tropical climes. In a nineteenth-century print depicting ice being unloaded in Cuba from the holds of a ship marked "Maine," Black, enslaved laborers are shown unable to tolerate the extreme temperature of the imported blocks (fig. 10). The food historian Hi'ilei Hobart, who studies the introduction of ice to nineteenth-century Hawaii, has argued that Indigenous accounts of ice as "burning" and "so hot" rather than freezing or too cold was interpreted by colonists as a marker of biological racial difference.<sup>54</sup> The importation of cold—which ushered in modern patterns of what one might call "imperial" eating—was indelibly tied to the exploitation and consumption of nonwhite bodies.<sup>55</sup> In the nineteenth-century Americas, ice, art, and race were inextricably bound together by practices of perception as well as technologies of globalization.

#### Ice/Sculpture

Yet, it was only in the 1960s and later that artists have tackled this critical nexus in their practice. In particular, a number of artists associated with the Caribbean and Latin America have productively utilized the material conditions of ice and its connection to sculpture to expose the racial ideologies of globalization. Among the



Fig. 11. Rafael Ferrer (Puerto Rican, b. 1933), 50 Cakes of Ice, 1970. Collection of the artist. Art © Rafael Ferrer/Licensed by VAGA, New York, NY

first practitioners to work in such terms was the Puerto Rican-born Rafael Ferrer, whose melting "environments" constructed of large ice blocks (first at the Whitney and later at MoMA) ironically reenacted the White-male heroism of minimalism (fig. 11).<sup>56</sup> Recalling his Puerto Rican upbringing, Ferrer explains that he chose to work with ice because "a man from the tropics views ice as a magical substance," perhaps referencing Gabriel Garcia Marquez's novel One Hundred Years of Solitude, in which a character mistakes ice for "the biggest diamond in the world." 57 It is precisely the incommensurability of ice and "a man from the tropics"—a notion at the forefront of the racist ideology animating nineteenth-century global encounters—that Ferrer and other contemporary artists have put at the center of their work.

Unlike many recent, straightforwardly eco-critical artworks using ice—for instance, Olafur Elliason's Ice Watch (a clock-shaped installation of Greenland icebergs melting away in downtown Paris, in 2015) or Roni Horn's Library of Water (a minimalist gallery in Iceland filled with clear columns of melted local glaciers, which is ongoing)—the particular subset of artworks I want to introduce here



Fig. 12. Francis Alys (Belgian, b. 1959), Paradox of Praxis I (Sometimes Doing Something Leads to Nothing), 1997. Video documentation of an action, Mexico City. Photo: Enrique Huerta

turn away from the visual mode of the sublime. They instead underscore the fact that the aesthetics of ice go hand in hand with commerce and politics. The artists working with ice on such terms are, not surprisingly, associated with the tropics, spaces where hot and cold matter have long been politicized.

Ice, for many of these artists, is not a precious, nonhuman substance whose melting is meant to be poignantly lamented, but human-centered—a sign for the disenfranchised body of the colonial other. In artworks such as Francis Alÿs's Paradox of Praxis (1997), this human context is physically enacted. In this performance piece, the Belgian-born, Mexico-based Alÿs pushed a torso-sized block of ice through the streets of Mexico City until it had completely melted into the hot asphalt (fig. 12). The artist's arduous but pointless task—akin to the grueling work of Mexican street vendors (which Alÿs also documented in other media in the same years)—transforms melting ice into a sign of nonwhite labor in the global South.<sup>58</sup> More recently, the Brazilian artist Néle Azevedo has literally used ice to sculpt the bodies of the oppressed. Her Minimalist Monument, first installed in Brazil in 2005, consists of an army of miniature human figures cast in ice and designed to quickly melt away in urban public spaces (fig. 13). Conceived as an "anti-monument," Azevedo uses the drama of melting to critique the dis-

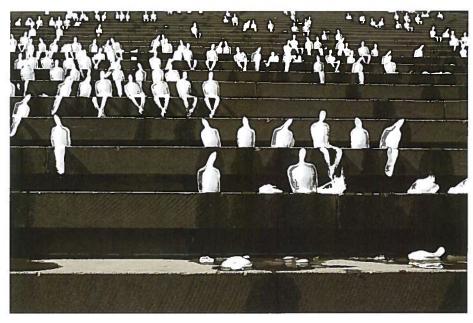


Fig. 13. Néle Azevedo (Brazilian, b. 1950), *Minimum Monument*, 2014. Installation. ©Néle Azevedo, Minimum Monument, Berlin 2009. © 2017 Artists Rights Society (ARS), New York/AUTVIS, Sao Paulo

connection between monumental sculpture and local history. Ferrer, Alÿs, and Azevedo each constructed a narrative of ice melting that is human rather than Anthropocene, political rather than natural, racialized rather than universal.

Sculpting ice, for those contemporary artists who are looking to or from the tropics, is ultimately about using ice as a kind of anti-sculpture. Each notably turned to ice that was mechanically made rather than naturally occurring, referencing the industrial history of their material and its geopolitics. The minimalist cube and the civic monument of today (much like the marble goddesses of the nineteenth century) are constructed from hard, durable matter that speaks to perpetuity—to the maintenance of essentializing narratives. To re-create them in ice, itself a product of the economic colonization of the tropics, is to marshal entropy as a weapon against the legacies of imperialism.

Today, in the midst of climate change and growing awareness of the fragility of Arctic ecosystems, melting ice has become far too easy to exploit artistically. When Azevedo's *Minimalist Monument* was installed in Berlin in 2009 under the auspices of the World Wildlife Fund, the artist's melting bodies were recast as an emblem of global warming even though the artist has never explicitly defined the work in environmental terms. Like the misreading of Powers's *Greek* 

Slave that took place in the antebellum South, this rebranding of frozen water as stand-in for glacier and iceberg unfortunately erases an important history—that in the nineteenth century and today, the properties of ice connect ecological fragility to racial politics. Now, as melting ice is slowly turning the once-mythical open polar sea into a troubling reality, we need to look south as much as north. As the tropics get closer than ever in nautical miles, they also become the region of the world most vulnerable to rising sea levels and warming temperatures. Not only will this result in a loss of land and livelihood for much of the developing world, but it will no doubt lead to the deterioration of global supply chains on which the North has long relied. The consequences of climate change are not just aesthetic, as the melting away of icebergs artistically installed may suggest, but deeply economic and disconcertingly political.

Entropy, then, can be dangerously universalizing. We live in a moment when ice as artistic medium has largely lost its history. An installation of icebergs, melting away, offers viewers a critique of environmental destruction that is cleansed of political implications, prompting a kind of passive gaze not unlike that of nineteenth-century Americans before their sculpted marble allegories. I began this essay with Tavares Strachan's Arctic Ice Project because it maintains an eco-critical currency while gesturing to that now-lost history. The key to its effectiveness, I would suggest, is its ability to combine a narrative of the vanishing Arctic sublime with the mundane mechanics of freezing. Though Strachan's final installation of a frozen cube recalls the work of Ferrer and Alÿs, the ice in question is not mechanically made but harvested from the remote North. In Strachan's turn away from the romantic, the iceberg imitates the ice cube. Staging a reversal of our usual encounter with ice, Strachan's project also asks us to return to narratives of encounter and expedition more generally. The piece might be read as a rescue mission wherein the nonwhite explorer from the tropics masters the Arctic.<sup>59</sup> He excavates its most precious matter and preserves it by using cooling technology powered by heat itself. The work thus centers not on melting but on freezingnot the chaos implied by entropy but on material equilibrium. We might say that Arctic Ice Project conveniently realizes the very material control that drove oncefailed nineteenth-century pursuits concerning frozen matter. But with its revised agents and sites, we can begin to situate today's ecological concerns of melting in a politicized history of freezing.

- I. Robert Hobbs, "Tavares Strachan's Infinite Games," in Tavares Strachan, *The Distance between What We Have and What We Want* (New York: Pierogi and Ronald Feldman Fine Arts, 2006).
- 2. Louis Legrand Noble, After Icebergs with a Painter: A Summer Voyage to Labrador and Around Newfoundland (New York: D. Appleton and Co., 1861), vi.
- 3. On the cultural impact of Arctic exploration, see Michael Robinson, *The Coldest Crucible: Arctic Exploration and American Culture* (Chicago: University of Chicago Press, 2006).
- 4. Quoted in Barry Alan Joyce, "Elisha Kent Kane and the Eskimo of Etah," in *Surveying the Record:* North American Scientific Exploration to 1930, ed. Edward C. Carter II (Philadelphia: American Philosophical Society, 1999), 104.
- 5. Robinson, The Coldest Crucible, 45.
- 6. Kevin J. Avery, *Church's Great Picture*, "The Heart of the Andes" (New York: Metropolitan Museum of Art, 1993).
- 7. Jennifer Raab discusses this characteristic of *The Icebergs'* reception in *Frederic Church: The Art and Science of Detail* (New Haven: Yale University Press, 2015), 87–122, arguing that Church purposely evaded narrative in order to explore formal qualities of painting.
- 8. For a compilation of period reviews of *Icebergs*, from which these quotations are drawn, see Gerald
- L. Carr, "Early Documentation of *The Icebergs*," in Eleanor Jones Harvey and Gerald L. Carr, *The Voyage of the Icebergs: Frederic Church's Masterpiece* (Dallas: Dallas Museum of Art, 2013), 91–94.
- 9. On the function of narrative in relation to failure in Arctic expeditions, see Adriana Craciun, Writing Arctic Disaster: Authorship and Exploration (Cambridge: Cambridge University Press, 2016) and Lisa Bloom, "Science and Writing: Two National Narratives of Failure," in Inscribing Science: Scientific Texts and the Materiality of Communication, ed. Timothy Lenoir (Stanford: Stanford University Press, 1998), 328–50.
- 10. On Bradford's career, see Richard C. Kugler, William Bradford: Sailing Ships & Arctic Seas (Seattle: University of Washington Press and New Bedford Whaling Museum, 2003).
- II. William Bradford, *The Arctic Regions: Illustrated with Photographs Taken on an Art Expedition to Greenland* (London, 1873), 7, 46, 78, 47.
- 12. William Bradford, "Life and Scenery in the Far North," *Journal of the American Geographical Society of New York*, Jan. 1, 1885, [n.p.].
- 13. On artists encountering ice in the early modern period, see Christopher P. Heuer, "Arctic Matters in Early America," in *Scale*, ed. Jennifer L. Roberts (Chicago: University of Chicago Press, 2016), 180–214.
- 14. On historical attempts to discover the Northwest Passage, see Glyn Williams, *Voyages of Delusion: The Quest for the Northwest Passage* (New Haven: Yale University Press, 2003).
- 15. On the history of American expeditions to the Arctic, see Robinson, *Coldest Crucible*; Pierre Berton, *The Arctic Grail: The Quest for the North West Passage and the North Pole*, 1818–1909 (New

- York: Viking, 1988); and Lisa Bloom, Gender on Ice: American Ideologies of Polar Expeditions (Minneapolis: University of Minnesota Press, 1993).
- 16. Matthew Maury, *The Physical Geography of the Sea and Its Meteorology* (New York: Harper & Brothers, Publishers, 1871), 204.
- 17. The Hollow Earth theory first appeared in John Cleves Symmes, "No. 1. Circular," Niles' Weekly Register, June 20, 1818, 294. Interest in the theory outlasted Symmes's own lifetime. His writings on the topic were published as an anthology in 1878 by his son: Americus Symmes, ed., Symmes's Theory of Concentric Spheres: Demonstrating That the Earth is Hollow, Habitable Within, and Widely Open About the Poles, Compiled by Americus Symmes, from the Writings of his Father, Capt. John Cleves Symmes (Louisville, Ky.: Printed by Bradley & Gilbert, 1878).
- 18. Symmes Theory of Concentric Spheres, Demonstrating That the Earth is Hollow, Habitable Within and Widely Open About the Poles—by a Citizen of the United States (Cincinnati: Morgan, Lodge, and Fisher, 1826), 144.
- 19. An early convert to Symmes's theory, Jeremiah Reynolds undertook an expedition to the South Pole in 1829. On this and other failed attempts to fund expeditions to test the Hollow Earth theory, see John Weld Peck, "Symmes' Theory," *Ohio Archeological and Historical Publications* 18 (1909): 29–43.
- 20. Edgar Allan Poe, *The Narrative of Arthur Gordon Pym of Nantucket* (New York: Harper & Bros., 1838).
- 21. See, for instance, William W. Wheildon, Atmospheric Theory of the Open Polar Sea: With Remarks on the Present State of the Question (Boston: Elmwood Typographia, 1872); and Isaac Israel Hayes, The Open Polar Sea: A Narrative of a Voyage of Discovery Towards the North Pole in the Schooner "United States" (New York: Hurd and Houghton, 1869).
- 22. On the history of the ice-harvesting industry in the northeastern United States, see Richard O. Cummings, *The American Ice Harvests: A Historical Study of Technology, 1800–1918* (Berkeley: University of California Press, 1949); and Joseph C. Jones Jr., *America's Icemen: An Illustrative History of the United States Natural Ice Industry, 1665–1925* (Humble, Tex.: Jobeco Books, 1984).
- 23. On the impact of cold storage on global shipping in the nineteenth century, see Rebecca J. H. Woods, "Nature and the Refrigerating Machine: The Politics and Production of Cold in the Nineteenth Century," in *Cryopolitics: Frozen Life in a Melting World*, ed. Joanna Radin and Emma Kowal (Cambridge: MIT Press, 2017): 89–116.
- 24. Jones, America's Icemen, 93.
- 25. Cummings, The American Ice Harvests, 142.
- 26. Noble, After Icebergs with a Painter, 175.
- 27. "Specifications of American Patents," Journal of the Franklin Institute 27 (April 1839): 245.
- 28. Jones, America's Icemen, 13.

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- 29. "Ship Found in Arctic 168 Years After Doomed Northwest Passage Attempt," *The Guardian*, September 12, 2016.
- 30. On the conventions of landscape and its ideological underpinnings, see Angela Miller, *Empire of the Eye: Landscape Presentation and Cultural Politics, 1825–1875* (Ithaca: Cornell University Press, 1996).
- 31. "Some Remarks on Landscape Painting," Bulletin of the American Art-Union 2 (November 1849):
- 32. Frederick Church's broadside entitled "The North" was published on the occasion of the exhibition of the painting in 1861 at the Boston Athenaeum. The quote comes from a reprint published in Harvey and Carr, *The Voyage of the Icebergs*.
- 33. On the cultural history of wetlands, see David C. Miller, *Dark Eden: The Swamp in Nineteenth-Century American Culture* (Cambridge: Cambridge University Press, 1989).
- 34. "Art," New York Evening Express, February 26, 1861, 1.
- 35. Bradford, Arctic Regions, 12.
- 36. Noble, After Icebergs with a Painter, 247.
- 37. Bradford, Arctic Regions, 14.
- 38. On chance methods and early modern painting, see Dario Gamboni, *Potential Images: Ambiguity and Indeterminacy in Modern Art* (London: Reaktion Books, 2002). On the theory of seeing-in, see Richard Wollheim, *Painting as an Art* (Princeton: Princeton University Press, 1987), 45–48.
- 39. Leon Battista Alberti, On Painting: and On Sculpture, trans. Cecil Grayson (London: Phaidon, 1972), 121.
- 40. Bradford, Arctic Regions, 46.
- 41. This idea has a longer history: Michelangelo, for instance, was reputed to see figures emerge from his marble blocks.
- 42. Joy Kasson, *Marble Queens and Captives: Women in Nineteenth-Century American Sculpture* (New Haven: Yale University Press, 1990).
- 43. Horatio Greenough, Edward Brackett's Marble Group of the Shipwrecked Mother and Child (New York, n.d.), quoted in Kasson, Marble Queens and Captives, 36.
- 44. On Church's relationship to detail, see Raab, Frederic Church.
- 45. Anne Brewster, "American Artists in Rome" (1868) and James Jackson Jarves, Art Hints, Architecture, Sculpture and Painting (1855), quoted in Charmaine A. Nelson, The Color of Stone: Sculpting the Black Female Subject in Nineteenth-Century America (Minneapolis: University of Minnesota Press, 2007), 60, 62.
- 46. Nelson, *The Color of Stone*. See also Kirk Savage, *Standing Soldiers, Kneeling Slaves: Race, War, and Monument in Nineteenth-Century America* (Princeton: Princeton University Press, 1997), 52–88. 47. Nelson, *The Color of Stone*, 75–112.

### The Entropic History of Ice 291

- 48. On the provenance of this bust and its history of vandalism, see John W. Coffey, "Arms for Art, and Other Shenanigans: The Curious Case of a Marble Bust of John C. Calhoun," *Southern Cultures* 19 (Winter 2013): 5–21. I am grateful to the author for bringing the history of this piece to my attention.
- 49. Martin A. Berger, Sight Unseen: Whiteness and American Culture (Berkeley: University of California Press, 2005).
- 50. Carr, "Early Documentation of The Icebergs," 59-66.
- 51. See ibid., 65.
- 52. Robert E. May, *The Southern Dream of a Caribbean Empire*, 1854–1861 (Gainesville: University Press of Florida, 2002).
- 53. Cummings, The American Ice Harvests, 137.
- 54. Hi'ilei Julia Hobart, "Tropical Necessities: Ice, Territory, and Taste in Settler Colonial Hawai'i" (PhD diss., New York University, 2016).
- 55. As Kyla Tompkins has shown, eating in the nineteenth century is central to what she calls "the performative production" of racialized bodies. See Kyla Wazana Tompkins, *Racial Indigestion: Eating Bodies in the 19th Century* (New York: New York University Press, 2012).
- 56. On Ferrer's work, see Deborah Cullen, *Rafael Ferrer* (Los Angeles: UCLA Chicano Studies Research Center Press, 2012); and Deborah Cullen et. al., *RetrolActive: The Works of Rafael Ferrer* (New York: Museo de Barrio, 2010).
- 57. Edward J. Sullivan, "Rafael Ferrer in the Tropical Sublime," in Cullen et. al., RetrolActive, 55.
- 58. On Alÿs, see Mark Godfrey, ed., *Francis Alÿs: A Story of Deception* (New York: Museum of Modern Art, 2010).
- 59. Though it remains unstated, Strachan's visual documentation of his expedition to harvest his ice block seems to ask viewers to recall the often-forgotten presence and contributions of nonwhites in the history of Arctic expeditions. In a general way, published narratives of Arctic expeditions regularly ignored the significant role that Indigenous guides played in the routing and survival of explorers. More specifically, Strachan may be referencing the achievements of Matthew Hensen, the African American member of Robert Peary's 1909 expedition that first reached the North Pole, a self-described "general assistant, skilled craftsperson, interpreter [of the Inuit language], and laborer" whose accomplishments were celebrated only posthumously.