earlier works, I find it hard to avoid concluding that—enjoyable as some of *The Information* is—the author has been overwhelmed by the vast and amorphous nature of his subject. Hence, perhaps, that redundant "The" in the title, which tries vainly to stem the flood implied by a more obvious choice of title—the simpler "Information."

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CLIMATE CHANGE

Between Two Poles

Cat Bohannon

It's a strange phenomenon: listening to the sound of running water can trigger salivation. One would expect it to be pleasant—Steven Pinker even argues we're evolutionarily driven to like the sound—but listening to Paul D. Miller's *Terra Nova: The Antarctica Suite* actually makes the listener a bit thirsty. The composition, commissioned by the Brooklyn Art Museum in 2009, is redolent with the sampled sounds of Antarctica's ice fields—cracks, groans, sluicing meltwater, crinkling shards, and newly freed icebergs in sloshing seas. Perhaps it's useful to have such an embodied reaction; as the accompanying film suggests, global warming threatens our already limited supply of fresh water. Choosing aesthetic over pedagogy can breed pedagogy, nonetheless. Thirst is a subtle way, then, to anticipate apocalypse.

The Book of Ice
by Paul D. Miller
Mark Batty, Brooklyn, NY, 2011. 128 pp. $29.95, C$34, £21. ISBN 9781935613145.

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Four years ago, Miller—a critically lauded composer and cultural theorist, better known as DJ Spooky—hired a decommissioned Russian naval ship to carry himself, a crew, and no small amount of high-tech recording equipment to Antarctica to record its ice fields. The ship, the *Akademik Ioffe*, now specializes in hydro-acoustic research. In Miller's case, that research would produce no papers in peer-reviewed journals but instead a multiyear, multigenre suite on climate change and the public imagination: a multimedia concert, a remix of Frederick Cook's scandalous 1912 film on the North Pole, installations at various biennales, and innumerable performances and lectures.

A QR code for sampling.

The latest node in that network of production is *The Book of Ice*, Miller's two-dimensional meditation on Antarctica. Not to be limited to a single genre, the book involves essays, graphic design, timelines, maps, propaganda for imaginary political movements (the agents of which may or may not be human), archival photos of Antarctic exploration, and even QR codes to access film and music online. Physicist Brian Greene wrote an introduction as multifarious as the book itself, ranging from the physics of ice to phase transitions in string theory. In a nod to climate change's cultural ties to science fiction, Miller even includes an interview—bewilderingly, a critic interviewing him—on Afrofuturism.

All of this, of course, is quite maddening for the average scientist. Where are the accounts of the latest in climate science? Ice-core samples? Where are the tutorials? What are we learning from all this art-doing and art-musing?

While many will learn some basic science about Antarctica and climate change from Miller's projects, what's most valuable here is a portrait of how the public imagines Antarctica and its role in a warming planet. Rather than pedagogy for a middle-school science classroom, we find an aesthetic tutorial on how data from perfectly well-meaning climate scientists are set adrift in the soup of public fears, hopes, soundbites, history, and cultural orientations. And lest we forget, we're included in that "general public": the vast majority of *Science*'s readers aren't climate scientists. For many, our only advantage is a heightened suspicion of any graphs and statistics that aren't properly documented.

The science included in the book is often ensconced in aesthetic gestures and sly cultural references. For example, Miller writes that although ice is "based on the molecule of water … many of the main qualities of ice are controlled by the hydrogen bonds between oxygen and hydrogen atoms. Got it?" No. We don't. Let's be honest: Wikipedia aside, many scientists who work above the molecular scale can't provide a definition of hydrogen bonding. Miller's winking at us here, somewhere between a joke and self-consciousness.

That play between the feeling of knowing and actual knowledge is sprinkled throughout the book in fascinating (and ultimately aesthetic) ways. For example, the figure "Risks and impacts of global climate change" colorfully depicts risks intensifying with increased temperature. By including numbers, it seems to impart scientific knowledge. However, the metrics are undocumented, and on closer examination, the illustration actually conveys nothing more than a general sense of impending apocalypse, marked somewhere between the years 2025 and 2075 by a gradual shading from yellow to red.

Remember the U.S. government's constant Orange Alert for a terrorist threat and the resulting widespread, directionless panic? That seems precisely how the general public understands climate change. We see that the scientific community is largely in agreement that it's happening, and many are even willing to admit the possibility of human influence, but we have no more than a fuzzy idea how and why it occurs. We stretch between two poles: the recent past and a terrifying future, robbed of the sense of agency real knowledge provides. Into that howling absence, we pour fantasies about merry penguins and shifting glaciers, mutely divide our garbage from recyclables, and scan the latest graph as desperately and aimlessly as one might read a horoscope.

Miller is at his best here visually and audibly—his introduction and interviews are just passable. The archival photographs of Antarctic expeditions are a treasure, as are many of the graphic designs that stem from his earlier *Terra Nova* composition. The propaganda posters for the "Manifesto for a People's Republic of Antarctica" are also delightfully mid-20th century (picture penguins in military formation under a stream of planes—Uncle *Aptenodytes* wants you). As a whole, *The Book of Ice* stands as a quirky meditation on Antarctica and its role in climate change.

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CREDIT: FROM *THE BOOK OF ICE*