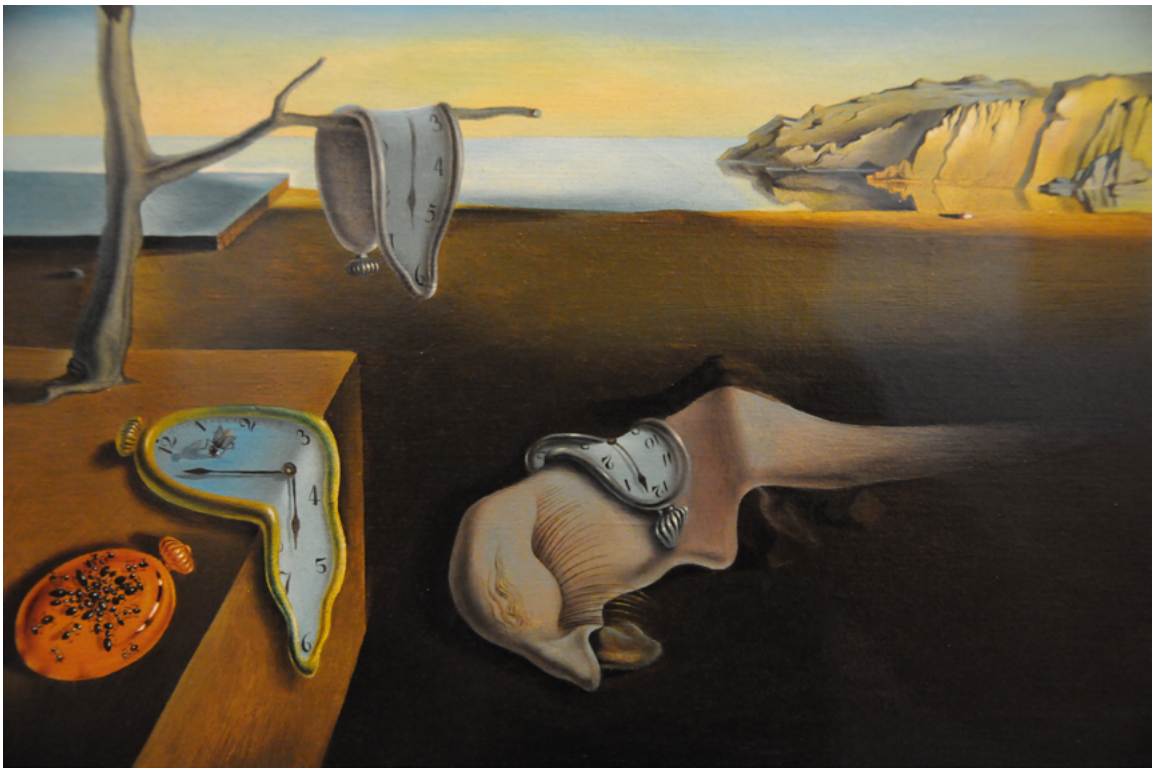
ISSN 2624-9081 • DOI 10.26034/roadsides-20190016

Midnight Blues in the Melting Arctic

Mia M. Bennett

At the peak of summer above the Arctic Circle, there is never a rush to get home before dark. Night will not come knocking until indigo skies return in August. On a late June evening in a town called Inuvik in Canada's Northwest Territories, well after the clock strikes twelve, a house party crackles with the sunlit energy typical of afternoon barbecues. Outside, children play in the streets unattended. A baseball game enters its fifth inning, the loud smack of the wooden bat against warm leather sending the ball into a streaky orange sky. At this point in the evening, it feels a little like meandering through a real-life version of Dalí's *The Persistence of Memory*, passing melting clocks on the way toward a sunset that will never arrive.

Despite the feeling of suspended reality under the midnight sun, time, of course, moves forward in the Arctic, just like anywhere else. In fact, up here, geological time could be said to be speeding up. In the epoch of the Anthropocene, glaciers are racing towards the ocean, sea ice is melting faster than ever, and thawing permafrost is turning into a giant ticking time bomb that bodes ill for the houses and roads that rest on top of this foundation.



The Persistence of Memory, Salvador Dalí (1931). http://www.moma.org

As recently as 100 years ago, people in the Arctic could have moved when local living conditions deteriorated – say, if the shoreline started to erode or animal populations dwindled. The nomadic ways of peoples such as the Inuit, Sami, and Nenets made life in a harsh environment a little more feasible. But now, with the majority of the Arctic's inhabitants residing in buildings fixed to the ground – all too often a consequence of the forced settlement of Indigenous Peoples by colonial governments, which sought in places such as Canada to essentially use them as human flagpoles to stake out territorial claims (Greaves 2016) – upping sticks is not so simple. Yet as the homes of people erode from under their feet in places like Kivalina, Alaska, the response is actually not to flee to more solid ground, but rather to dig in.

This tendency is also true of people in Inuvik, where construction on Canada's first highway to the Arctic Ocean finished in 2017. A little over a hundred kilometers north of this town of 3,200 people, Canada's largest river spills into the Arctic Ocean. The Inuvialuit call it Kuukpak, or "Great River," the Gwich'in call it Nagwichoonjik, or "River Flowing Through a Big Country," and the Dené call it the Deh Cho, or "Big River." In English, it is named the Mackenzie River after the Scottish explorer who sailed down it thinking it would reveal a long-sought passage to the Pacific. Instead, it spat him out into the Arctic, a forbidding region for European explorers but one whose ice has provided a solid foundation for indigenous movement for millennia – and, for the past few decades, ice road truckers.

Every winter, the Mackenzie freezes into a sinuous white streak strong enough to support big rigs. Although ice presents an obstacle to ships at sea, it enables industrial

Standing on the Mackenzie River Ice Road between Inuvik and Tuktoyaktuk in the winter of 2016-2017, the last one during which it was officially maintained before the permanent highway opened.
Photo: Mia M. Bennett.

transportation on land. The great rivers that drain into the Arctic Ocean in Siberia and Canada freeze to a crawl each winter, allowing KAMAZ trucks (Argounova-Low 2012) and eighteen-wheelers to reach remote northern towns. Rumbling across the riverine ice road, trucks that have driven all the way up from southern Canada deliver crucial supplies to the coastal community of Tuktoyaktuk, population 898. Or rather, delivered, for the ice road has not been maintained in winter since the all-weather highway opened two autumns ago.

The new 137-km two-lane highway, called the Inuvik-Tuktoyaktuk Highway (ITH) after the two communities it connects, was effectively spearheaded by local and regional leaders within the Inuvialuit community (Bennett 2018), the Indigenous People who hold title to 90,650 square kilometers of the surrounding lands. Since the Inuvialuit settled their land claims with the Canadian state in 1984, they have pursued various commercial opportunities including efforts to develop offshore oil and gas resources and to build a deep-water port. Plans for the ITH have been floated since the early 1970s, when the federal government finished work on the 740-km Dempster Highway, which terminates in Inuvik. Ottawa finally granted approval and funding for the ITH in 2011, at a time when officials across the Arctic were urging the development of a fast-melting region. In some sense, the realization that the Arctic is no longer hidebound by geological time has moved the clocks forward to match capitalism's relentless pace. Communities in the Arctic, ever resourceful, are trying to leverage this sudden interest in the North to attract investment in their local economies, many of which depend on a precarious mix of revenues from resource-based sectors such as mining or fishing and government subsidies.

Like the Dempster, the ITH is supposed to be a permanent "all-weather highway." Yet this hardy turn of phrase is a little less convincing up north than down south, where "just-in-time" deliveries are more likely to live up to their name. In the Canadian Arctic, a "highway" is really two lanes of gravel, and "all-weather" means that a road holds up to snow, ice, sleet, rain, and sun – to a point. It is actually the sun that makes things tricky, for when the undulating tundra warms up, the gravel roadbed turns to mud, which threatens to swallow up heavy vehicles.

Signs of the slip-sliding terrain are already evident along the Dempster. Driving south out of Inuvik in summer, the buggy, boggy delta morphs into a funhouse forest. "Drunken" trees lean in a crooked stupor, their narrow trunks pushed sideways not by relentless winds from above but rather by shifting soils below. Hotter temperatures – and, by corollary, the world's major greenhouse gas emitters (Sand et al. 2016) – are to blame for the thawing ground. Passing through this twisted arboretum is a little less Dalí and a little more van Gogh, all swirling trees and skies. Just west of the highway, a grassy, gnawed hillslope looks like a giant troll took a big bite out of it. This landslide-induced degradation is known as a permafrost thaw slump, a phenomenon occurring with increasing regularity as the ground stirs from its hyperborean hibernation. But eroding shorelines, inebriated trees, and subsiding terrain seem to do little to dissuade people in the region from building roads and putting down pipelines. While all of these investments are meant to lay the groundwork for future prosperity, it is unclear whether they will even last for their typical thirty-year design lifespan.

Mackenzie River in summer.
Photo: Mia M. Bennett.

Waiting to cross the Mackenzie River in Tsiige-htchic.
Photo: Mia M. Bennett.

"Drunken" trees tipping in the permafrost laden soil along the Mackenzie River.
Photo: Mia M. Bennett.

In January 2018, the Doomsday Clock inched forward to two minutes to midnight in light of "the looming threats of nuclear war and climate change" (Mecklin 2018), the closest it has ever come to that fateful hour. But the odd thing is – and this is not just in the Northwest Territories, but in many parts of the Arctic – there seems to be a sense of living in a time that is hurtling towards that catastrophic midnight while simultaneously reveling in the extended golden hour of a polar summer night, where the good times keep on going and the color midnight blue is merely a pigment of the imagination, so to speak. Thanks to geopolitical and geoeconomic interest in the North, investments are reaching places like Tuktoyaktuk that have been off the radar of global capital for decades. In some ways, it appears as if the melting ice has finally made the region sync up with the limited attention spans of investors.

A grandfather and his grandchildren play on the shoreline in Tuktoyaktuk. Photo: Mia M. Bennett.

Seen from one angle, the determination to put more gravel down in the Arctic could be considered a form of resilience or even *niriunniq* – an Inuktituk word that roughly translates as "hope" (Kirmayer et al. 2011). Viewed from another position, however, northern infrastructure development could be seen as folly. Why are humans putting down roots in a liquefying landscape?

The answer, I think, involves a certain refusal to admit how quickly geological time has accelerated in the Arctic. While environmental changes have opened up new possibilities for access and investment, the speed at which these shifts are happening may be outpacing capitalism's time horizons. Ultimately, all-weather roads are not designed to be all-climate roads. Designing infrastructure that can keep up with the rapid-fire rate of climate change, or what might more appropriately be called climate instability, will require both new mobilities and malleabilities in light of the cryosphere's newfound fluidity.

Ironically, in seeking to adapt, capitalism and the state may need to draw lessons from the more footloose and flexible ways of life they tried to stamp out a century ago. While indigenous peoples have managed to persist in the Arctic for at least 20,000 years, it is unclear if the brittle infrastructures of settlers and industry will last for much more than a hundred.

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Cite as: Bennett, Mia M. 2019. "Midnight Blues in the Melting Arctic." *Roadsides* 1: 42-49. DOI: https://doi.org/10.26034/roadsides-20190016.

Author:

Mia M. Bennett is an Assistant Professor in the Department of Geography and School of Modern Languages & Cultures (China Studies Programme) at the University of Hong Kong. Through fieldwork and remote sensing, she researches the politics of infrastructure development in frontier spaces, namely the Arctic and areas included within China's Belt and Road Initiative. As an advocate for increasing public awareness about the Arctic, for the past ten years, she has been running a blog, Cryopolitics (www.cryopolitics.com), which provides Arctic news, analysis, and photography.

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Collection no. 001 was edited by: Agnieszka Joniak-Lüthi
Copyediting: David Hawkins
Layout: Antoni Kwiatkowski and Chantal Hinni

ISSN 2624-9081

University of Zurich[UZH]

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