

SAND AND SNOW ATTHE A Canadian travelling in Qatar discovers FND a different side of the climate crisis. TEXT-TRISTAN BRONCA OFTHE VORID

The most astonishing thing about outdoor air conditioning is that it is really just like indoor air conditioning. You'll be walking around one of Doha's outdoor malls in the merciless heat, and suddenly you'll pass an unseen wall into a beautifully temperate zone. You'll search for the source, expecting to find vents blowing noisily into the torrid atmosphere, but instead you'll find them humming gently along, barely intruding on this invisible oasis of perfectly comfortable air.

Outdoor air conditioning is an expensive necessity in this little corner of the Persian Gulf. Qatar, with its average daily temperature of 37 °C in July, is one of the richest countries on the planet, and it is marshalling titanic sums to wage a technological war on the climate.

In most of the world, the greatest obstacle to addressing the climate crisis is the chasm between its causes and effects. It's difficult to fathom how a new law to manage my car's emissions where I live in Toronto relates to, say, the predicted 257 per cent rise in heat-related deaths in the U.K. over the next 30 years. But at the extremes—such as the rich equatorial city of Doha, or in the rapidly melting Canadian Arctic—that gap collapses. Fossil fuels are the source of Qatar's stunning wealth, and as much as 60 per cent of the country's carbon footprint results from efforts to stave off the heat. Put another way, the forces that allow people to survive in this city are the same as those that could make it uninhabitable in the next 100 years.

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Qatar is a tiny country, a peninsula sticking out of the side of Saudi Arabia between Bahrain and the United Arab Emirates. My girlfriend and I visited in the fall of 2019. A civil engineer, she was there for a sevenweek contract. I joined her for two of them.

By conventional city-building timelines, much of Doha, the capital, has risen out of the dunes overnight: immaculate eight-lane highways, overpasses, stadiums, and hotels, constructed in as little as a few weeks, many in preparation for the World Cup in 2022. The city's most extraordinary feature is a manmade series of islands called The Pearl, which stretches several kilometres out into the Arabian Gulf. It's a city unto itself, replete with its own

neighbourhoods modelled to evoke life in Venice, the tropics, the Mediterranean, and Morocco, respectively. There are beaches, as well as thousands of plush villas, townhomes, and apartments with the commensurately luxe amenities. Massive hotels inhabit their own islets, encircled by yachtfilled marinas.

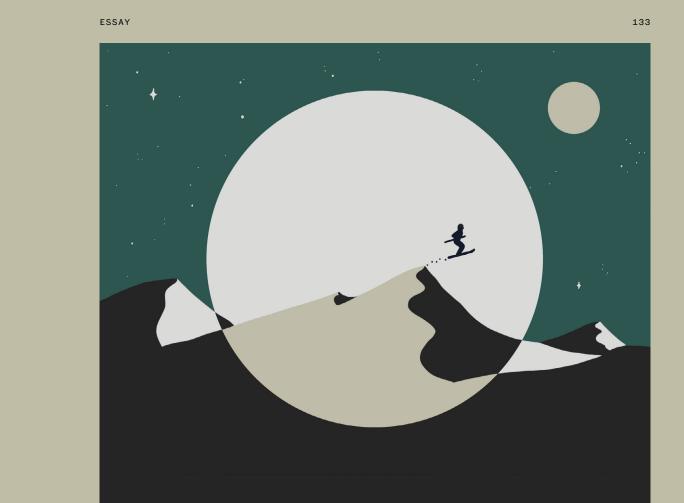
In Qatar, conspicuous consumption is not only commonplace but expected. One of the ways this culture of decadence manifests is in the creation of environments that should, by rights, be impossible in the desert. Take the malls, which seem to have replaced the traditional Arabian souks as the place to demonstrate purchasing power. Most have at least one skating rink. Festival City, the Qatari mall that doesn't take itself too seriously, has a snow park where you can toboggan, tube, and otherwise frolic on 12 rides spread out over nearly 900 m².

But step outside these artificial snowscapes and the contrast with the natural environment sharpens. Qatar is now one of the fastest-warming areas on earth outside the Arctic. Summers are already oppressively hot, treated largely the same as our Canadian winters by anyone who can avoid the outdoors. Climate scientists warn that by 2070 the country could join an expanding band of land mass that will be uninhabitable for humans. The heat and humidity will be capable of killing even healthy young adults in a matter of hours. Air conditioning—indoor or out—will become every bit as essential as food or water.

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Education City is home to nine international universities and several other research and educational institutions, many of them housed in architectural marvels. One of the primary draws is the National Library, a sprawling glass and steel structure with levels of bookshelves and desks climbing upward in every direction from the entrance, like a stadium. When I visited, they were promoting a lecture about ice loss in the Arctic.

In satellite time-lapse footage recorded since 1978 you can watch the sea ice around the North Pole expand and contract over the seasons. That shifting blob of white has gotten steadily smaller, and climate scientists now believe the Arctic could be ice-free within 15 years. This melt is already setting off a series



of disastrous feedback loops. Less ice means more ocean, less heat reflected into space, and the release of potentially huge deposits of greenhouse gases trapped in the permafrost. That means more warming, more ice loss, and unimaginable quantities of fresh water flowing into the oceans, flooding coastal cities and disrupting currents that determine weather patterns across the planet. And that means things will change everywhere, including in the deserts of Qatar.

After spending a few hours in the library, I walked the outdoor fitness facilities at Oxygen Park, which was lush to the point of artificiality. It backed onto a stretch of desertscape still under development. I later learned it was to be the site of Education City Stadium, one of eight stadiums in various stages of construction. This one—built largely from recycled, locally sourced materials, with low-flow water fixtures, native drought-tolerant plant life, and energy-efficient LED lighting—would be a "beacon of education and sustainability to the world."

It's an admirable vision, but it feels quaint and even absurd when it collides with the lived realities of a society built on oil wealth. I heard it said that it's cheaper in Qatar to hire 50 people with shovels than to rent a backhoe. These workers have often been subject to appalling working conditions. As of 2013, at least 1,200 of them had died building the stadiums that are the country's new pride and joy, a figure that was almost certainly underreported even seven years ago. Most of these deaths are attributed to "natural causes," usually cardiovascular events that should be rare in otherwise healthy labourers. The government

has since introduced bans on manual labour in unshaded areas between 11:30 a.m. and 3:00 p.m. during summer months, but wet-bulb temperatures regularly exceed dangerous limits outside that window.

Given the terrible human cost, one can't help but wonder who it's all for. Based on my time there, I honestly don't know. So much of what we saw was empty. One Friday night on The Pearl, almost all of the yachts were shuttered. Shop attendants stood idly in the cool blast of their store entrances. Sparsely populated hotel restaurants turned away customers who failed to meet their dress code. I could count on two hands the number of other pedestrians we passed on the promenade. Luxury, it seemed, was an end in itself, less about surviving this increasingly hostile natural environment than conquering it.

Sea levels may be rising, but we have built islands. It may be getting hotter, but we have built playgrounds of snow.

In the 2030 National Vision for Qatar, one of the stated goals is the "responsible exploitation of oil and gas." That phrase—"responsible exploitation"— acknowledges a) the irresponsibility of oil and gas extraction, and b) their intention to leave none of it in the ground. The royal family is investing heavily in the expansion of renewable sources of energy, but the *Washington Post* reported that those plans are dwarfed by the ones to expand natural gas production by a whopping 43 per cent in the next five years.

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If you visit the Middle East, you must go dune bashing. One afternoon, a Pakistani man named Mohammed picked a few of us up in his SUV. We drove for about an hour on a pristine and mostly empty highway out of the city, passing the vast steampunk city that is the oil and gas refinery. We stopped briefly at a run-down

gas station to let the air out of the tires, a measure

that would keep them safely in the sand as we bar-

relled over dunes several storeys high. Mohammed

conferred with several other drivers in our convoy,

and then we took off, past the road's end and into the

great sandy beyond.

After a white-knuckle ride at speeds and inclinations that fainter hearts might describe as terrifying, we stopped at a camp by the shore of the inland sea. There was tea and soda. Camels sat placidly on the beach. Everything moved a little slower (though that might've been the adrenaline), and there were none of the displays of wealth that I associated with this country. After a while, we walked down by the water to watch the sun disappear through the indigo twilight. Way off in the darkening haze, we could make out the flames burning at the top of the refineries: a beautiful and surreal vision of an unstoppable force. The engines of humanity's demise cannot be turned off.

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