



SIGNS OF WATER: COMMUNITY PERSPECTIVES ON WATER, RESPONSIBILITY, AND HOPE

Edited by Robert Boschman & Sonya L. Jakubec

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On Not Having Invented the Wheel: A Meditation on Invention, Land, and Water

Richard Harrison

1.

This morning I thought, “Read happy. Write sad.”

Today is a day to write. Thales said, “Water is everything.” He meant it, I’m told, in physical terms: the substance of the universe was singular, but I take it here in the sense that we say “love is everything,” in terms of significance: water is life’s greatest need. And it is the one we are destroying, the one whose relationship between give and take in the places where we have lived for millennia has been so distorted by consumption and waste that there is now desert where once there were rivers and lakes, and there is water or rock where there used to be ice. In my own neighbourhood, there was water where there used to be gardens and comfortable homes.

The other day I heard a terrible sentence about climate change, a sentence made more terrible because of how casually it was said: “Without changing our lives or careful geoengineering, we are in big trouble.” It was part of the television news, spoken by someone superficially educated in what they are told to talk about from behind a desk, and then I heard its echo in a talk given by a world-renowned hydrologist, John Pomeroy. He

stated that the Marmot Basin, flooded out because of logging, had been deliberately clear-cut to “engineer the watershed to increase flow.” The lesson is there, yet the industrial world that some of us belong to and others have to live with has only gone farther with the idea of altering the planet to accommodate its own refusal to change.

In the news report, “geoengineering” meant putting reflective crystals into the atmosphere so the earth doesn’t take in as much heat from the sun as it used to, and in that way, things will cool down. Imagine it: changing the entire atmosphere to adjust the temperature of the planet we are overheating from below. I never loved more the blue of that afternoon sky.

2.

One of the things I’ve heard said to prove the inevitability, if not the rightness, of European culture’s displacement of the Indigenous peoples of the Americas is that when the Europeans got here, “the Indians didn’t even have the wheel: that’s how technologically limited they were.”

The invention of the wheel: In my experience of being taught about the rise of humanity (though in those days it was the “rise of Man”), the invention of the wheel was one of those things, along with the discovery of fire, the making of clothes, and the domestication of animals that were the *sine qua non* of being human itself.

But no one addressed the corollary question: If you say that humanity invented the wheel, what are you saying about a people who didn’t? And why didn’t they? I know that a culture’s invention or adoption of any technology is a complicated story, more often than not a cross between a gift and a collision, and the subject of much study and debate. I don’t know if it’s even possible to do the work to answer the question of why something *did not* happen. Or what that work would be. Perhaps the question is best used as a means to think about what has been done, but to think about it in a new and less triumphalist way.

3.

Inventing the wheel isn’t about inventing the wheel, it’s about inventing the axel, and the cart to carry much more than a sled, or a travois, or any person or animal on its own can carry compared to what it can pull. It’s the device that makes the movement of people and material possible

on huge and energy-efficient scales. It would have made migrations easier for everyone. It made Rome possible; the engine, the automobile, the railway. Transoceanic sailing ships big enough to carry sufficient settlers and soldiers to change a continent become possible when steered with the leverage provided by a wheel instead of the hands-on guidance of a rudder. And what is a propeller except a wheel that pushes sideways? Even airplanes: Wilbur and Orville Wright's plane is regarded as the first of its kind not because it was the first airplane to fly, but because it was the first to land intact, the way planes do now, carrying their wheels for thousands of miles across the sky just for that purpose. But the wheel is more than a device. The wheel doesn't just re-invent progress, it invents *for* progress a new way to measure and praise itself: not a better way to do something a person used to do another way, but a way to do something no person could ever do before.

4.

I used to teach composition for Trent University on a reserve in northern Quebec. I taught in the winter, so every couple of weeks, I'd drive from a temperate Ontario through the logging roads between Temiskaming and Val d'Or to meet my students, some of whom took four hour trips on snowmobiles to learn to write in the language of sanctioned Canadian education. This course was at once a testament to the resilience of the people of the reserve and to the condition of Indigenous life in Canada: The people were Algonquin, and at the time they did not officially exist, their tribe being said to have been wiped out. The people I was teaching to speak in one of the official languages of the country were, in that language, extinct. One of the elders told me, "We don't exist? Then they should change the map, and put "Memorial" between "Algonquin" and "Park."

I also learned this from the elder: The Algonquin ideal of a person moving through the forest is that of someone who leaves no trace. The entire way of life outside the boundaries of human habitation was of being in the wider world in such a way that the wider world did not remember you. The example he gave me was that when you harvested mushrooms, no matter how hungry you were, you never took so many that the remainder couldn't grow back to replace what you'd taken. All the technologies of hunting, of harvesting, of building were designed to keep pace with the

environment's ability to replenish what you took and take in what you left behind.

5.

Wheels and axels and carts are not the end of their own invention. They need roads—both the smooth asphalt kind and the kind made of strips of steel cross-braced with forests-worth of wood. The wheel alters the landscape to meet its needs: roads cut in with a permanence that can last for hundreds of years, because roads demand constant attention against natural erosion and decay caused by the thousands, maybe the millions of wheels for which they lay down and serve.

All travelers move in the present, but all roads run from past to future. The road is time expressed in motion: Whenever you stand in the road, you are standing in front of an oncoming car.

The road changes nature, and not just across its own width; the road's power stretches for miles either way, sometimes hundreds of them. Sometimes thousands. The image of passengers shooting buffalo from the moving train isn't only cruelty, and it isn't only congruent with the policy of a government determined to remove Indigenous peoples by destroying their source of food and shelter, it's the railway tracks removing the masses of animals that would get in the way of the progress of the train; those passengers are wheels making room for themselves.

The wheel hungers for space, and it thirsts for oil; oil is what gives the wheel its greatest travelling range and power, and the wheel makes possible oil's extraction at deeper and deeper levels beneath the earth—and at a greater and greater cost to the earth's supply of water. Not only is water used in immense quantities in the extraction of oil itself, the movement of water over both the ground and in the atmosphere is being changed by the wheel's conversion of oil into motion.

One gas tank at a time, wheels are burning the earth, melting the ice and displacing the world's water, burning it and pouring its ashes into the atmosphere, changing the way the weather works without regard to season, and we've seen the signs now three times here, where we thought, I think, we were immune, in the last three years: Canada's biggest flood, Calgary's most devastating snowfall, northern Alberta's most disastrous fire.

6.

Not only did the peoples of Turtle Island not invent the wheel, they seem never to have thought of it. I'm a settler, a child of the wheel, and not claimed enough by any Indigenous community to know enough about their stories, to know whether there's one, somewhere, about someone who "invented the wheel" and saw what it could do but realized what it would do and turned away.

But then another thought occurs to me in imagining such a story: The absence of the wheel is a void, but it's only a void in a world where the wheel is present. How could there be a story warning away from the wheel when there is neither the wheel nor the idea of one to avoid?

And why am I looking for a story at all? Isn't my longing for the existence of an Indigenous story that has more power than any story in my own culture, just me hoping that someone else has done what we could not? I may want to bring my own culture to what I think of as the Indigenous relationship between a people and their stories, but I can't do that by making that relationship the object of a Romance of my own.

The facts I have are these: Europeans had the wheel when they arrived in the New World and the Indigenous peoples here did not. Europeans have been busy making stories that have turned the world from an object of acceptance and awe into an object of investigation and control, and as far as I know, Indigenous stories hold fast to not just living with the mysterious, but preserving it. Stories may not change or limit a people's behaviour. Perhaps they only illustrate it, and we use them when we think that what we want to tell someone is best told through drama.

But now, in the dominant language of the age, and as much at ease with it as a conversation about a parade route, come words about re-engineering the atmosphere with the same purposes in mind that flooded out the Marmot Basin. This time it's the planet's relationship with the sun and the sky in order to cover over the consequences of a world driven by the wheel of progress.

Some things we cannot afford to invent. Either the Indigenous peoples never thought of the wheel, or they thought of it and realized that the best relationship between people and a disc with a hole in the middle was

jewelry, so that to be human was to carry a wheel rather than be carried by it. The question about the absence of the signature device of European technology on Turtle Island isn't, *Why* not? but *How* not? How did you not even want what the wheel would bring? How did you not see the world as having an absence that the wheel would fill?

Thales said, "Water is everything." He meant it in the physical sense: everything is made of a single substance. In my earlier response to that interpretation of his sentence, I took it to be speaking about significance: "Water is everything" is like the sentence, "love is everything," meaning there's more than just that, but nothing more important. But contemplating worlds defined by the wheel and its absence, I think an answer to the question is closer than I thought; it's about the fundamental image of the world. The inventors of the wheel and all who live by it love the world as rock in which the things to count on are the things that last. The human place in this world is to change solid things—to move as wheels do over ground reshaped to their needs. But not to invent the wheel is to love the world as water, where it is patterns in motion, not objects, that stay the same, and the human place is to preserve the permanence that preserves us, to feel the stillness of the land the way we are aware of the movement of water, and move through it, even in dreams, the way a boat moves through its wake.