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Pipelines as Sun Tunnels: Visualizing Alternatives to Carboniferous Capitalism

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Canada is home to the third largest oil deposit in the world, the Alberta Tar Sands (behind only Venezuela and Saudi Arabia). Over the past decade there have been quickening efforts by tar sands producers to build new pipelines to transport more oil to market. The precise reason industry wants new pipelines – allowing for expanded tar sands production – is why they are being so fiercely resisted by indigenous peoples and environmentalists. Growing the tar sands will further pollute and despoil the traditional territories of the Beaver Lake Cree and many other First Nations affected by the intensive mining required to extract tar sands oil. Expanded production will also grow global C02 emissions, making it increasingly challenging for Canada and the global community to arrest dangerous climate change. Finally, new pipeline infrastructure necessarily means more spills of oil onto land and water and the further production of capitalist "sacrifice zones."

The Keystone XL pipeline, proposed to transport tar sands oil across the Canadian border and through the United States was defeated thanks to powerful alliances between indigenous peoples, environmentalists and local communities along the pipeline route who were rightfully worried about the adverse effects of spills. While Donald Trump has signed an executive order that resurrects the project, opposition remains strong and the project's future is uncertain.⁴

The Enbridge Northern Gateway project, another high-profile tar sands pipeline, was recently defeated by similar assemblages of opposition. The proposed project would have sent tar sands oil to Canada's west coast – a distance of approximately 1,200 kilometres – where it would then be loaded onto supertankers bound for Asian markets. Resistances to Keystone XL and Northern Gateway are manifestations of what journalist Naomi Klein calls "blockadia" – a "roving transnational conflict zone that is cropping up with increasing frequency and intensity wherever extractive projects are attempting to dig and drill, whether for open-pit mines, or gas fracking, or tar sands oil pipelines." ⁵

The same day that Canadian Prime Minister Justin Trudeau announced his government's opposition to the Enbridge Northern Gateway project in November 2016, he gave his approval to the Kinder Morgan pipeline expansion. Cut off one tar sands tentacle and another one sprouts. Blockadia has now set its sights on the Kinder Morgan pipeline, which is currently the major flashpoint over tar sands expansion in Canada. The Kinder Morgan project would twin an existing pipeline that runs from the Alberta tar sands to metro Vancouver (a distance of roughly 1,150 kilometres). At full capacity, the expanded pipeline will transport 890,000 barrels of tar sands oil per day.

The Tsleil-Waututh Nation, whose traditional territories are proposed to house the terminus for the pipeline expansion, have consistently warned about the increased chance of catastrophic oil spills if the project advances.⁷ A spill of tar sands oil into Burrard Inlet would make it ever harder for the Tsleil-Waututh to safely access the marine foods that are integral to their culture and economy. At a recent press conference announcing her Nation's legal challenge to the project, Chief Maureen Thomas made her opposition crystal clear: "We do not consent to the Kinder Morgan pipeline project in our territory."

Kinder Morgan and the broader oil industry have lobbied hard for the pipeline, and their efforts have been rewarded with approvals from the governments of Canada and British Columbia. Kinder Morgan, with governmental support, is trying to force a fossil-fuel infrastructure project on indigenous peoples who do not consent. Reflecting on the "extractivist" mindset that has animated both colonialism and carboniferous capitalism, Leanne Betasamosake Simpson notes how "extracting is stealing—it is taking without consent, without thought, care or even knowledge of the impacts that extraction has on the other living things in that environment. That's always been a part of colonialism and conquest." 10

The raw self-interest of companies like Kinder Morgan is resulting in the extraction of more and more fossil fuels, despite the pressing need for energy transition. It is also continuing the march of colonial dispossession. Oil industry self-interest is at odds with the continued livability of traditional indigenous territories and planet earth itself; it is an existential threat for indigenous peoples from Standing Rock to Burrard Inlet, while increasingly threatening species survival *en masse*. The stakes in anti-pipeline resistance could not be higher.

Visualizing Carboniferous Capitalism

In his book, *Lifeblood: Oil, Freedom, and the Forces of Capital*, Matthew T. Huber argues that "the biggest barrier to energy change is not technical, but the cultural and political structures of feeling that have been produced through regimes of energy consumption." Images promoting and images resisting fossil fuels are key in structuring and re-enforcing public feelings. Visual images are sites where struggles are waged between hegemonic and counter-hegemonic forces. The contested domain of resource extraction in contemporary Canada is made visible through many kinds of images — those made by capitalist corporations, indigenous activists, environmental groups, everyday citizens.



Figure 1.
Pipeline Image
http://www.kindermorgan.com/
pages/business/gas pipelines

Figure 1 is featured on the Kinder Morgan website, promoting their vast network of fossil fuel pipelines that crisscross the continent. This is an ambivalent image, both the powers and the vulnerabilities of the fossil-fuel industry are made visible. A cylindrical frame acts as the border of the picture. The point of view places the viewer inside a pipe looking out at a line of unconnected pipes that move from fore and midground and then advances over a hill in the background distance. This is Modernist photography, with emphases on formal qualities of sharp focus, abstraction in form, and crisp lines. It is the sanctioning visuality of capitalist modernity: Order, control, and progress. The image resonates with the accompanying text that promises "exciting growth opportunities that we are executing and pursuing." ¹³

Visual meanings are never stable, however. The advancing pipes in the Kinder Morgan image are not only queuing for growth and progress: The image reveals industry anxiety over its fast receding future. Thanks to growing indigenous-led protest, and concern over oil spills and climate change, fossil fuel companies have had to change their visual strategies. A recent *Globe and Mail* story reports how companies are "attempting to draw focus away from oil production and toward friendlier pictures of the uses of energy in daily life." ¹⁴

The aesthetic of the above pipeline image, like many of the images circulated online by Kinder Morgan, is enabled by the distinct *absence* of fossil fuels. The disconnected pipes render them inoperative. Oil company efforts to visually represent pipelines without fossil fuels helps reveal the very post-carbon world they are seeking to suppress. Kinder Morgan's network of pipelines will need to be absent of fossil fuels to avoid 1.5-degree Celsius warming, and the dangerous climate change it is predicted to bring. Canada, for example, needs to achieve at least 90% decarbonization within the next thirty years for earth's warming to stay within the 1.5-degree limit ¹⁵



Figure 2. Nancy Holt: Sun Tunnels (1973-76). Photographs by authors, 2013.

Visualizing Solar Futures

The visuality of the Kinder Morgan image is weirdly reminiscent of artist Nancy Holt's *Sun Tunnels* (1973-1976) (Figure 2). *Sun Tunnels* is perhaps Holt's best-known work, and it is a central piece in the US Land Art movement that arose in the 1960s and 70s, paralleling the emergence of the contemporary environmental movement. The work is four concrete tunnels laid out in an x shape, permanently installed in the Great Basin Desert, Utah. The artist drilled additional small holes in various sizes along their sides. The visitor can crawl inside, and the pipes become lenses through which to encounter the surrounding sky and ground. Holt was interested in astronomical orientation and the power of the sun: The tunnels form shelter from the heat of the sun in the desert, and they are aligned with sunrise and sunset.

There are connections between Land Artworks like *Sun Tunnels* and ancient works like Stonehenge: In *Sun Tunnels* Holt created a place to bear witness to the cycles of the earth. While the distance of the work from urban centres has meant that photographic representations are key to its circulation as art, people also flock in groups to *Sun Tunnels* at summer solstice to collectively view the orbit of the sun in relation to the stars.¹⁶

Looking through Kinder Morgan's empty pipe we can imagine place-based art installations akin to *Sun Tunnels* being part of the deconstruction of old pipelines. Sections of old pipe that were used to transport ancient sunlight can be creatively repurposed to engage and celebrate the sun in its present glory; they can serve as paens to solar richness and generosity. ¹⁷ These works of public art can culturally support our needed energy transition away from fossil fuels.

Solar-Powered Economies

Solar power will be central to the post-carbon energy mix. The sun offers our planet enough energy in one hour to meet contemporary industrial needs for an entire year. ¹⁸ Harnessing this diffusely distributed energy is technologically challenging, but not insurmountable. It is already

predicted that covering approximately 1% of Texas with solar arrays would generate enough power to provide for current U.S. energy needs.¹⁹

The needed transition to solar power, however, is being stalled by the concentrated power of the fossil fuel industry. US fossil fuel companies, for example, spend approximately \$300 million a year lobbying the government, deploying three lobbyists for each member of Congress. ²⁰ Moreover, the limited governmental support that the solar industry did enjoy during the Obama Presidency is threatened by the climate change denialism of the Trump administration – denialism that has long been funded by the fossil fuel industry. ²¹

The movement to replace fossil fuels with solar power needs to be joined with efforts to shift economies away from the ultimate dirty fuel: self-interested profit maximization. The self-interest of fossil fuel companies is an existential threat to a multitude of species, including our own; it is putting the hospitality of the Holocene at risk. Fossil fuel extraction needs to stop, but so too does the violent and self-interested profit-maximization at the heart of capitalism.

In the same way that present solar power promises to provide for humanity's energy needs, the sun's largesse can also inspire (re)surgent economic forms that are powered by generosity instead of avarice. According to philosopher Georges Bataille: "The sun gives without ever receiving. [Humans] were conscious of this long before astrophysics measured that ceaseless prodigality; they saw it ripen the harvests and they associated its splendor with the act of someone who gives without receiving." An anti-capitalist, Bataille was interested in economic forms that were better rooted in an affirmation of earthly richness (thanks to solar generosity), versus the resentful and impoverished self-seeking that powers capitalism. ²³

One of Bataille's primary examples of alter-economies are the potlatch ceremonies performed by Pacific Northwest indigenous peoples. ²⁴ During potlatch ceremonies, which continue today, families give away accumulated wealth on the occasions of births, deaths, marriages, and other important cultural events. ²⁵ According to Kwakwaka'wakw elder Agnes Alfred: "When one's heart is glad, he gives away gifts... The potlatch was given to us to be our way of expressing joy." ²⁶ Materially, the potlatch promoted well-being and social peace by ensuring that wealth was shared widely in participating communities.

The Tsleil-Waututh Nation also practice the potlatch. Their current leadership in the struggle against the Kinder Morgan pipeline is bringing us closer to a future when the "black snake" of fossil fuel infrastructure can be uprooted and replaced with more sustainable energy systems. ²⁷ Just as importantly, the Tsleil-Waututh's longstanding affirmation of earthly richness, celebrated in the potlatch, is an exemplar of the alter-economics needed to transform the deadly self-seeking at the heart of capitalism.

Readers can contribute to Tsleil-Waututh legal defence against the Kinder Morgan pipeline project by clicking here.

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⁸ Ibid.

¹⁰ Leanne Simpson and Naomi Klein, "Dancing the World in Being: A Conversation with Idle No More's Leanne Simpson," *Yes!* (5 March 2013), http://www.yesmagazine.org/peace-justice/dancing-the-world-into-being-a-conversation-with-idle-no-more-leanne-simpson (accessed 17 March 2017). The term "carboniferous capitalism" belongs to Lewis Mumford, and names the centrality of ancient sunlight, in the form of fossil fuels, for powering industrial capitalism. See *Technics and civilization*, (Chicago: University of Chicago Press, 2010).

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¹² Martin Jay, "Conclusion: A Parting Glance: Empire and Visuality," in Martin Jay and Smathi Ramaswamy eds., *Empires of Vision, A Reader*, (Durham: Duke University Press, 2014).

¹³ http://www.kindermorgan.com/pages/business/gas_pipelines (accessed 17 March, 2017).

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