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Environmental Humanists Respond to the World Scientists' Warning to Humanity

Alberta and the Global Commons: A Climate Change Tragedy

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by Robert Boschman

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Abstract

The Canadian province of Alberta contains the third-largest proven reserve of oil on earth, yet the disconnect between politics and the sciences has never been more severe or as consequential. A right-wing party given to authoritarianism has recently been elected in Alberta that is taking actions to ensure the continued extraction and transport of bitumen from the tar sands in the north. Despite the three recent warnings by scientists (beginning in 2017) concerning global climate change tipping points—and specifically that fossil fuel reserves must remain in the ground—the government of Jason Kenney continues Alberta's carbon-intensive extractive activities while waging destructive political engagement with Canada and the world. This essay documents Alberta in terms of the model provided by classical tragedy and highlights three acts: 1. The Great Flood of 2013; 2. The Great Fire of 2016; and 3. The Orphan Wells of 2020. In the tragic denouement currently underway here, Alberta's reckless actions impact the global commons and affect all earthlings.

Keywords: Alberta, tar sands, oil, tragedy, climate change, commons

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Alberta and the Global Commons: A Climate Tragedy

Robert Boschman

Especially troubling is the current trajectory of potentially catastrophic climate change due to rising GHGs from burning fossil fuels ...¹ —William J. Ripple et al.

> We should leave remaining stocks of fossil fuels in the ground ...² —William J. Ripple et al.

> > This requires an emergency response. —Timothy Lenton et al.

The disconnect between politics and science in the Canadian province of Alberta, home to the third largest proven oil reserve on the planet, has never been as severe and consequential as it is now (Alberta Government 2020). Given the gravity of the written warnings by global scientists beginning in 2017 (Ripple et al. 2017), and given Alberta's long-standing proud identity as a maverick oil producer, the province's 2019 election of a right-wing government determined to extract and transport heavy oil from its northern oil sands means that the global environmental hazards posed by fossil fuel here will go on. The carbon emissions from this place, far higher than any other province, are an uncontested fact (Canada 2020). Yet while Premier Jason Kenney's government insists—even during the COVID-19 crisis—on defunding education, health care, and environmental protections, it is subsidizing oil industries with \$4.7 billion CAD (Notley 2019). At the same time as this government ignores the climate sciences that make plain its bitumen must stay in the ground, it wages a rhetorical war on the Canadian federation and peoples, even invoking separation (Wexit) should its demand

for new pipelines and federal subsidies not be met (Rempel Garner et al. 2020). At a recent press conference, when asked by a mainstream reporter if his government should perhaps consider investment in alternative energy industries, Premier Kenney angrily dismissed what he called "the ideological fantasy of shutting down the modern industrial economy" (Fawcett 2020). Clearly, despite the increasing urgency of leading scientists' statements over the last three years (see this paper's epigraphs), Alberta has dug in. Facts may be stubborn, but Albertans like the premier and the constituency that elected him are too. They have made this oil-laden province a theatre for tragedy in which the collision between facts and politics unfolds while the world watches and suffers the consequences.



FIG. 1. COUPLED TANKERS, CALGARY 2020. PHOTO R. BOSCHMAN

Is it too much to invoke the word *tragedy* here? We see an *agonist*, Alberta—a rich and powerful member of the Canadian federation since the discovery of oil here in 1914—incrementally lose its way, blinded by its own historic successes, and unable to change when change it must. Its *polis* refuses to hear the scientific investigators, who have reached a credible consensus three times in the last three years. With increasing urgency each time, scientists have stated that fossil fuel energy sources and products must be relinquished and replaced. Rather than listen and act in the emergent situation all humans face, the Alberta people have instead elected an extremist to their highest leadership position—premier—because he promises to lead them forward based on the glories of their shared extractive past. The rest of the world recognizes that we cannot burn the fluid taken from this ground; to do so is folly. The new leader instead insists on blaming others and reinvokes Alberta's glorious past. The model of ancient tragedy fits appropriately and well, but let's explore further.

We the audience know where this is going. Educated beneficiaries of oil culture, we have season tickets and are familiar with how tragedy works. In this particular drama, we've seen the signs already, acts played out onstage that have now become pretty desperate. In point of fact, the signs have been many but three in particular stand out: 1) The Flood of 2013; 2) The Fort Mac Fire of 2016; and 3) The Orphan Wells of 2020. These are the preeminent contact points in the drama, at the outset of which the new premier appears onstage to inform his frightened citizens (like Oedipus addressing Thebes) that he will investigate tirelessly, rooting through our shared history and never giving up until finally he can point to the party responsible for this awful state of affairs. He even funds an investigatory body called "The War Room" replete with tribunal powers charged with outing Alberta's enemies, environmentalists all (Graney 2019). So the drama proceeds and the audience reviews what they already know has happened, including the flood, the fire, and the mess of orphaned oil wells. Dramatic irony is now engaged.

As an audience member viewing tragedy, you witness what you already know to be true, see the downfall borne of hubris take place, pity the protagonist who learns too late what you ironically knew before the play began, and experience cathartic relief that it isn't you going down like that. Except here the latter point should be crossed out. As Pierre Daubigny (2018) has demonstrated in Gaia Global Circus, the planetary audience is now part of the play. We are all actors in this existential earth drama. Certainly by the time of Alberta's *denouement*, taking place as I write, the audience members (you, me, us) understand that no one is divorced from these proceedings. There is no catharsis, no sigh of relief, because there is no safe distance from climate change. The traumatizing flood that in one night and one day ruined Alberta's southwestern cities and towns and farms in 2013; the fire that consumed the northern oil sands capital of Fort McMurray three years later; the abandoned wells in their thousands, so beautifully termed orphans by those who study such things, from which all Alberta's wealth has gushed for a century-these three are symbols representing an untenable future for the global commons. The trio of events no longer speaks merely of some provincial jurisdiction located over there. Yes, these are well known public facts that originate in Alberta; but the world is now Alberta, the stakes are about as high as can be, and every earthling has an interest in the outcome.

But let's review these three acts—flood, fire, orphans—once again, this time in the context of the three warnings given by scientists since 2017, the last of which appears almost yesterday in the planet's leading journal, *Nature*. Timothy Lenton et al. (2019) state unequivocally that the emergency is now. It is a rending experience for anyone who can think and feel to encounter the historical events found in Alberta and then read this stark piece. Three historical facts—flood, fire, orphans—meet three emergency warnings. Aeschylus with his three furies couldn't drum up a better scenario, but in this instance it may be a little late to ask that primeval chthonic trio with their horrific faces to go quietly beneath the Alberta Legislature while we Albertans figure this out for ourselves. They aren't in a diplomatic mood and it's not all about Alberta.

2013: The Great Flood

I was in my neighborhood pub in Calgary on the night in late June when the rain began. I remember the darkness and the unrelenting heavy torrent as I set out to walk home with no raincoat or umbrella. Few saw the reality of this event coming, even though weather forecasts had been gloomy. In this city, where the Bow and Elbow Rivers meet, water levels usually peak in mid-June as mountain snow packs melt and flow eastward. But 2013 was totally different (Fig. 2). While the mass of statistics for this event extend beyond the scope of this essay, here are a few facts concerning one of the worst natural disasters in Canadian history and certainly the worst flood Albertans alive then had ever experienced or could recall: more than 125,000 people were evacuated in thirty communities, with five deaths (MNP 2015, 1); almost 1,000 kilometers of roads were closed, including thirty bridges (MNP, 1); and the flood waters damaged or destroyed 14,500 homes, ten health facilities, eighty schools, and 3,000 businesses. The Insurance Bureau of Canada (IBC) deemed it at that time (June 2013) "the most expensive natural disaster the country has ever experienced" (MNP 30) with a price tag of \$6 billion CAD.



FIG. 2. THE ELBOW RIVER FLOOD PLAIN IN 2017, PERMANENTLY ALTERED. PHOTO R. BOSCHMAN

The 2013 flood traumatized Alberta, it is safe to say, and many conversations and debates quickly ensued regarding possible connections to climate change. The chorus of discussions became swiftly heated. On June 23, a mere four days had passed since the disaster when this headline appeared in Canadian Market Review: "Alberta Floods 2013: Zero Connection to 'Climate Change." The anonymous author(s) called it "A crushing blow to the climate change propagandists" simply because the Weather Network had referred to other great floods hitting Alberta in the nineteenth century. To the deniers, climate change couldn't be real because floods had taken place before. Engineering firms, NGOs, government and insurance agencies, and hydrologists, however, began to use the word *climate* in their data-driven, historically-minded reports that followed. What they described here in Alberta was—and is—a climate with a very long history of variability now behaving with demonstrably greater variations, like a gyre altering its speed and size; and in their recommendations they made it clear that Alberta should prepare for more extreme events like the 2013 Flood. Stantec Engineering (n.d.) weighed in with a report. IBC made detailed statements. WaterSmart (2013), a Calgarybased environmental consultant firm, wrote that the "[i]mpacts of a changing climate should be accounted for, including changing precipitation patterns, drought and heat waves" (9).

Five years later, Calgary's newspaper published a retrospective featuring hydrologist John Pomeroy, based in the mountain town of Canmore when the flood occurred: "For Pomeroy and his students, it was to prove a hands-on education none had bargained for, and later a data deluge that led to a \$143-million warning research program, the first of its kind" (Kaufmann 2018). By this point, two years after the fire at Fort McMurray, the upshot for Alberta had become clearer to many: "Alberta's become a Canadian hot spot for these kinds of natural calamities and others, with seven of the country's 10 most expensive episodes plaguing the province" (Kaufmann).

How the electorate would respond—the political leadership they would elect in order to deal with environment and economics—would play a major role in the tragedy now unfolding.

2016: The Great Fire

Called "The Beast," the great fire of 2016 began in the boreal forest of northern Alberta on May 1st and burned across two provinces before finally being killed over a year later in early August 2017. Although fortunately no humans were killed, nearly 90,000 were evacuated from the region around the hub city of Fort McMurray, where entire neighborhoods were consumed (Krugel 2016). The fire jumped the mighty Athabasca River and rampaged through nearly 600,000 hectares of forest (de Souza 2016). Ironically, it virtually brought to a halt oil sands operations, reducing Canada's oil production by 25% at a cost to Alberta of \$70 million CAD per day (Williams 2016). Aside from that, it still constitutes the costliest disaster in Canadian history, with a price tag of just under \$10 billion CAD, and earned the moniker of Canada's top news story for 2016 (Krugel 2016). Under the latter honor, top billing was immediately accorded to questions of causation, correlation, and responsibility. Fighting over these questions continues to this day. Who or what is to blame for "The Beast"?

As with the flood three years earlier, outright denial regarding any linkages to climate change started within days, including this headline in *The Rebel* (2016): "SICK: Eco-Freaks Celebrate Forest Fire—Even Blame Fleeing Residents—While Fort McMurray Burns." In the first days of the fire, images of citizens in their vehicles trying desperately to escape the area on the single highway leading south filled every media platform and garnered worldwide attention. Local and federal politicians tried to outmaneuver each other to be seen in the best possible light concerning cause and correlation. No one wanted to appear to blame the suffering workers of Alberta's oil sands whose homes and livelihoods had turned to ash. Prime Minister Trudeau declined all offers of international assistance (Kohut 2016). Still, as YouTube congealed with home videos showing people driving through an apocalyptic landscape of fire and

smoke, global climate change came up for wide discussion with less caution this time around. Someone even used the word *karma*. Canada's conservative *National Post* retorted with "Fort Mac isn't Karma—Any Blame is Shared by All of Us" (Gerson 2016). On the same day, Elizabeth Kolbert (2016), writing for *The New Yorker*, stated, "Though it's tough to pin any particular disaster on climate change, in the case of Fort McMurray the link is pretty compelling." *Scientific American* weighed in early as well, placing the fire in the context of the planet's circumpolar boreal forest, and quoted Mike Flannigan of the University of Alberta that the disaster was "consistent with what we expect from human-caused climate change affecting our fire regime" (Kahn 2016). Once again, experts consistently stated that pronounced extremes in climatic variability, the hallmarks of change on a planetary scale, were being seen in Alberta.

The response of the Alberta electorate was to usher in the most extreme right-wing majority government in the province's history in the spring of 2019.

2020: The Orphans

Alberta houses tens of thousands of inactive wells of various sizes, the detritus of 400,000 drillings over the last century (Hartshorn, Fionda, and Sheldon 2015). You have to pay attention when reading the government and legal documents on this matter, with particular heed given to the distinction between abandoned and orphan wells (HillNotes 2019). The former are deemed a good thing as these sites have been remediated at the expense of taxpayers; orphans, on the other hand, have lost their parent, the corporate entities that, like Victor Frankenstein, birthed their creations but then opted to abscond in deadbeat fashion, leaving others to deal with the consequences. In a dramatic demonstration of external environmental costs, the expense for rehabilitating orphans is estimated at \$260 billion CAD and will be carried by citizens indefinitely (McIntosh et al. 2018)—as oil companies such as Encana, a giant oil actor created in part by the Alberta government in 1973, move their headquarters to other jurisdictions or else declare bankruptcy (McClelland 2019). The Supreme Court of Canada's January 2019 ruling makes clear that bankrupt oil corporations must give first priority to environmental cleanup, yet we can still expect many inactive wells to remain orphaned (HillNotes 2019).

To keep your eyes on the tragedy, GeoDiscover interactive map details the locations of orphan wells across the province, which from this perspective looks like a field of yesterday's dreams. Each drill site is represented by a black dot (GeoDiscover Alberta n.d.). Cartographically, you see the thousands of dots appear and realize you're witnessing, virtually, the history of oil and gas extraction in Alberta. Zoom in further and each dot becomes a number highlighted in yellow.

Using GeoDiscover, I located well X0000069 in Calgary and went to see it for myself (Fig. 3). It took me less than thirty minutes to reach the site adjacent to the Bow River and within the fenced-off boundaries of a bird sanctuary in Inglewood, the city's oldest neighborhood. A small red pipe, just visible, jutted from the earth perhaps a hundred meters from a heritage settler home called Colonel Walker House. Nearby, dozens of black tanker cars sat coupled one to another on a rail line, and the smell of tar pervaded the area (Fig. 1). The pipe may appear inconspicuous but that doesn't mean it's inconsequential, as the federal Canadian government under Justin Trudeau has applied an initial \$1.7 billion CAD to orphan well remediation (Harris 2020). Canada's central government has instituted a bare-bones strategy to deal with climate change at the same time as it has the unenviable task of negotiating with Alberta, where there is a lot of denial and bile. As Kenney invests billions in big oil and pipeline infrastructure, his nemesis Trudeau funds a nascent cleanup.



FIG. 3. ORPHAN WELL X0000069, MAY 2020. PHOTO R. BOSCHMAN

Denouement

We come to the resolution, happening day-by-day in 2020. Here, in a province living in the past and nursing grievance like the unnaturally long-living Gollum looking for his lost ring—or, closer to formal tragedy, Macbeth rooting out his enemies—the Kenney

government has awarded its ministers the powers to create laws unilaterally and without consultation. This is called Bill 10 (Carpay 2020). As I write, former environmental protections concerning extractive industries, not only oil and gas but coal and open-pit mining, are being nullified (Fletcher 2020). Scientists like John Pomeroy have been ignored, their warnings and recommendations cast aside; and extraordinary Albertans such as Aritha van Herk, the author of *Judith* and *Mavericks*, the latter a history of the province's intrepid achievements in energy extraction over the last century, have begun to speak up regarding the tragic direction taken by the Kenney government. Just before the pandemic broke out in Calgary, van Herk (2020) wrote that perhaps the maverick myth should no longer apply to this place: "We're suffering a case of protracted road rage worse than the flu, travelling with our elbows out, careless of penalties. And the streak of indignation fueling that aggression isn't pretty." It's worse than not pretty.

The transition to conservative authoritarian government *is* Alberta's response to the emergency requirements of the planetary commons, and as such it is tragic. It will unleash great suffering and the keen knowledge that accompanies such pain after it is too late. To make this very plain, four Conservative members of parliament from Alberta electoral districts have created *The Buffalo Declaration*, which states: "No longer can the fate of our people be determined by a class of politicians, bureaucrats, lobbyists, academics, journalists, or business leaders who have no real connection to, or understanding of, our land or our culture" (Rempel Garner et al. 2020). The situation here-and-now is a tragedy not only for the province itself and for Canada, but for the world. While Alberta is far from alone in its sullen politics, it bears repeating that a crucial percentage of the earth's fossil fuel deposits exists here—and time is running out.



FIG. 4. CALGARY MURAL DEPICTING ALBERTA'S EXTRACTIVE PAST. PHOTO R. BOSCHMAN

This government knows full well that to assent to the three warnings critically rendered by scientists means acknowledging and acting on the need for radical change, which it chooses to construe as "ideological fantasy." It's a choice—and choice is central to classical tragedy. Mavericks may be capable of change, but the metonym, as van Herk (2020) points out, refers to a "people who are risk-taking, forward-looking, and creative. It originates from Texas rancher Samuel Maverick, who refused to brand his cattle." As I write these words, Fort McMurray, home to the vaunted Alberta oil sands, is flooding. Some whose homes burned to the ground in 2016 are now losing everything again, only this time to water. Three years from now, when the citizens of Alberta vote again, on the planet's scale it could very well be too late for a possible change in government to mean much.

Notes

¹ See Ripple et al. 2017. ² See Ripple et al. 2020.

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