

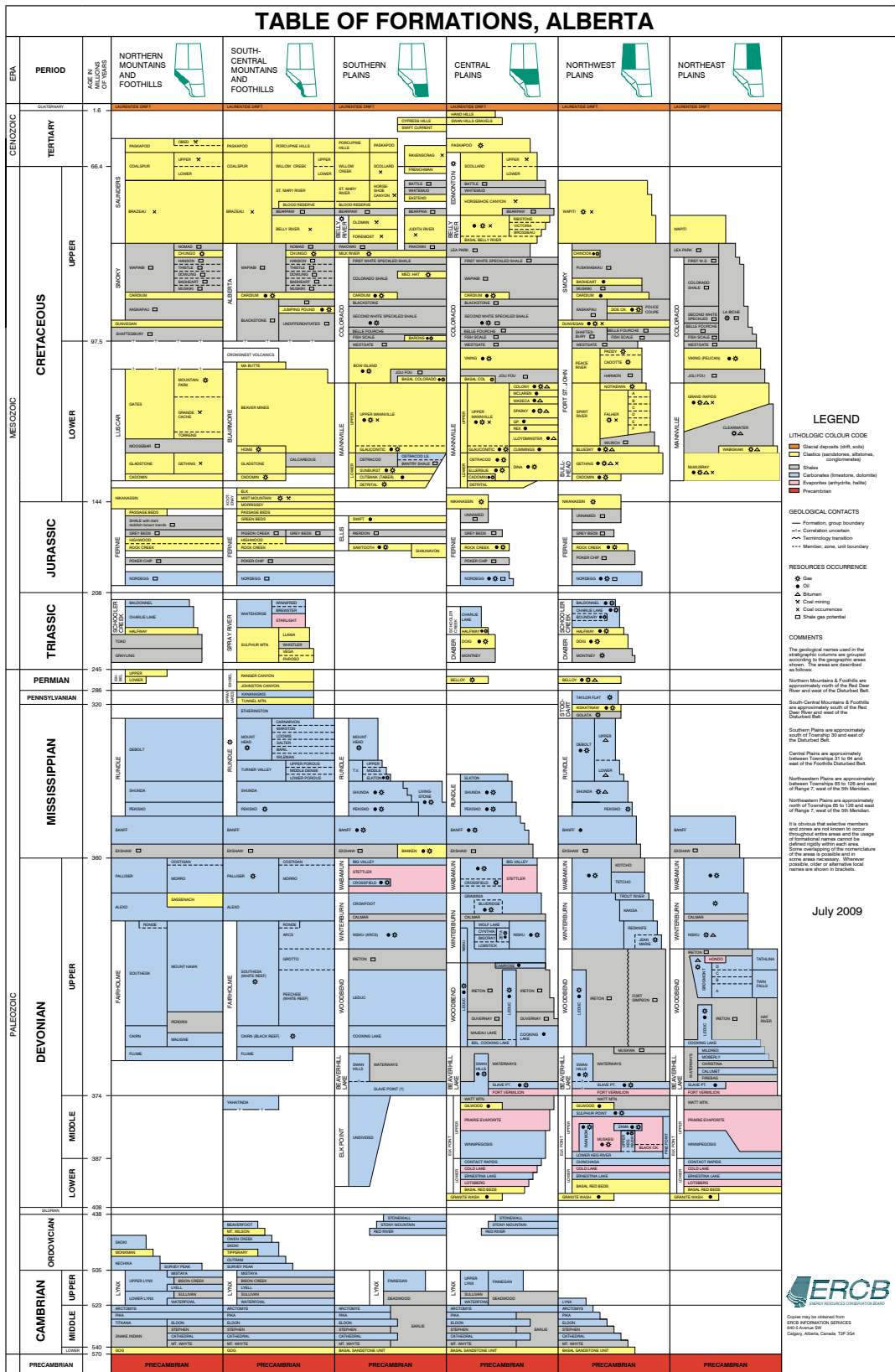
My work has focused, in recent years, on oil and water as the two primordial liquids that form the undercurrents of all narrations as they activate profound changes in the planetary ecology. The current transformation of the physicality of the planet and its climate and biosphere is considered so severe that scientists have begun to use the term Anthropocene to mark a new era where the Earth as a whole depends on what humans do to it. The use of fossil energy has turned humans into a geophysical force.

The Anthropocene replaces the Holocene that coincides with the Bronze Age and Iron Age which defined human presence on the planet in terms of technological progress and the ability to make weapons. Now that humans are technically in control of the landscapes, energies and resources, we realize that we are less in command than ever. We are more like the blind passenger on a ship whose captain we fancy to be. The forceful human-centric approach to nature has been hugely damaging and is no longer appropriate given the unpredictable and non-linear climate change we are facing in the future. There is no control, there is only the fluid circulation between what humans do and how nature responds. But the response is not always local. Through the intervention in the fragile local biosphere or the marine ecosystem, an unbalance is happening way over there, at a long distance from the site inflicted. People are baffled on local levels by disruptions created by far away places. We live in a new reality but cannot represent this experience to ourselves. The time asks for a fundamental recalibration of our sense of order and disorder, of cause and temporalities.

In *Deep Weather* I draw the connection between the relentless reach for fossil resources with their toxic impact on the climate, and the consequences this has for indigenous populations in remote parts of the world. The first part of the video comments on the huge open pit extraction zone for tar sands in the midst of the vast boreal forests of Northern Canada. The biodiversity of the boreal wood belt is of global significance. All the more as after the oil peak, ever dirtier, remote and deeper layers of carbon resources are being accessed. Aerial recording of the devastated crust in the state of Alberta opens the view into the dark lubricant geology. The tar is captured within the sand grains, held inside by a coat of clay - and the only way to get it out is by adding huge amounts of fresh water from the Athabasca river and to boil the black soup until the oily substance bubbles over the rim of the cauldrons. The waste from this toxic process gets collected in tailing lakes spreading over large areas that used to be covered by ancient spruce forest and spongy wet moss. The horizon is stained and the rain drives the contaminated air into the soil and water. Aggressive mining, steam processing and

the trucking around of the tar sands are impinging on environmental and human rights as they devastate the living space and hunting territories of First Nation people. The Athabasca river flows north into the Arctic Ocean and interlinks with its ecology. It is the backbone of human development in Northern Alberta. In the last few years, the water level of the river is sinking to the point where far away settlements cannot be reached by boat anymore. Remote undeveloped areas in the heart of the boreal forest, which were accessible to native hunters only, are successively unlocked for oil extraction. The forest is the commons, it's where First Nations make their meat provision for the winter. The erasure of common land is a distinct feature of the Anthropocene. With the transformation of the political ecology, land was turned into a commodity. Outsourcing extraction activities far into pristine areas entails the building of roads, settlements, traffic and communication lines to this remote place and opens the development of everything inbetween. All this impinges on the living and migrating space of many species, including humans.

But for aboriginal folks, practical inconvenience is not everything. Local mythologies and divinities of the biosphere animate the landscape. The landscape contains both worlds, it is a psycho-social resource. Hence the noise, subterranean vibrations and the invisible toxic juices seeping into lakes and rivers affect not only the biological but also the mental ecology of contamination, forming a hybridized locality. The disaster is under the ground, entering every living thing and transforming the genetic future. There is an incongruence of temporalities that poses problems now: Indigenous people think in long term future, several generations in the future, whereas oil companies think in 50 years, and politicians in 5 year terms, in electoral cycles.



Every major globally operating oil company is present in Alberta and has licensed patches. The entire state is partitioned and development has begun simultaneously in multiple sites. It is the largest capital project, the most capital-intensive development in the world. It reaches

into deep geological time, down to Cambrian layers of planet formation. Companies can acquire the license for any of these layers assumed to contain carbon deposits. A particular lot of land on the surface may have numerous owners in deeper layers, sometimes sharing the same drill holes.

The Alberta oil enterprise has effects beyond their local devastation of large chunks of boreal wood. There is a doubling effect. The boreal wood belt is of vital importance for the carbon absorption of the emissions generated by the global hydrocarbon society as a whole. At the same time, the dirty fuel that is being extracted from tar sands will be a lot heavier in carbon emission than anything we have consumed so far. The interventions made on a local level impact on the entire planetary life. They form legacies for the next 100'000 years, leaving residues that are matter out of time, for which we lack the proper cognizance and timeframe to comprehend.

This awareness of the huge gap in time and space that exists between cause and effect always brings us back to the question of accountability, no? It is worth noting that since the early 90ies, corporate power has shifted from the boards of directors to the shareholders, without implying additional responsibilities. The effect that this shift in corporate power structures has on environmental deterioration has been pointed out in a recent study published in a scientific journal (Proceedings of the National Academy of Sciences). There is fundamental rigidity, known as lock-in, within the energy economy that favors the use of fossil fuels despite their large environmental and social costs. Heavy investments in fossil fuels have led to big profits for shareholders, which in turn leads to greater investments in technologies that have proven to be profitable. While, in parallel, the chances of success for sustainable alternatives diminish. The authors identify that this rigidity of the existing energy economy could be considerably reduced by introducing new rules that hold shareholders of companies liable for the damages caused by the companies they own. Allocating the liability between the company and its shareholders could spur a shift toward a sustainable energy system.

In the European context, the issue of liability dates back to the European Coal and Steel Union, or the Montanunion, as it was called, which was the first contract among European states, signed 1951 in Paris, to lay the foundation for the European Union. It runs simultaneous to the Atomic Energy Union contract. As a result of WW2 it was understood that coal and steel industries, which are essential to conduct war, should no longer be in the

hands of a state, but should be mutualized and in the hands of various actors and owners. The United States was very much in favor of the idea to privatize the access to these resources, as it incorporated elements of liberal capitalism. A particular juridical form of company was created that would limit liability towards the state and favor the building of cartels – GmbH, Company with limited liability, or Ltd. The corporate model as we know it today goes back to this moment of regulating the extraction of commodities that are directly linked to the war industry and its power engine. There are juridical contracts that regulate the violence among humans but there is no contract that regulates the violence inflicted on nature. Michel Serres in “The Natural Contract” pleads for a legally binding contract between humans and non-humans, between Humanity and Nature. And it’s a peace contract.

The second part of *Deep Weather* then turns to the consequences of the melting Himalayan ice fields, rising planetary sea levels, geo-thermal disasters and extreme weather events that increasingly define the living condition in Bangladesh. These changes impose an amphibian lifestyle on the Bangladeshi population, they have begun to devise convertible houses, floating agriculture and cruising schools. Climate change, exasperated by projects such as the Canadian tar sands, turns exposed areas unlivable. In previous glacial eras, species could migrate to other, more agreeable zones. But this is no longer possible now, every livable space is practically occupied by other people or serves as resource to feed them, every square km has its owner, its designated purpose. The tracks of migration are crossed by dense infrastructures, hindering the passage through territories.

The video documents the gigantic community effort in building protective mud embankments. Hands on work by thousands without any mechanic help is what climate change will mean for people in the Deltas of the global south and elsewhere. These are the measures taken by populations who progressively have to live on water when large parts of Bangladesh will be submerged. The scenery of collective human action stands in harsh contrast to the one in Alberta where expensive large-scale machinery replaces human labor. Fossil fuel replaced slave labor, they say. But basically it was simply transferred elsewhere, where much unpaid labor is necessary to survive. For different purposes there is massive landscaping going on on a planetary scale. There is much knowledge produced in understanding how organisms and topographies interweave to form these landscapes. But knowledge should no longer be considered the privileged access to reality. As various speculative ontologies suggest now, it is an illusion to think that we can have knowledge OF the world from a separate objective position, it always knowing as part of being, the discursive-material dynamic is what

constitutes reality. Otherwise, we fool ourselves into believing that we have some sort of control over the forces that are unleashed in our biosphere. There is an epistemic deficit of what lies ahead of us. It's highly speculative. Our knowledge-based and aesthetic functioning should be integrated into the metabolic streams that steer the whole Earth. Artistic practice is not standing apart, at a distance, representing. It's a full engagement in the material-discursive processes that shape the earth system and our reality. The very least it involves thinking of how content makes its way into the world and back in the form of material relations. To think from in the midst, not from outside.