(Dis)Entangle: Conceptualisations of Nature, Fossil-Fuelled Progress, and the Self

A collaborative artistic-research project by Tatjana Söding

Status Quo

Tatjana:
Searching for transformative and regenerative repair as part of the climate emergency is a moral imperative that begins with an acknowledgement of what has already been destroyed; but also, of what—in the present time—must be deconstructed. In other words, to begin to envision repair we must first look at what needs to be destroyed.

All too often, the facts we hear about climate breakdown are presented to us as if they are single events. We detach ourselves from news stories because we don't emotionally connect to them. This is, in part, also because of the technocratic language that is so commonly used to describe the loss of livelihoods. The flooding of someone's living room, memories drowning in muddy water, futures sucked into the powerful stream of destruction. A coal excavator penetrating layers of soil, rich with history and biodiversity, extracting what is deemed useful and piling what's outsourced.

I would like to open this talk with an experience-experiment.

Close your eyes and picture the many environments in which you have lived,
which have shaped your memories and emotions,
which are of importance to you.

Settle on an environment that you feel emotionally connected to. Focus on this special place while listening to the 2022 United Nation's definition of the environmental crisis we are facing.

Allow yourself to feel the emotional impact these words have onto you, as you bring to life the image of the environment that is dear to you:

Voice One:
"Nearly all land areas are seeing more hot days and heat waves; 2022 was the hottest year on record. Higher temperatures increase heat-related illnesses and can make it more difficult to work and move around. Wildfires start more easily and spread more rapidly when conditions are hotter.

Changes in temperature cause changes in rainfall. This results in more severe and frequent storms. They cause flooding and landslides, destroying homes and communities, and costing billions of pounds.

Water is becoming scarcer in more regions. Droughts can stir destructive sand and dust storms that can move billions of tons of sand across continents. Deserts are expanding, reducing land for growing food. Many people now face the threat of not having enough water on a regular basis.

The ocean soaks up most of the heat from global warming. This melts ice sheets and raises sea levels, threatening coastal and island communities. The ocean also absorbs carbon dioxide, keeping it from the atmosphere. More carbon dioxide makes the ocean more acidic, which endangers marine life.

Climate change poses risks to the survival of species on land and in the ocean. These risks increase as temperatures climb. Forest fires, extreme weather and invasive pests and diseases are among many threats. Some species will be able to relocate and survive, but others will not.

Changes in climate and increases in extreme weather events are among the reasons behind a global rise in hunger and poor nutrition. Fisheries crops, and livestock may be destroyed or become less productive. Heat stress can diminish water and grasslands for grazing.

> Changing weather patterns are expanding diseases such as malaria. Extreme weather events increase disease and death and make it difficult for health care systems to keep up. Other risks to health include increased hunger and poor nutrition in places where people cannot grow or find sufficient food.
>
> Climate change increases the factors that put and keep people in poverty. Floods may sweep away urban slums, destroying homes and livelihoods. Heat can make it difficult to work in outdoor jobs. Weather-related disasters displace 23 million people a year, leaving many more vulnerable to poverty."
>
> ***(United Nations, 2022)***

In this terrifying description of what is currently taking place in our homes, habitats and ecosystems, the United Nations omits the intersectional impacts the climate emergency has for Women, People of Color, Differently Abled Bodies, and Queers.

The climate emergency, now and in the future, affects differentially positioned people in utterly different ways. It is those who have been oppressed by a system responsible for the climate crisis that are to suffer from it most.

This unequal effect, is not, as common wisdom has it, because the Global North is prone to experiencing less extreme weather events. Rather, it is because of a development based on the exploitation of labour, land, and humans, that societies in the Global North can equip themselves to fend off climate disasters and have more means to alleviate the harms cause by such disasters – for the time being, at least.

This unevenly distributed impact is also because countries in the Global North dare to continuously go down a road of destruction, a reliance on technology, a control and detachment from nature, and othering of human beings and non-human actors alike.

This approach permits the feeling of safety in a world of unforeseeable change. It is a small tunnel—cool, light, and protected, underground—above which fires are raging, hot, with relentless power of ultimate destruction.

But let's not be reductionist here. It is not solely the fires that are burning down this planet, or the floods that are making it drown. Neither is it only the Co2 in the atmosphere, which is at the root of the climatic destruction we are witnessing.

In the first instance, it is other greenhouse gases, such as methane and nitrous oxide, land-grabs, deforestation, water pollution, ocean acidification, soil-depletion, the sixth mass extinction, that has our planet bear ever less animals, bodies ravaged by work in fossil-fuelled factories, minds swamped with ideals core to the capitalist system.

As the natural disasters increase, so too have environmental and development sectors to "resolve" climate emergency. The talk of sustainability is all over town. The word sustainability has its roots in the Latin word *sustinere*, which means "to hold".

As our collective sense of environmental consequence is growing, we are seeking ways of holding what is still there. But what is it really, that will be held and sustained and what will be let go?
Will capitalism be continued in the wake of a crisis of under-reproducing nature?
Will various and diverse societies of indigenous people win the world over?
Will the Eastern Lowland Gorilla, the Hawksbill Turtle, or the Javan Rhino remain?

Who gets to answer these questions?
At present, it is the fossil lobbies, who are holding individual desires, state apparatuses and economic processes in their tight grip.

Should the answers come from so-called world-leaders, all too often interwoven with the industrial sector? Perhaps, it will be the working class, social movements, women, People of Colour, differently abled, Queers? You and me?

Who gets to answer what shall be held and sustained?
What needs to be dismantled and let go of.
What needs to be destroyed so that we can begin to repair.

This talk looks back, historically, in order to begin to approach these questions.

To look back, first we must understand how dominant ideologies and ontologies relate to nature to understand what is at the core of the mainstream desire to "sustain" something.

We will unpack how various histories, bodies and environments have been disconnected from one another and how linear storylines have been forced onto us.

When returning to the stories of history, we need to re-entangle these narratives to understand what really set forth this polycrisis. As World Historian and Ecologist, Jason W. Moore writes:

> **Voice Two:**
> "Class, race, gender, sexuality, nation—and much, much more—can be understood in terms of their relationship within the whole of nature, and how that nature has been radically remade over the past five centuries."
>
> ***(Moore, 2016)***

At the same time, we want to disentangle our minds from these hegemonic ideas; disentangle the individual parts that have been subjugated to the idea of continuous economic growth, nature domination, organic communities, nation states, and heteronormative productivity. Only then can we resurrect lost ontologies and practices and envision new ways of entangling with natures, environments, and communities, to find liberation and transformative potential for reparation.

What follows is nowhere near to a complete, coherent story of the past.

But by centring environmental historians, anthropologists, queer theorists and indigenous activists and academics alike, I wish to shed light on what has become known to us as a benign story of the discovery of coal.

In listening to and working with various and diverse voices and positions I will aim to retell an expanded history of the discovery of coal. Touching on deteriorating biodiversity, intersectional inequality and on plutocracy and technocracy.

Time Travel

Anthropocentric climate change, the change of climatic conditions due to human impact, is a concept known to many of us.

The term first arose as a geological exercise to track the so-called 'golden-spikes' in the stratigraphic record. The spike will mark the geological and historical point in human history at which we have left the Holocene and entered the Anthropocene. Residual bones of farmed chickens and levels of nuclear pollution are the two favourite proposals of many where to place the date-stamp.

The term of the Anthropocene was crucial to a public awareness of the causes and effects of climate emergency. But as Jason Moore writes:

> **Voice Two:**

"These are questions of cause and effect that the Anthropocene can pose, but cannot answer. Why? Because the perspective retains—even as it seeks to transcend—the binary of Humanity and Nature. It is a binary seemingly inscribed in the intellectual DNA of the Anthropocene project. But such questions unsettle the idea of Nature and Humanity in the uppercase: ecologies without humans, and human relations without ecologies. Far from merely a philosophical difference, the uppercase Nature and Humanity that dominate Anthropocene stories do something unintentional—but deeply violent. For the story of Humanity and Nature conceals a dirty secret of modern world history. That secret is how capitalism was built on excluding most humans from Humanity— indigenous peoples, enslaved Africans, nearly all women, and even many white-skinned men (Slavs, Jews, the Irish). From the perspective of imperial administrators, merchants, planters, and conquistadores, these humans were not Human at all. They were regarded as part of Nature, along with trees and soils and rivers—and treated accordingly. To register the bloody history of this Human/Nature binary is a moral protest. It is also an analytical protest. For capitalism does not thrive on violence and inequality alone. It is a prodigiously creative and productive system too—at least until recently. The symbolic, material, and bodily violence of this audacious separation—Humanity and Nature—performed a special kind of "work" for the modern world. Backed by imperial power and capitalist rationality, it mobilized the unpaid work and energy of humans— especially women, especially the enslaved—in service to transforming landscapes with a singular purpose: the endless accumulation of capital."

(Moore, 2016)

Rather than understanding nature as a separate entity, going back in history requires one not to ask *when* did nature start being degraded but how did *humans engage in environment-making that has such utterly destructive consequences?*

To answer this question, Moore coined the word "Capitalocene" as a replacement for the term the Anthropocene. To him, it is not the "Age of Man" that is at the root cause of the climate emergency. It is the Age of Capital.

Voice Two:

"The Capitalocene argument says three things that the Anthropocene perspective does not—and cannot. First, it insists that the history of capitalism is a relation of capital, power, and nature as an organic whole. It is world-ecological (Moore 2015a). It is a multispecies affair. Capitalism is neither a purely economic nor social system, but "a historically situated complex of metabolisms and assemblages" (Haraway et al. 2015, 21). Second, the history of capitalism cannot be reduced to the burning of fossil fuels, in England or anywhere else. It is a history of the relations of power and re/production premised on the cash nexus. Those relations enfolded coal and other energy sources from the sixteenth century; they allowed for successive waves of global conquest and the worldwide appropriations of Cheap Nature. Third, the Capitalocene argument challenges the Eurocentric—and frankly false— view of capitalism as emerging in England during the eighteenth century."

(Moore, 2016)

Feminist Ecologists have done tremendous work to understand how the Nature/Human Dualism has given rise to what Moore calls the Capitalocene. Let's hear from historian Carolyn Merchant, who in 1980 wrote one of the first books to explore the Scientific Revolution through the lens of feminism and ecology:

Voice Three:

"In the 1960s, the Native-American became a symbol in the ecology movement's search for alternatives to Western exploitative attitudes. The Indian animistic belief-system and reverence for the earth as a mother were contrasted with the Judeo-Christian heritage of dominion over nature and with capitalist practices resulting in the exploitation of resources available for any person's use. But as will be seen, European culture was more complex and varied than this judgment allows. It ignores the Renaissance philosophy of the nurturing earth as well as those philosophies and social movements resistant to mainstream economic change. The

Renaissance view of nature and society was based on the organic analogy between the human body, or microcosm, and the larger world, or macrocosm. But between the sixteenth and seventeenth centuries the image of an organic cosmos with a living female earth at its centre gave way to a mechanistic world view in which nature was reconstructed as dead and passive, to be dominated and controlled by humans.

The world we have lost was organic. From the obscure origins of our species, human beings have lived in daily, immediate, organic relation with the natural order for their sustenance. In 1500, the daily interaction with nature was still structured for most Europeans, as it was for other peoples, by close-knit, cooperative, organic communities. Thus, it is not surprising that for sixteenth-century Europeans the root metaphor binding together the self; society, and the cosmos was that of an organism. As a projection of the way people experienced daily life, organismic theory emphasized interdependence among the parts of the human body, subordination of individual to communal purposes in family, community, and state, and vital life permeating the cosmos to the lowliest stone.

Central to the organic theory was the identification of nature, especially the earth, with a nurturing mother: a kindly beneficent female who provided for the needs of mankind in an ordered, planned universe. But another opposing image of nature as female was also prevalent: wild and uncontrollable nature that could render violence, storms, droughts, and general chaos. Both were identified with the female sex and were projections of human perceptions onto the external world. The metaphor of the earth as a nurturing mother was gradually to vanish as a dominant image as the Scientific Revolution proceeded to mechanize and to rationalize the world view. The second image, nature as disorder, called forth an important modern idea, that of power over nature. Two new ideas, those of mechanism and of the domination and mastery of nature, became core concepts of the modern world. An organically oriented mentality in which female principles played an important role was undermined and replaced by a mechanically oriented mentality that either eliminated or used female principles in an exploitative manner. As Western culture became increasingly mechanized in the 1600s, the female earth and virgin earth spirit were subdued by the machine.

The image of the earth as a living organism and nurturing mother had served as a cultural constraint restricting the actions of human beings. One does not readily slay a mother, dig into her entrails for gold or mutilate her body, although commercial mining would soon require that. As long as the earth was considered to be alive and sensitive, it could be considered a breach of human ethical behaviour to carry out destructive acts against it. For most traditional cultures, minerals and metals ripened in the uterus of the Earth Mother, mines were compared to her vagina, and metallurgy was the human hastening of the birth of the living metal in the artificial womb of the furnace-an abortion of the metal's natural growth cycle before its time. Miners offered propitiation to the deities of the soil and subterranean world, performed ceremonial sacrifices, and observed strict cleanliness, sexual abstinence, and fasting before violating the sacredness of the living earth by sinking a mine. Smiths assumed an awesome responsibility in precipitating the metal's birth through smelting, fusing, and beating it with hammer and anvil; they were often accorded the status of shaman in tribal rituals and their tools were thought to hold special powers.

The change in controlling imagery, was directly related to changes in human attitudes and behaviour toward the earth. Whereas the nurturing earth image can be viewed as a cultural constraint restricting the types of socially and morally sanctioned human actions allowable with respect to the earth, the new images of mastery and domination functioned as cultural sanctions for the denudation of nature. Society needed these new images as it continued the processes of commercialism and industrialization, which depended on activities directly altering the earth-mining, drainage, deforestation, and asserting (grubbing up stumps to clear fields). The new activities utilized new technologies-lift and force pumps, cranes, windmills, geared wheels, flap valves, chains, pistons, treadmills, under- and overshot watermills, fulling mills, flywheels, bellows, excavators, bucket chains, rollers, geared and wheeled bridges, cranks,

elaborate block and tackle systems, worm, spur, crown, and lantern gears, cams and eccentrics, ratchets, wrenches, presses, and screws in magnificent variation and combination."

(Merchant, 1990)

An increasingly commercial society found its justification for industrialisation in the so-called Scientific Revolution, that invented the mechanical ontology based on the Cartesian Dualism which has become all too familiar to us today. As philosopher and ecofeminist, Val Plumwood describes:

Voice Four:

"This dualism owes its name to Rene Descartes's famous argument about the separation of mind and body. Descartes surely does not deserve all blame. He personified a much broader scientific and especially philosophical movement that encouraged a strict and total division not only between mental and bodily activity, but between mind and nature and between human and animal. As mind becomes pure thought—pure res cogitans or thinking substance, mental, incorporeal, without location, bodiless—body as its dualized other becomes pure matter, pure res extensa, materiality as lac k. As mind and nature become substances utterly different in kind and mutually exclusive, the dualist division of realms is accomplished, and the possibility of continuity is destroyed from both ends. The intentional, psychological level of description is thus stripped from the body and strictly isolated in a separate mechanism of the mind. The body, deprived of such a level of description and hence of any capacity for agency, becomes an empty mechanism which has no agency or intentionality within itself, but is driven from outside by the mind. The body and nature become the dualised other of the mind."

(Plumwood 1993, 115)

I want to introduce three decisive moments in which the dualistic view on nature and people gained hegemonic status and thus supported the rise of fossil power, the exploitation of peoples and the destruction of natures. A hegemonic status that is so strengthened today that the air we breathe is saturated with greenhouse gases, the cloths we wear are oil in a different aggregate state, and the food we eat is produced by fossil-fuelled machinery. On January 5th, 1769, James Watts was granted a patent for what he would be remembered for until now: the steam engine. This is a mechanic object that is often described as the invention of one man alone, understood as a machine efficient enough to inaugurate the Industrial Revolution, as though it were the only factor that led to the rise of factories, capital labor division, and environmental destruction. But As Alf Hornborg writes:

Voice Five:

"The prerequisites for the British shift to steam power were not merely technological, but fundamentally social. They were a response to the world market demand for great volumes of inexpensive cotton cloth. Much of this demand came from slave traders in West Africa and slave owners in America, and these very slaves supplied the British cotton textile industry with inexpensive raw material. The steam engine, in other words, was made possible not only by James Watt's engineering, but by the eighteenth-century world-system in which capital accumulation in Britain was based on African slave labour and depopulated American land.

At the core of the Industrial Revolution was the substitution of human and animal muscle power, as well as water and wind power, with fossil energy, or—if you wish—the imperative to increase productivity per hour of human labour. Steam engines and steam-driven factories inaugurated this development toward what we now know as high-tech society and a continuous aspiration for economic growth.

Even if we disregard the vast quantities of labour time invested in the British colonies to subsidize Britain's economic growth during the nineteenth century, we can join Pomeranz (2000) in calculating the equally vast land areas claimed for the British economy. Already in the mid-eighteenth century, the annual British import of Swedish iron represented around a million hectares of Swedish forest (Warlenius 2011: 68). To substitute for the food energy in sugar consumed in England in 1831, the country would have needed to grow domestic food crops on an additional million hectares of farmland. To replace the cotton fibre imported in

1830 with domestic wool, England would have required an additional 9.3 million hectares of pasture and hay. To replace the annual import of Baltic and American timber in the early nineteenth century would have required almost 0.65 million hectares of British woodland, and to substitute firewood for the annual consumption of coal around 1815, another 6 million hectares of forest. During the course of the nineteenth century (from 1815 to 1900), Pomeranz adds, England's imports of sugar increased elevenfold, its coal output fourteenfold, and its cotton imports twentyfold. In the year 1900, these three commodities alone (sugar, coal, and cotton) thus implied an ecological relief amounting to over 200 million hectares of ecoproductive land. Rolf Peter Sieferle (2001 [1982]: 104) calculates the wood equivalent of British coal extraction in the year 1900 as in itself over 225 million hectares (2,252,000 km2) of woodland. If we include, in addition to sugar and cotton, other land-intensive imports such as grains, beef, timber, and a variety of colonial crops such as coffee, tea, and tobacco, it becomes apparent that this ecological relief surpassed the total land mass of Great Britain (less than 24 million hectares) by at least an entire order of magnitude.

The extraction and transport of these and other imports to England was to a large extent financed with revenue from textile exports. Ultimately, in other words, the point with all the investments in intensified mass production was that it granted England access to increasing volumes of resources beyond its own land surface. This reinterpretation of the Industrial Revolution in terms of global transfers of resources has not taken into account the immense amounts of labour invested in colonial plantations, mines, and forests, or the vast land areas which provided all these laborers with food. In acknowledging the requisite appropriation of labour and land in the periphery, this perspective on industrialization finally leads us to recognize that technology may not primarily be a matter of saving time and space, but of redistributing it in global society (Hornborg 2006)."

(Hornborg, 2016)

The invention of the steam engine was not the pre-requisite of the industrial revolution, of fossil capitalism. It was the dehumanisation of people and the exploitation of land, rendered possible through the Cartesian Dualism. Only this ontology could give rise to inventions such as the steam engine and served its energy converting ability with human labour and natural fuel. But this is not where our story stops, just yet. The quest of subsumption went on. As human ecologist Andreas Malm writes:

Voice Six:

"In the second quarter of the nineteenth century, the British Empire deployed steamboats to extend its control over territories and accelerate its appropriation of resources from around the world. They required coal. Agents of the imperial machine—officers, engineers, merchants—were instructed to keep their eyes open for coal seams wherever they sat foot, such as on Borneo, where a missionary happened upon some outcroppings in 1837. His discovery touched off a rush for the black gold on that far-flung island, positioned right on the highway between India and China, potentially a perfect fuel depot for the steamboats now frequenting their shores. The most exciting reserves were located on a small island called Labuan. Off the northern tip of Borneo, a most suitable port of call, Labuan was covered by luxuriant tropical forests, and right in their midst, thick veins of coal protruded. The lieutenant in the Royal Navy leading the expedition later reconstructed the scene in a lithograph. It shows two puny white men pointing at a seam of coal standing out between high trees and a stream of water. The man in the right corner is dressed in the uniform of a Royal Navy officer: he represents the military "power by which the Empire has landed in this jungle. With a wondrously erect posture, his eyes turned towards the officer, the other man gesticulates wildly and enthusiastically at the finding; most likely, he envisions the coal as a source of fortune, a material his business can extract and sell to steamboats, not the least those operated by the Navy. The scene exudes excitement, a sense of mastery and proprietary right. It registers the moment when foreign shores are integrated into the fossil economy – a distinctly British invention, most simply defined as an economy of self-sustaining growth predicated on the growing consumption of fossil fuels and therefore generating a sustained growth in CO2 emissions. The coal of Labuan had never before been connected to any such pursuits. The native population knew about it,

> but had left most of it untouched: only with the arrival of the British was the coal hauled into a circuit that expanded by setting it on fire. "First the fuel was in the ground, still and unstirred; then someone came to the scene and, eyeing profit and power, commenced its exploitation. In this regard, the lithograph provides an Urbild of the fossil economy. It is, if you will, a picture of the Fall (and downwards like a fall, into a shaft the ground, is the fundamental movement of that economy). The uncountable repetitions of the same act over the past two centuries form the defeated time now pouring down from the sky."
>
> ***(Malm, 2018)***

This fossil economy, steeped in boosterism, scientific rationality, subsumption of nature and peoples is what we are up against. But to think that we can just simply replace fossil energy with green energy is a short-sighted view. It is a neglect of the very ontological view, that as we have seen, unleashed the power for the fossil economy to get a hold of our live worlds.

Now, how can we learn to fight and to hold. Long before the word sustainability was first championed by the Brundtland Report "Our Common Future" in 1987 it was present as an idea and practice around the world. All too often, we think that we need to reinvent the wheel. This is often a very western centric and progress-oriented undertaking.

Without falling into a narrative of romanticisation, it is crucial to acknowledge that several groups have been good at *sustaining*. Indigenous peoples, or people with traditional ecological knowledge, have long sustained relationships to nature in non-extractive ways. And tribal nations have sustained most of the land they lived on, that surrounded them, for thousands of years until many were imprisoned in their own land onto "reservations" by colonial powers. This is not to say that indigenous groups have never spoiled parts of their land. Rather the centre-right have developed a strong socio-political narrative that infantilizes indigenous ontologies, arguing that the only reason indigenous groups live in a more respectful way amongst ecological nature is that their regressed developmental status and lack of technology have never really "allowed" them to ever foster the ability to destroy their environment. In *The Soul of Sustainability* (2018) Dan Shilling shows how wrong this is:

> **Voice Seven:**
> "Native Americans may have lacked earth movers, but they did build huge cities and manipulated their environment in colossal ways. Also, considering their hunting skills, especially after they acquired the horse and rifle, American Indians probably could have wiped out the bison, but they didn't, an act of ecological restraint and spiritual reference. Had they practiced farming and fishing more intensely on fragile lands and rivers, they could have destroyed their world and its resources, but did not. Historian Donald Hughes observes in 1983: Indian technology was certainly capable of doing more damage to the environment than was actually done." It wasn't so much the tools that were or were not available to Native peoples that determined ecological health; it was, instead, the wisdom to know what to do with the tools. To peoples with an organic and animated world view, the practice of interrelatedness with nature obliges humans to leave a liveable world for civilizations to come; it was not a functional necessity of a technological possibility but a question of moral integrity.
>
> While it is impossible to identify the indigenous philosophy or attitude towards nature (and obviously this is also not the reductionism or universalism we want) we can point to a few common threads that weave their way through the tapestry of many aboriginal beliefs about the natural world among them:
>
> - Reciprocity and respect define the bond between all members of the land family
> - Reverence toward nature plays a critical role in religious ceremonies, hunting rituals, arts and crafts, agricultural techniques, and other day-to-day activity.
> - One's relationship to the land is shaped by something other than economic profit
> - To speak of an individual owning land is anathema, not unlike owning another person, akin to slavery
> - Each generation has a responsibility to leave a healthy world to future generations.

> These are not romantic myths, or fables of a prehistoric Noble Savage, as detractors claim; nor do they suggest an idyllic fairytale where Indians and fellow creatures harmoniously cavorted in a pristine garden before the Fall. The millions of people in the Americas before European contact used natural resources, built cities, diverted waterways, exploited animals, warred with one another, transformed ecosystems with fire, and sometimes harmed the earth. Complicating interpretation, the continent was home to hundreds of sovereign nations, most with multiple clans and villages; so, to say all Native/Indigenous peoples in all places followed the same ecological blueprint is a nonstarter.
>
> Having said that, more than 10,000 years of history testifies that the prevailing standards shaping most Indigenous relationships to the natural world were *restraint* and *reverence* – restraint because, as people close to the land, they understood and embraced their dependence on Earth's resources; reverence because all was a gift from the Creater, whose animate universe meant animals, trees, and rocks were another "people"."
>
> ***(Shilling, 2018)***

And ultimately, we should not always locate indigenous thought elsewhere or in the past. As the Skolt Sami of Finland, the Nenets and Altai of Russia, the Sapara of Ecuador, the Karen of Myanmar, and the Tla-o-qui-aht of Canada, the Sami of Sweden, and many groups close and far from the environment that you live in, can teach us here in the now, animist ontology provides for the most successful conservation efforts yet achieved.

Into the now

Before we come together to (dis)entangle and think of future repair, three implications of warning are needed.

1. The Future

We must work towards queer futures.

Through a historical analysis of the way theories of sexuality have been conflated with theories of evolutionary biology, queer ecologists' Moritmer-Sandilands and Erickson (2010) highlight how Darwin's evolutionary theory was conceptualized as both one of natural selection – the dominance of the organism most able to survive within a given environment – as well as one of sexual selection – the dominance of the organism most attractive to reproduce amongst its species' partners.

In a Darwinist understanding of nature as an arena of competitive dominance, the struggle for survival became naturalised as the goal attained by all species; and the ability to reproduce became essential to the survival of a species. Any deviation from this natural function of sexuality as reproduction came to be seen as *un*natural: sexuality minus (the will or ability for) reproduction was subsequently understood as a "crime against nature" (Gaard, 1997, p.127), and a competitive disadvantage in a struggle to survival. Born was the idea of the *norm*alization of sexual reproductivity and *de*naturalization of non-reproductive sexual desires (of both bodies unable to sexually procreate or minds unwilling to) (Gaard, 1997), and by extension the naturalization of heterosexuality and denaturalization of homosexuality (Moritmer-Sandilands and Erickson 2010). As a project concerned predominantly with the future (survival of the planet and its inhabitants of all sorts), mainstream environmentalism importantly builds upon an idea of sexual reproduction as natural and imperative; or in the words of queer ecologist Cameron Butler "sustainability is fundamentally a project of [heteronormative] futurity" (2010, 278). Many queer theorists strategically pit themselves as anti-futurist in their critique of heteronormativity. Exemplary is Edelman's (2004) work, that analyses how all political discrepancies between the left, centre and right are overcome in their unifying belief in the idea of futurity: the mobilization for a certain politics by appealing to the benefits brought about for the "Child". Edelman hence defines queers as "those not fighting for the children" (2004, 3), and the queer project as opposed to heteronormative ideas of "reproductive futurism" (2004, 4). Although critiques of Edelman's anti-futurity importantly point towards the exclusion of queer folk appreciative of children

and/or sexual reproduction, Edelman's thoughts are a crucial reminder that what falls short in frameworks of reproductive futurity is the concern for the struggles of those oppressed in the presence (Butler 2010).

2. The Past

We must voyage back into the past in an emancipatory way.

The project of going back in history to resurrect old times is one that has been crucial to the political project of the far-right: A (vague) moment in history is fixated upon in which the aspirations of the right were more widely represented. The development of an organic nation that arose from a clearly defined territory, heritage by blood, cultural homogeneity, a sense of power and order are characteristics of this envisioned past. Roger Griffin holds that fascism is an act of palingenesis, a compound noun composed of the Greek words *palin* for *again* and *genesis* for *birth*. In this understanding, the right seeks to "rescue (the nation) from perceived" geopolitical, cultural, military, racial and economic threats. (Griffin in Malm & the Zetkin Collective). This understanding of time can be described as fixated in the past but forward looking in seeking to reinstall what is understood as once having been existent. The fixation of the right onto a glorified past shall not hinder us from going back in time in a more emancipatory way, but the burden that calling for an organic relationship with one's natural surrounding has due to this practice by the right shall nonetheless be neglected.

3. The Present

We must transform and repair science.

As we try to overcome the dualistic ontology at the heart of the scientific revolution, we must not overthrow science to find repair. Historian Eric Hobsbawm argued forcefully, scientific racism was an intrusion of 19th century politics into science, not the other way around. Science, too, can be transformed and repaired.

As we try seeking out for other ontologies to find repair, we shall not underestimate the task. As helpful as other ontologies are in seeking out for a different world, they rarely suffice to come to terms with the world that has been constructed through the domination of peoples and natures. Taking from an animist ontology and importing it into a different context can be extremely extractivist. Neither do we want to locate indigenous knowledge to be a matter of the past, nor something which only occurs outside of Western societies. Likewise, shall we not suspect that an animist ontology by itself can lead to the destruction of fossil capitalism. It can be a guiding principle and a signpost for a post-fossil world. But what we need is a dual strategy, of thinking through the old while envisioning the new.

I would like to close this by returning to the experience-experiment. Close your eyes and come back to the image of the environment you thought of in the beginning. Try to imagine what ways this environment has been rendered dead and productive. Have its trees been cut down to make space for industry? Has its people been relocated to provide more productive labour elsewhere? Think through animist and organic ontologies that rely on restraint and reverence. Would trees and human habitats be enchanted in different ways? How would this environment change? What would we there? What do you sense, hear, taste? Open your eyes and write some of these thoughts and feelings down to keep this alternative world alive.

Thank you. I hope this journey has begun to plot out some points for us to come together to create our expanded timelines.
I look forward to meeting you all in person next month.

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