

A Big Pile of Glitch: A Manifesto for Feminist Solarities

by Mirrorland Collective

Feminist Solarities is...

Living in uncertainty.

Instability – the only constant on a planet undergoing
accelerated unprecedented
change.

Exponential.

What is instability without precarity?¹

Meta-stability?

Precarity, neoliberalism's ambition:

Love.²

Le désir, la flamme, l'être enflammé(e).

Kinship:

Interspecies kinship,

Interstellar kinship,³

Constellations of care.⁴

Undone, recalibrated, reoriented.⁵

Exuberant regeneration,

exuberance despite emergency,

exuberance of emergencies;

Abundance,

patch dynamics.⁶

To solarize (engl) / Solariser (fr)?⁷

Metastability, not precarity.⁸

Cosmic pessimism?⁹

Bright

bleak

blight

break

bleak bright

break blight.¹⁰

Do not turn to face the sun but attune to the sun inside.

Pyrosexual desire is capaciousness.¹¹

Eclipse the given world.

Green fire,¹²
white earth,
black coal.

Green fire,
green flash,
a spark.

Spark as neither bleak nor bright?

“A glitch has appeared in the reproduction of life.”¹³

A glitch is not a bug
(Bugs are mistakes in the code).

A glitch is the opposite:

Something in the code
is doing
exactly what
it's intended to do,
but *now*,
under *these conditions* ...

((hyper consumption / endless extraction / borders / extinction / mass migration / clamping
down on power formations / too much growth / not enough))

... appears as a ‘problem’ only to
slip away.

Avoiding ‘solutionist’ modes of thought.¹⁴

Glitches can't be repaired,
Glitches can't always be solved.
A big pile of glitch.

We want to know but the world exceeds our conception¹⁵

Which

is always

slipping?¹⁶

You are a glitch.

A life of its own

~~A troubled transmission.~~

Embrace glitch:¹⁷

Giving in / Giving up,

Glitch as method to,

Lightning as method too,

Glitch dialectics,¹⁸

Interrupting solar infrastructure.¹⁹

Fearsome solarly.
Fear SOME solarly,
 SOME fear solarly...
Furious patience could be all the rage.²⁰

Feminist adaptation,
 allows us to invite in constellations
 of kinship under conditions of change.²¹
A universal movement:
 Elemental kinship.²²

We lost the commons.²³

Now we seize onto the not-yet of collective enunciation.²⁴
Teeming with life, and death in common,²⁵
We bask in the harsh light of uncertainty,
The commons towards radical inclusion under conditions of mass migration.

Sunspot pricing²⁶
Icarus was here
(Fugitive commons)²⁷
I'm a sun, Baby!

Sun marks:
Sensitivity and attunement
Possibility
 unfurled
Blistering in the sun
Mark of the Witch.²⁸

First comes lightning²⁹
Not the sun and the earth.
Not the sea and the moon.
As a change between
two disparate series.³⁰
An imbalance of energy
A counter-strike.

In between and beyond
 the Blight & the Bleak;
In between sky and earth is the space that isn't just space.
It is a beginning.

Begin with lightning.
Lightning is bi-directional, requiring first an invitation,³¹
Predicated on consent.
Feminist solarly is a lightning strike,
a bi-directional pulse, galvanizing...
From the strike comes different intensities,
travelling at different speeds;
the light,
the sound,
the smell,
le toucher, la caresse, le coup de soleil.
Lightning is life, lightning is death,
Lightning causes the patch-work of fires that sustains the boreal forests.³²

The sun is not just a ball of fire.
It is a ball of plasma.
The sun is a ball of lightning.³³

Fiery regime!

What / who escapes the sun?³⁴
Qu'est-ce qui échappe au soleil, s'échappe du soleil?
The sun is made up of the forces that escape it.
What escapes the sun can be a generosity or a monstrosity:
Solar flares,
Electromagnetic waves,
Radio waves.
What escapes the sun / solar?
The bottom of the ocean (more life),
chemosynthesis,³⁵
death.

What grows despite / in spite of Enlightenment?³⁶
What grows despite Enlightenment might
Become resurgent
Might become an exaptation³⁷
An old habit with a new direction.
Solar sabotage.³⁸

The sun is plasmatic relation
The sun is no relation, god.

[lamp click]
Ex-aptation without end.
[lamp click]

[lamp click]
Mirrorland.³⁹
[lamp click]

Let's solarize (engl) / Solarisons (fr);
"to rise/rize" is in solarize.
A labour of lightening submerged energies?
To solarize is to decolonize
To reconcile
To reconstitute

Feminism lives in relationships, not in individual bodies;
There are no spaces in-between
Interstitiality (l'entre-deux)
It is *all* in the spaces in between.⁴⁰
Relationality,
Extra-relationality.⁴¹
Solar unknowns⁴²
Not bidirectional
Rhizomatic⁴³
Celestial
On a spectrum of (in)visibility
E m b o d y i n g t h e s p e c t r u m.

Not bright, not bleak, but fiercely ambivalent.⁴⁴

Solarize!
We solarize and ask. . .⁴⁵
We are feminist solarity!

¹ Anna Tsing (2015) asks us to challenge our understanding of precarity as “an exception to how the world works,” and instead suggests we move towards forms of empowerment that accept it as “the condition of our time” amidst capitalist ruination.

² What does love mean under conditions of generalized precarity? The answer may not be so simple. In their book *The Undercommons*, Stefano Harvey and Fred Moten (2013) argue that neoliberalism relies on a particular “administered precarity” that insists on flexibility, opportunism and adaptability. Such precarity is not only contingent, rather, it is also a “will to contingency, the willingness to be made contingent and make contingent all around you” (p.76). Administered precarity involves an opportunism, flexibility and adaptability that seek to externalize contingency as a condition that can be worked on and harnessed. Once contingency is transformed into an external condition, through estimates, projections and calculations, it can be finessed and leveraged for profit. If the precarity of student debt, the speed of gentrification and the cost of rent are calculable, they are also administrable. In such an environment, love seems too sentimental, too caught up in relations of care, too slow to keep up to the speed of administered change. Who’s got time for love when all the relations of social reproduction, your city, your neighborhood, your friends, your workplace, your work times are all subject to revision? Yet the opposite is also true. If the intimacies of love are too slow and too insistent from the perspective of neoliberal precarity, from the perspective of bourgeois privacy, love is not stable enough. In *Gaga Feminism*, Jack Halberstam (2012) powerfully writes about how the explosive intimacies between lovers appear as a force to be contained and enclosed within the everyday humdrum of coupledness and nesting. In other words, from the perspective of privacy and stability, the intimacies of love are too uncontrollable and too subject to change. In this fashion, one could say that bourgeois privacy wants to imprison love within the sovereign realm of the ownership and domesticity, whereas neoliberal precarity attempts to divest itself of love’s relationality altogether. In other words, perhaps what neoliberal precarity and bourgeois stability obfuscate, then, is the possibility of love as a “non-sovereign relation.” Lauren Berlant has described love as a form of “non-sovereign” relation that interrupts one’s intentionality, without being anti-intentional (2011, p.9). Although non-sovereign, love is neither the desire to overcome a constituent lack, the desire to finally become whole again, nor the condition of being subject to a greater force. Rather, as Berlant argues, love would appear to be an invitation towards alterity and care, a place “to which people can return, becoming as different as they can be from themselves without being traumatically shattered; it is a scene of optimism for change” (200, p. 448). This non-sovereignty is not merely the thirst for expenditure and destruction as it sometimes appears to be in Bataille, neither is it a momentary dissolution of boundaries in holy communion. “Non-sovereignty is not here the dissolution of a boundary. It’s the experience of affect, of being receptive, in real time” (Berlant, 2016, p. 402). Could an ethics of non-sovereign relation be the cornerstone of feminist solarities?

³ Drawing explicitly on Indigenous knowledge, interspecies kinship acknowledges the relations between humans and nonhuman kin, and the webs of interconnection between them (Zoe Todd 2015, 2017; Kim TallBear 2011). We can also understand the calls for multi-species justice (Banerjee, 2018) and multi-species ethnography (Kirksey and Helmreich, 2010; Livingston and Puar, 2011) as integral parts of building kinship networks.

⁴ In *Matters of Care* (2017) Maria Puig de la Bellacasa argues for a feminist reworking of the understanding of care that extends through techno-scientific and naturecultural worlds.

⁵ Sara Ahmed (2006) reminds us that objects are an effect of “towardness,” meaning that they take us in some directions rather than others; she thus alerts us to the fact that to be oriented “towards” something is always also to be oriented “away” from something else, which becomes relegated to the background. Ahmed also proposes that re/dis-orientation requires interdisciplinarity. It requires the retooling, borrowing, supplementing, enriching, combining and recombining of disciplines so that individual disciplinary bents do not become harmful acts of relegation to the background. To think the “turn” to solar as a project of re/dis-orientation might be to ask what objects (previously considered awry) heliocentric orientations put within reach?

⁶ Patch dynamics is, at its root, a process of scale within an ecosystem. At one scale, the ecosystem may appear stable (i.e. it remains a forest), yet at another smaller scale there are patches within the ecosystem that are undergoing wildly different states. One patch may have just experienced a fire, a neighbouring patch may be a very mature forest and yet another patch may be a meadow of wildflowers transitioning into forest. In many ecosystems, what may appear as stable is actually a collection of diverse micro-patches, all undergoing changes at different rates. Collapse and regeneration can be part of healthy ecosystems but biodiversity is key (see Pickett, Steward & White, 1985).

⁷ As the *Mirrorland Collective*, using English as our shared language to think, write and perform together, we were also aware that we were gathering in the largely francophone city of Montreal, built on Indigenous territories where Kanien'kéha and other Indigenous languages are spoken. Even among the collective itself English was but one of the many languages spoken by our members. Weaving French throughout the manifesto is a modest nod to the plurilingualism needed to expand our thinking. At the same time, this gesture aims to draw attention to the limits of attempts to shift and destabilize conversations (such as that around energy transition) while remaining beholden to colonial languages, which in the case of Canada have played a major role in shaping dominant logics and world-views. Attuning to both the limits and potentials of language, the *Mirrorland Collective* has used poetics in this manifesto, so as to experiment with the cross-pollination of existing languages and to think through what language(s) might need to be invented to speak Feminist Solarities into being. And so, the weaving of French throughout the predominantly English document is a provocation: an opening to reflect on the fact that in living through climate crisis we are experiencing and feeling events for which language is inadequate. Put short, new knowledges require new languages to express new multi-species inter-stellar world-views.

⁸ In her book on Simondon, Muriel Combes (2012) explains that metastability refers to the stability of a dynamic system that is above its lowest state of energy. Under a metastable system, the least amount of disturbance may trigger a change of phase. In this sense, metastable systems harbor potentials that are incompatible, because they belong to heterogeneous dimensions of being. For instance, when water is supercooled, its overall temperature drops below its freezing point, yet crystallization has not yet begun. At this state, water contains a disparity between orders of magnitude that are deeper than the individualized potentials of “water” or “ice.” As Alberto Toscano (2004) elaborates, Simondon’s notion of metastability (or disparation) presents an opportunity to rethink the notion of the commons. From the point of view of metastability, the commons appears to be a state that is not held “in common.” In other words, the commons does not refer to the dark background secretly structuring social relations from which a revolutionary subject might emerge. Rather, if there is a metastable commons this would be one that is defined by impossibility, one that is not given in advance but rather needs to be invented through an

ontological background of inequality. Thus thinking metastability alongside the commons requires us to think of the disparation that is at the heart of every common.

⁹ For Eugene Thacker (2012), “cosmic pessimism” is not a moral or metaphysical pessimism, nor is it a pessimism that is subjective or objective, nor is it a pessimism “for-us” or “in-itself.” Instead, cosmic pessimism is “a pessimism of the world-without-us.” Drawing on the pessimist *par excellence*, Arthur Schopenhauer, Thacker (2011, 2017) notes that pessimism may be the only viable philosophical response to the radically unhuman condition, or cosmic indifference, that characterizes the world. As Thacker (2017) writes, “cosmic pessimism stands in opposition to the ontology of generosity in post-Kantian idealism, with its emphasis on overpresence, flux and flow, and the becoming of the Absolute” (p. 315). In this way, cosmic pessimism evokes a dismantling of the projected human face on the cosmos via the realization that the world always exceeds and overrides human capacities (Beier & Wallin, 2017). Or as Thacker (2012) puts it: “[t]he contours of cosmic pessimism are a drastic scaling-up or scaling-down of the human point of view, the unhuman orientation of deep space and deep time, and all of this shadowed by an impasse, a primordial insignificance, the impossibility of ever adequately accounting for one’s relationship to thought” (p. 68).

¹⁰ By way of provocation, the organizers of *After Oil School 2: Solarities* highlighted the notion that “solar futures” are often presented in overly reductive terms as either “bleak” or “bright.” On one hand, there is the idyllic bright solarly: infinite, clean, abundant, democratic, egalitarian, responsible. On the other hand, the promise of a bleak solarly looms: irresponsible, harmful, reckless, a reproduction and extension of the petrocultures that define our current moment in time. These are, of course, not the only solar imaginaries, and whatever future does arise will surely not be so black and white. However, this dichotomy of thinking calls on us to be wary, intentional, and iterative in our creation and re-creation of the very concept of solarities.

¹¹ Clark and Yusoff (2018) propose “pyrosexuality” and “pyrosexual desire” as a way of countering eco-capitalist discourses of desire focused on limitations, finitude, and restriction. Pyrosexuality is expansive, drawn from a genealogy of “sexual desire and fiery consummation” (p. 118).

¹² Lynn Margulis (biologist) and Dorion Sagan (science writer) offer the following: “[b]urning like a cool green fire, photosynthetic beings transmute sunlight into themselves” (cited in Clark & Yusoff, 2018, p. 11).

¹³ As Berlant (2016) asserts, “a glitch has appeared in the reproduction of life.” For Berlant, the “glitch of the present” does not signal a bug in the code, a flaw, for instance, in infrastructural or energy system design that is in need of repair. Instead, the glitch signals a slippage, an in-between, a “troubled transmission” that “reveals what *had been* the lived ordinary,” (p. 403) that is, what the system was in fact intended to do, which is now, under some circumstances, causing many problems. The trouble with glitches, then, is that they cannot be addressed in terms of repair, fixing, or ‘solutions’, which in the case of energy transition, puts us in a difficult situation. In relation to Solarities, solar power alone can and will not be the ‘solution’ to today’s glitching energy infrastructures and ideologies defined as they are by unconditional “carboniferous love” (Yusoff & Clark, 2018) and a whole range of extractivist and exploitative practices.

¹⁴ ‘Solutionist’ modes of thinking so often belong to the category of techno-fetishistic fantasies that avoid addressing the root causes of the current climate and energy crisis. What does it mean to respond to the glitch with hospitality? Particularly where the search for ‘solutions’ is itself perhaps part of the current energy impasse? How might the glitch provide a reminder of all that

is not right, to act as an opening to care differently about what is at stake rather than imagining it is possible to solve this planetary crisis or save the planet using the same logics and tools that caused it? With this solutionist legacy in mind, Laboria Cubonicks (2018) propose that what is needed now, more than ever, is both the strategic deployment of existing technologies to re-engineer the world as well as an unprecedented cunning, scale, and vision of gender justice and feminist emancipation, or, “a feminism that is adapted to the abstraction, virtuality and complexity of our present situation.”

¹⁵ Sur les promesses de l'entreprise spéculative, voir Quentin Meillassoux (2006), *Après la finitude: essai sur la nécessité de la contingence*. This assertion builds from the speculative claim that reality cannot be wholly represented “in-itself,” but instead, only ever as it is “for-us”, that is, as a correlate of human consciousness (Meillassoux, 2008). Where the real is understood as a problematic and substantive multiplicity that exceeds human representations, any reality we construct is necessarily fragmentary, holey, a pervious tissue of inconsistencies. This is not to say that there are no particular facts or regularities between certain certainties, but rather that the “laws” that chase these regularities are always contingent. This claim is not a form of anti-realism but, rather, a form of anti-absolutism that is invoked to “to curb every hypostatization, every substantialization of an object of knowledge which would turn the latter into a being existing in and of itself” (Meillassoux 2008, p. 11).

¹⁶ Notice a subtle movement, taking place in between these lines. Which of them is slipping, the world or our conceptions? Perhaps in between these two slippages, in between these two differences, a new difference emerges, an Idea takes distinction, and a world opens. A relevant discussion here would be the distinction Deleuze (1994) makes in *Difference and Repetition* between Ideas and concepts. From this perspective if there is a blockage at the level of the concept it is not merely due to a failure to render representation infinite but rather from the superior positivity of the Idea that arrests the concept (1994, 288-289).

¹⁷ Digital artist Rosa Menkman (2010) advocates for embracing the inevitability of glitch in poignantly poetic fashion in her *Glitch Studies Manifesto*.

¹⁸ Could glitch-as-practice counteract the glitch symptom illuminated by Berlant (2016)? Might glitch dialectics fuel a “politics without the infection of purity” (Laboria Cuboniks)? Could glitch dialectics explode the serenity of synthesis by putting contradiction into overdrive? Glitch dialectics: a spark neither bleak nor bright?

¹⁹ The interruption of solar infrastructure echoes ideas put forth by Laboria Cuboniks (2018) in *Xenofeminism: A Politics for Alienation*. Xenofeminism encourages us to develop both ideological and material frameworks that support interruption, intervention, and innovation in would-be savior technologies so we can respond flexibly and creatively in anticipation of their perils and pitfalls.

²⁰ Theorizing mood as political atmosphere, Jonathan Flatley (2017) contends that, “[a]lthough we are never not in a mood, and the most powerful moods are the ones we do not even notice, moods do shift. In some moods, for instance, collective political action might not even enter one's consciousness except as something impossible, futile, foolish, or obscure. But then, with a shift in mood, organized political resistance all of a sudden seems obvious, achievable, and vital, and it makes urgent and complete sense to storm the Winter Palace, to occupy Wall Street, to block the highways, or to strike” (p. 148). With a shift in mood: what might furious patience bring -- and what might it afford?

²¹ Conversations about climate change are often characterized by debates around mitigation, adaptation and resilience where “the human” is always-already positioned at the centre of any

mitigation/adaptation strategy. Responding to such characterizations, feminist adaptation proposes a mode of thinking with a broadened scope so as to question who and what is included within calls for adaptation.

²² Elemental eco-criticism and the environmental humanities at large have begun to address the complex interrelations between elements. As Melody Jue and Rafico Ruiz note in the introduction to their forthcoming edited collection *Saturation: An Elemental Politics*, “[f]rom blood work to surplus data, the heuristic of saturation is a call to an elemental scholarship, yet exceeds the solidity of earth, the fluidity of water, the temperature-sensitivity of fire, and the mobility of air. A more accurate image of saturation is a reconfigured periodic table of the elements. Not the well-known grid of chemical elements, metals and non-metals, rows of periods, columns of groups, but rather a realigned version that follows the elements and relations specific to the Chthulucene—with hydrogens and oxygen an oceanic coupling of racialized sound, necropolitics, and citizen sensing” (Duke UP).

²³ As Sylvia Federici (1998) argues in *Caliban and the Witch*, the ongoing dispossession of the commons, that begins with the loss of access to public lands where people could hunt, forage, and produce food, was one important tactic to entrench and later reproduce capitalism. This enclosure of the physical commons was concomitant with an enclosure of knowledge, particularly knowledges held by those bodies on the margins. Carolyn Merchant’s (1989) foundational feminist text, *The Death of Nature: Women, Ecology and the Scientific Revolution*, also unfolds various ways in which knowledge itself has been enclosed so as to subjugate particular bodies, including women. On a more mundane level, in many parts of the world, renewals of infrastructure have required the insertion of new fixed capital, technical knowledge and expertise, which has involved the dispossession of land and knowledge, the enclosure of commons and the seizure of the means of reproduction in ways that disproportionately effect women. If solarify is a shift in the ways we sustain our life, what new modes of collective belonging maybe enabled or foreclosed by it?

²⁴ For Felix Guattari (1995), all processes of subjectification involve the formation of yet unthought collectivities, where the very notion of the “collective” refers to a sense of multiplicity that “deploys itself as much beyond the individual, on the side of the socius, as before the person, on the side of preverbal intensities, indicating a logic of affects rather than a logic of delimited sets” (p. 9). In this way, collective enunciation is the very existential territory on which ethical, aesthetic and political transformations must be negotiated and out of which new and more transversal accounts of environmental, social and mental ecologies might be relaunched (Guattari, 2000).

²⁵ Death is often invoked in Anthropocene and climate change discourses, but usually only insofar as it is used to quantify the loss of human and nonhuman lives. However, death is also generative, particularly as those like Rose (2012) point to generational time and the ways death unfolds abundance.

²⁶ Today, capital's speculative powers entrap energy futurity in the crosshairs of spot and futures pricing, as Leigh Johnson (2015) makes terrifyingly clear. A solarify that encourages sunspot pricing is both ludicrous and viciously bleak.

²⁷ For Moten (2018), fugitivity is the ongoing refusal of standards imposed from elsewhere. In *Stolen Life* he writes, “[f]ugitivity, then, is a desire for and a spirit of escape and transgression of the proper and the proposed. It’s a desire for the outside, for a playing or being outside, an outlaw edge proper to the now always already improper voice or instrument.” In this spirit, and following Moten, a fugitive commons might be that which actively works to connect subjects

and recalibrate relations that our preconceptions may have led us to otherwise ignore, deject or disavow.

²⁸ The sun leaves marks on the skin. For women, these marks were once construed as signs of the Devil and witchcraft, reminding us that solarly is not immune to constructions that are deeply gendered. Devil's marks referenced in Hopkins & Stearne's (2007) *The Discovery of Witches and Witchcraft: The Writings of the Witchfinders* (p. xvi).

²⁹ The dominant scientific theory of the origin of life on Earth is Abiogenesis where self-replicating primitive life self-assembled from non-living organic molecules. In 1953, Stanley Miller created amino-acids (the organic building blocks of proteins) in an experiment where he produced electric discharges inside a reaction chamber containing water, hydrogen, methane and ammonia, similar to the early Earth atmosphere. From this experiment came the hypothesis that lightning may have been the spark that created the building blocks for life to evolve on earth (Miller, 1953). Later other researchers, such as Oró and Kimball (1961), were able to show experimentally that other organic molecules could be created through non-living mechanisms. Other theories exist for the origin of life on Earth, such as Panspermia where the earth is hypothesized to have been seeded, or inseminated, accidentally or intentionally, by extra-terrestrial sources of life (Hoyle & Wickramasinghe, 1981). Although fungi and bacteria spores may well be able to survive in space, this highly gendered view of a passive Earth needing insemination from space does little to actually explain how life evolved in the first place.

³⁰ In *Difference and Repetition*, Deleuze (1994) proposes the idea of lightning as a bi-directional charge that relate two disparate series. Yet notice how lightning requires an imbalance of energies, or a condition of metastability. As Brian Massumi explains, "the lightning strike does not resolve, resemble or represent the charged field. It doesn't conform or correspond to it. It culminates it, in a playing out or performing of its intensity" (2002, xxiv-xxv). A commons founded on the model of a lightning strike, does not seek to resolve, or correspond to the disparate modes of becoming against which it emerged. Rather, it carries these modes of becoming to a new intensity, expressing them at a new level.

³¹ In order for lightning to strike the ground, a positive charge must build up on the ground to attract the negative charge from the cloud. The lightning strike itself descends first from the cloud then is met with a bright reciprocated current from the ground (Baker, 2015).

³² The boreal forest, which stretches across the sub-arctic region of North-America and Eurasia, is an example of an ecosystem constantly undergoing growth-collapse-reorganization-growth cycles (see Patch Dynamics [6]). One of the key drivers of this cycle is fire caused by lightning. Many species of the boreal forest, such as the lodgepole pine, are pyrophytes and actually require fire in order to reproduce properly. As Clark and Yusoff (2018) state "fire licks the boundary between biologic life and inhuman materialities" and, as such, fire (like sex) plays a role in the energetic release of endless accumulation and stagnation. This cycle appears to be undergoing disruption by human fire-suppression for forestry and by climate change (Wotton et al, 2017). Suppression of the natural fire regime has been shown to artificially age a forest and lead to larger and more intense conflagrations.

³³ The sun is an endlessness of glitches. Ferocious patience?

³⁴ One cannot help but note the monotheistic rhetoric that sometimes surrounds popular conceptions of the sun. The sun is often thought of as the life giving one-all, an incandescent light that is the origin of love, wisdom and life. Against this tendency it is perhaps important to note, as Nicole Starosieslki has said in her keynote address to the Solarly conference, that "we do not look at the sun." In other words, what reaches the earth is not an earthly representation of

the sun, a light that allows all other seeing, but rather a number of forces that literally travel faster than the sun's escape velocity. Such a perspective shifts our attention from the sun as monolithic force to a source of disparation, of diverging tendencies that effect the harvesting solar energy in different ways; electromagnetic waves, solar flares, heat waves, solar winds...

³⁵ Although almost all living organisms on the current Earth depend on photosynthetic organisms for energy, there are some types of bacteria that do not. These bacteria use a process called chemosynthesis where energy from heat or chemical gradients and chemicals such as hydrogen, methane or hydrogen sulfide is used to create organic molecules and as a source of metabolic energy. This is most common in deep sea ecosystems such as hydrothermal vents where no light penetrates and little organic matter filters down from shallow depths (Cavanaugh, et al, 1981). These ecosystems are possibly very similar to the earliest forms of life on earth as photosynthesis probably evolved later. Clearly, the success of photosynthesis demonstrates the potential of the sun as a source of energy (Martin & Russell, 2007).

³⁶ Understood in energetic terms, underlying the Enlightenment is a series of disparate tendencies, which are intimately bound up with the sun in more than just a metaphorical way. The rise of mass agriculture and plantation slavery, the notions of property and freedom are all entangled with the sun. As Susan Buck-Morss argues (2005), the Enlightenment is intimately bound with the legacies of plantation, agriculture and slavery which provide the food and energy necessary to reproduce a "free" labor force in Europe. In this sense, the sun was already part of the carbon energy economy of the Enlightenment. As Timothy Mitchell (2013) argues, the use of coal made possible the clearing of forests and the concentration of populations in cities, since wood no longer functioned as a source of fuel. This meant both a demand and the possibility to supply massive forms of agriculture, often through the labor of enslaved peoples (p. 15-17). Enlightenment in this sense is not the basking in glory of supreme Western knowledge, but rather a vicious circle of disparate tendencies, which amongst other things harvested the sun, through a regime of violence and forced labor.

³⁷ Paleontologists Stephen Jay Gould and Elisabeth Vrba (1982) use the concept of exaptation to refer to how an evolutionary characteristic originally selected under one set of pressures, or else adopted for no specific purpose at all, can later be co-opted and repurposed under entirely new conditions. More than this though, the concept of exaptation helps insert complicated lines of causality into evolutionary thinking. An adaptation can later become an exaptation, which can lead to an entirely new set of evolutionary conditions and hence present even further adaptation. A simple example is the relation between feathers and flight in the evolution of birds. Feathers were initially designed for thermoregulation and later exapted for catching insects. Larger contour feathers later become exaptations for flight. Yet flight brings in entirely new selective pressures that leads to a whole series of further adaptation. Perhaps a social theory of exaptation can begin by taking seriously this nonlinear causality. The basis of new social forms and sources of resistance are often already incipient in modes of belonging that have since been recoded or exapted for wholly other purposes. Yet exaptation is not merely a matter of repurposing existing modes of solar resistance in functional ways. Rather as Elizabeth Grosz (2004) notes, exaptation also asks us to think untimely modes of belonging, that maybe exapted in a future that is yet to come.

³⁸ Sabotage is a tricky concept. As Darin Barney argues (2018), sabotage ought not be "reduced to violence and destruction, despite the tendency to do so by both the institutional left and capitalist states." Rather sabotage is often defined as the conscious withdrawal of efficiency, Barney argues, echoing labor leader and feminist activist Elizabeth Gurley Flynn. Yet what

makes sabotage so slippery is its contradictory valence: the slow-downs, gear-jams, and temporary denials of service that sabotage uses against capital are likewise habitual to capital itself. In fact, at least according to one account of energy (Mitchell, 2013), sabotage defines the ways in which the oil industry historically has operated. Thus as Evan Calder Williams (2016) contends, “what distinguishes sabotage above all isn’t any sense or principle of deviance, especially given that such operations have no inherent ‘politics,’ available across the political spectrum and to companies and corporations themselves. Rather, it’s ... the impossibly small difference between exceptional failures and business as usual, connected by the fact that the very same properties and tendencies enable either outcome. If we are to think of sabotage as a process that negates productivity, it’s a negation that can’t be disentangled from the structures of productivity itself.” Such undecidability and intimate difference lead Jeff Diamanti and Mark Simpson (2018) to theorize sabotage as a *dispositional practice* by which “contradiction turns the operative, the activity, the disposition, into the inoperative, the problem, the counter-disposition. The counter-disposition is the energetic glitch or break out of which abolition is made possible and then durable.” It is worth emphasizing that a condition of solar energy will necessarily involve the multiplication of the sites of extraction, production and distribution of solar energy as well as of the types of labor involved, from solar panels installed in houses to those owned by corporations and states, to electric grids and storage batteries. What new antagonisms, new opportunities for sabotage do these bring about? What dispositions and counter-dispositions might solar sabotage require and inspire? And who will figure the solar saboteur?

³⁹ In Lorenz-Meyer's (2017) interviews with Roma people living near the Orlik solar farm, she notes that community members often referred to the farm as “Mirrorland,” describing not only the aesthetic nature of the farm but its associated “mirror maze of shady business practices” (p. 437). “Mirrorland” thus represents the nature of solar projects, which often signal a shiny purity despite “shady” origins in manufacturing, installation, and power distribution.

⁴⁰ Berlant (2016) offers an analysis of Juliana Spahr's poetry (*This Connection of Everyone with Lungs: Poems*, 2005) to show how the “infrastructure of the social emerges within.” According to Spahr's poetry and Berlant's analysis, we are all connected through the commons of the breath that is shared between bodies, environments, and continents. The recitation of Spahr's poetry (her lines, for example, read, “Everyone with lungs breathes the space in and out as everyone / with lungs breathes the space between the hands in and out / as everyone with lungs breathes the space between the hands and / the space around the hands and the space of the room in and out”) both shapes and reproduces this all-encompassing commons.

⁴¹ Yusoff (2013) asks what ethics might look like if it is directed towards things that are “lost to sense” and may not hold the promise of relation; that is, things that are not yet (future), that have perished (loss), that exceed the scope of our measuring tools (micro/macro), that refuse to be completely known (indifference), etc. This proposal provokes us to ask: should we be thinking about the ways in which sensibility itself shapes, in the sense of constraining, our plans for action towards a brighter energy future?

⁴² The promise of “solar unknowns,” equally a technical as social praxis, in part rests on the promise of infrastructure. “Alternative worlds require alternative infrastructures,” writes Deborah Cowen (2017): “systems that allow for sustenance and reproduction.” Building these solar unknowns into global energy infrastructures is a means of materializing, through infrastructure, a reconfigured ordering of the carbon present.

⁴³ Following Deleuze and Guattari (1987), relationality is not only constituted by assemblages of bodies, but also the rhizomatic connections that have “neither beginning nor end, origin nor

destination [...] always in the middle” (p. 263), throwing into question how (and why) bodies have been individuated and identified in the first place. While we draw on this rhizomatic logic of forces and intensities, we are also wary of the impulse towards “rhizomania,” which co-opts this generative concept and divests it from its most radical political and ethical import (Wallin, 2010). That is, where “rhizomatics” are often mobilized as a mode of recognizing a multiplication of “diverse” identities and/or identitarian subject groups, imperatives for the creation of pluralist subjectivities are not as much radical as they are perfectly optimized for a socio-economic vehicle that requires such post-structural, self-styling.

⁴⁴ We think about ambivalence as one among many modes of being (including sickness, depression, fatigue, clumsiness, awkwardness) which have been cast, in a society in which life is largely organized around the demand for productivity, as the “inability to work” (Berlant, 2007). Indeed, we constantly feel the pressure to resolve ambivalence and ambiguity in order that we may resume being productive members of society. We wonder if ambivalence can be reconceived as a mode of being in the world that is “active” but in a slower, less efficient, more diffuse way (like rays of light going through the atmosphere).

⁴⁵ We have a glitch in transmission. We are, as yet, unable to capture and make meaning of the unwieldy realities of climate change, raising difficult questions about energy futures. Being in and with and of the ongoing ecological crisis, we collectively perform and embody what we cannot yet articulate so as to dilate what is deemed possible in the first place.

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