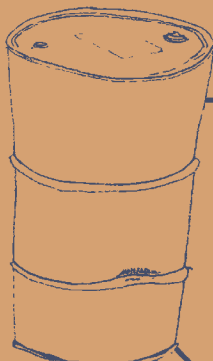


PETRO- SUBJEC- TIVITY.

Brett Bloom

De-Indus-
trializing
Our Sense
of Self

OIL



FOOD

Oil is used in harvesting, transportation, and composting.

ENERGY

FOSSIL FUELS

FOSSIL FUEL DEPENDENT

These sources are only possible if made with cheap fossil fuels, steel, aluminum, and an enormous amount of waste that is left in poor countries so wealthy ones "look clean." Not enough resources for everyone on Earth to have them.

biofuels

solar

hydro

wave

wind

geothermal

TRANSPORTATION

WORK

COMMUTING

HEALTH

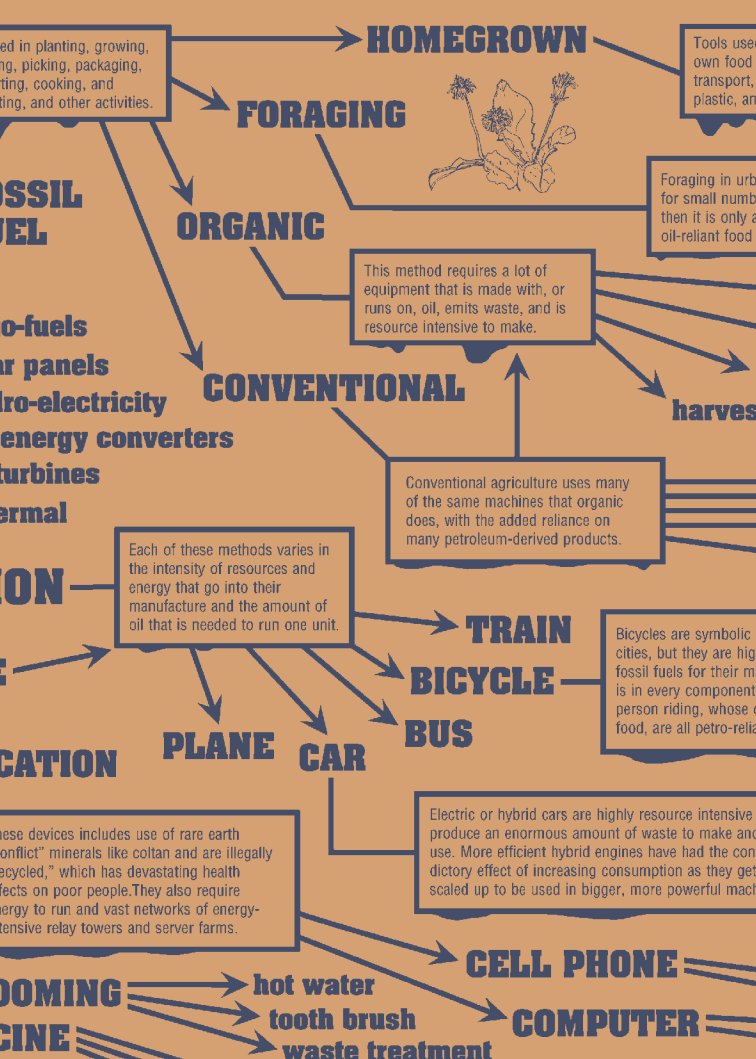
COMMUNICATIONS

We ingest, rub on our bodies, inject under our skin—in attempts to heal ourselves—items that are made directly from oil derived chemicals or made using oil or other forms of cheap, wasteful energy.

The "clean" energy industry is still heavily dependent on fossil fuels.

SHELTER

**AGRICULTURE
MEDICINE**



FOSSIL FUEL DEPENDENT

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SHELTER

GRO
MEDIC

CLOTHING

Every item we wear has oil in it or its production.

hat

shoes

raincoat

shir

plasticsphere

mass extinction

ENVIRONMENT

je

PETRO-SUBJECTIVITY.

De-Industrializing Our Sense of Self

This method requires a lot of equipment that is made with, or run on, oil. Its waste and its resource intensive to make.

Each of these methods varies in the intensity of resources and energy that go into their manufacture and the amount of oil that is needed to run one unit.

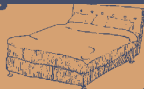
...of the same machines that game discs, with the added reliance on petro-burn-derived plastics.

Bicycles are symbolic of cities, but they are highly resource intensive. Every component, from the tires to the seat, are all petro-reliant.

Electricity, hybrid cars are highly resource intensive and produce a notorious amount of waste to make and use. More efficient hybrid engines have had the contradictory effect of increasing consumption as they get scaled up to be used in bigger, more powerful machines.

Western houses are extremely resource intensive and are filled with thousands of petroleum infused consumer goods.

heating
bedding



bio-fuels
solar panels
hydro-electricity
energy converters
wind turbines
nuclear

CONVENTIONAL

TRUCK

PLANE

CAR

TRAIN

BIKE

BUS

TELEVISION

COMING

LINE

ING

hot water

tooth brush

waste treatment

CELL PHONE

COMPUTER

cont



t
n
lification

**Our current
sense of self
is no more
sustainable
than our
current use
of energy or
technology.**

— **Derrick Jensen**, *Endgame*

Brett Bloom

PETRO- SUBJEC- TIVITY.

Breakdown Break Down Press
June 2015

De-Indus- trializing Our Sense of Self

The human psyche naturally rebels against the idea of its end. Likewise, civilizations have throughout history marched blindly toward disaster, because humans are wired to believe that tomorrow will be much like today — it is unnatural for us to think that this way of life, this present moment, this order of things is not stable and permanent. Across the world today, our actions testify to our belief that we can go on like this forever, burning oil, poisoning the seas, killing off other species,

pumping carbon into the air,
ignoring the ominous silence of
our coal mine canaries in favor of
the unending robotic tweets of our
new digital imaginarium. Yet the
reality of global climate change
is going to keep intruding on our
fantasies of perpetual growth,
permanent innovation and
endless energy, just as the reality
of mortality shocks our casual
faith in permanence.

— **Roy Scranton**, *“Learning How to Die
in the Anthropocene”*

Consider the structures on which [our society] has been built. Its foundations are geological: coal, oil, gas — millions upon millions of years of ancient sunlight, dragged from the depths of the planet and burned with abandon. On this base, the structure stands. Move upwards, and you pass through a jumble of supporting horrors: *battery chicken sheds; industrial abattoirs; burning forests; beam-trawled ocean floors; dynamited reefs; hollowed-out mountains; wasted soil.*

Finally, on top of all these unseen layers, you reach the well-tended surface where you and I stand: unaware, or uninterested, in what goes on beneath us; demanding that the authorities keep us in the manner to which we have been accustomed; occasionally feeling twinges of guilt that lead us to buy organic chickens or locally-produced lettuces; yet for the most part gluttoned, but not sated, on the fruits of the horrors on which our lifestyles depend.

— *The Dark Mountain Manifesto*

Petro-Subjectivity

Petro-subjectivity is something that each of us experiences constantly. It is a sense of self⁰¹ and the world that shapes

who we are and how we think. It stems in part from the fact that the use of oil is present in every thing we do. It has shaped the concepts that govern our thinking. Our use of language and the basic concepts that structure our existence are breathed through the logic of oil relationships and form the metaphoric universe we bathe ourselves in when we speak to one another about who we are, what we do and what the world around us consists of.

The groundbreaking book *Metaphors We Live By*, by **George Lakoff** and **Mark Johnson**, gives us a way to start to think about how deeply engrained oil use is in our language and conceptualizations of the world:

The concepts that govern our thought are not just matters of the intellect. They also govern our everyday functioning, down to the most mundane details. Our concepts structure what we perceive, how we get around in the world, and how we relate to other people. Our conceptual system thus plays a central role in defining our everyday realities. If we are right in suggesting that our conceptual system is largely metaphorical, then the way we think, what we experience, and what we do every day is very much a matter of metaphor.⁰²

In Western culture we conceive of the future as something that is ahead of us and the past is something that is behind, both physically and metaphorically. Our metaphors are based on our direct experience of reality, and we understand them as having a truthful content. What we need to understand is that our metaphors are acculturated. Other cultures conceptualize time differently, like the Aymara people, of South America, who see the past immediately in front of them, with the future being something they cannot see and therefore conceptualize as approaching from behind:

*Contrary to what had been thought a cognitive universal among humans – a spatial metaphor for chronology, based partly on our bodies' orientation and locomotion, that places the future ahead of oneself and the past behind – the Amerindian group locates this imaginary abstraction the other way around: with the past ahead and the future behind.*⁰³

We take as a given that the future is somewhere ahead, but it is truthful only in as much as it is meaningful to us. Metaphors are powerful and they are buried deep within our language and how we relate to the world. A common saying in our culture is, "Time is money." **Lakoff** and **Johnson** say this about metaphors of time:

*When we are living by the metaphors LABOR IS A RESOURCE and TIME IS A RESOURCE, as we do in our culture, we tend not to see them as metaphors at all. [B]oth are structural metaphors that are basic to Western industrial societies.*⁰⁴

These metaphors become truthful because industrialization has shaped and formed our daily schedules in profound and definitive ways. We work long hours doing the same things over and over again with very little time to ourselves that is not part of participating in and keeping up with industrialized society. We should add to this understanding of time—and its high regimentation and importance in industrialized society—the all pervasive presence of oil (and other fossil fuels) in our lives. Oil shapes our daily experiences to such a great extent—even more than industrialization does—that we take them as normal and truthful of how the world is, rather than as a condition which is historically circumscribed and will not persist. Oil use gives us a metaphorical, conceptual relationship to the things we do. An example of a metaphor that reinforces our petro-subjectivity is: “This is nothing but flyover territory.” This statement is one of a city dweller talking of his travel between major cities by airplane. What it reveals is a practiced lack of concern for not only the people and the culture that exists between major cities, but also the landscape, the creatures, plants, and systems that also exist there. The speaker’s hubris reveals a highly human and individualized perspective. It has a truth value to those whose world is focused on the narrowness of urban living. There could not be a more important thing to a giant city than vast rural spaces outside of it that provide it

with everything it needs to function. It is important to note that some of the metaphorical relationships oil creates are not spoken at all, are not translated into language, but are instead spatial, experienced as abstractions of where we are that give shape to the ontological base for generating statements like the one above. Our ontological understanding of the world is permeated by these relationships.

You cannot come up with one aspect of your life that is not impacted by the use of oil. Any thing that you can possibly think, say, or do, is impacted by oil to some extent however small or large. A powerful metaphorical and conceptual order structures your thinking and actions about everything you experience and it is related to oil use. The influence and formative presence of oil in our lives is something we accept with little regard. My awareness of it has in part emerged from a growing frustration with the ways in which humans respond—or mainly do not respond—to climate breakdown.⁰⁵ I am daily haunted by questions of how to address and prepare for climate breakdown. I harbor deep frustrations that humans collectively continue as if the planet and our survival are not in grave danger. Why do we act as if nothing is wrong when we see destruction, feel the loss of species in our midst, have overwhelming evidence of the collapse of ecosystems, and hear daily the horrors of the havoc of coming decades and centuries? Perhaps we have no capacity to understand what we

are facing as our senses and intellect are so severely atrophied under the weight of petroleum fueled relationships. The main problem is how we relate to the world and the ways we see the world and are not tuned to receive the damage, let alone the tremendous loss as we continue thinking the world through oil relationships. Another factor to consider is that oil use makes our daily spaces, our routines, our repeated consumption, dull, repetitive and more or less predictable; it smooths the texture of our lives out so there is nothing unexpected or wild. When we see no variation in this ordering of everything immediate to our existence as consumers we do not register more important changes happening at a larger scale.

The conceptual, and perceptual, order that is shaping our understanding of the world creates all kinds of problems for us in preparing for the chaos of climate breakdown. I think that understanding it will help us to work to remove it. It is so familiar and comfortable that we refuse to step out of it. It is a precondition that is in place before you take any position on the matter of climate breakdown. This is the case in as broad a continuum imaginable, from that of "climate deniers" and their fearful ignorance about the destruction happening all around them, to that of "anarcho-primitivists" and their calls for accelerating the collapse of civilization. It is a uniting condition that impacts everyone from doomsday prepper to permacultural guru; there is no privileged or correct

vantage point from which to look at climate breakdown. This pre-conceptualization undergirds and gives structure before the formulation of a single thought, hope, or heart palpitation. You are born and will die with this precondition. It modifies and lays all the ground for the actions you take. It is in your food, your housing, your health care, your sex, your thoughts, literally everything. The most important thing to understand is that it creates and orders your capacities for relating to things. And most attempts to solve climate problems end up repeating the same logic, rather than work against it.

This precondition is your, our, everyone's, "petro-subjectivity." It is the presence of oil in your sense of the world and self. The conditions oil (fossil fuels) creates, through massive accretions of habit and influence from great to small, repeatedly over the course of seconds, minutes, hours, days, weeks, months, years, generations, in all of us gives immense force to our collective subjectivity. We repeat this collected totalizing gestalt of relationships every moment of the day, by ourselves and with others. I have been describing this precondition, the order of metaphorical relationships to the world, as "petro-subjectivity" for lack of a better term or way of thinking about this problem. I am someone who has been trained to look at and interrogate the visual evidence of the world and this has powerful lessons for those who spend years paying close attention to the ways in

which things look and how this can tell us an enormous amount about what produced them. Once you start seeing the role oil has in generating everything, you will be struck by the pervasiveness.

Petro-subjectivity is in place well before you ever self-identify as something else like Christian, atheist, socialist, environmentalist, or other ideological decoration. These positions only reinforce to greater and lesser extents the way your life unfolds. I was discussing this recently with an artist I respect and admire and he suggested that the Enlightenment was to blame for instilling in us relationships of detachment to the world outside our rational brains. I wrote to him that I do think that the Enlightenment, which gave us what we have seen to be truly destructive nonsense of things like Cartesian dualism of the mind-body split, is an accelerant in our destruction of the planet, but it is only an ideology amongst others. Oil and its use would have been discovered by humans without the Enlightenment just as printing on paper, geometry, astronomy, and other important human achievements were. Oil does something profoundly different than ideology. It restructures our relationships and capacities to perceive. Oil produces our daily lives, our daily selves, our daily communities and everything else in a primary way. It has a definitive role in forming understanding of self and relation to the world and others. It starts the moment we are born, as even our birth is heavily reliant on oil. Our

subjectivities are suffused with the influence of oil so much so that nothing can be done without relating to it. Oil produces the conditions of thinking, feeling, and being. It orders relationships to other people, landscapes, and non-human things. You enact this sense of self even if you never give it much consideration. Writing and reading these words are an enactment, a reinforcement, of petro-subjectivity, as they were written on a computer and later printed and shipped to where you received the printed copy, or maybe you downloaded the PDF or ePub.

It was not until I was well into my fourth decade of petro-subjectivity that I could begin to be able to see and articulate this, to develop my own perceptual skills, aesthetic analysis and cognitive capacity to gather enough evidence to make arguments and reflections about this situation. It is so basic to how you and I are in the world that we do not pay attention to it. Petro-subjectivity is more natural, more normal to us than the things that we really need—that is, a healthy, functioning global ecosystem—that we destroy to get it. We need to learn how to pay attention to how we enact our petro-subjectivity and what it unleashes.

This essay is an investigation of what petro-subjectivity consists of, the visible and invisible evidence all around us and how we can work to unravel it. This will take a long time, perhaps generations. It is not a benign subjectivity, something we can just make



green and everything will be okay. Putting up solar panels or windmills, or eating organic food, enacts the exact same kinds of relationships that pumping oil and burning it in combustion engines does. This is because these things are reliant on the heavy use of oil and the same kinds of relationships oil enables; this is a direct example of how we think through relationships we know through using oil and then apply them to other situations thinking we have found a solution. This is petro-subjectivity at work. Renewable energy—what I think is more appropriately called “fossil fuel dependent energy” which I will get to below—is a perfect example. An enormous amount of waste and emissions goes into making windmills or solar panels. Because these devices do not make waste when they are making electricity next to our homes, we think we have found a solution rather than shifted what we are paying attention to. What this demonstrates is that we are used to waste and destruction happening elsewhere, like mountain top coal removal, and consuming it with the appearance of freedom from any problems associated with it. This is a staggering cognitive disconnection from what is happening and what we want to think of as happening. This is how perverse petro-subjectivity is once we start paying attention to it in this way. Petro-subjectivity is a fundamental way of relating to the world—it is a totalizing gestalt of uncountable accretions of micro-relationships that ooze into each other to

produce a unified field of perception. It so thoroughly erases our ability to see its omnipresence that we do not even recognize it or think it is odd that it is in all things we do. We have an incredibly difficult time thinking and being otherwise. We have no imaginary for exit as we have so little theorization of the problem itself or practice thinking without it.

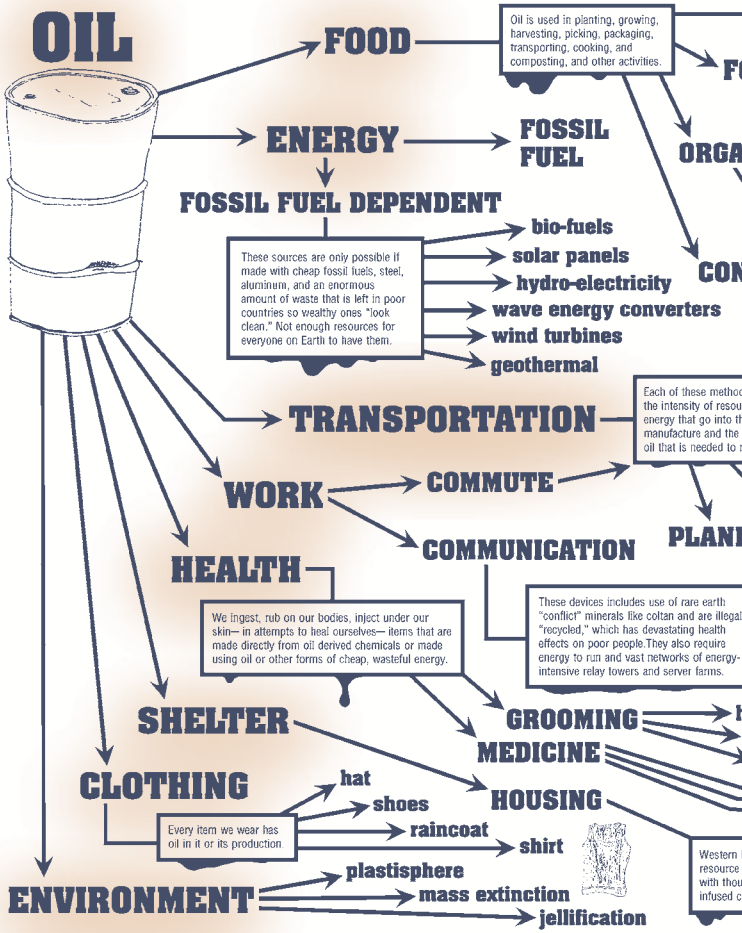
We know that oil will run out or become way too costly to produce—both in terms of the amount of energy that is put in to accessing hard to reach or energy-intensive sources and the ecological risks and costs of removing these materials.⁰⁶ We do not know exactly when this will happen; we hear regular broad predictions of collapse and contraction. The fact that oil will run out—or that continuing to use it or other fossil fuels exacerbates climate breakdown in unbearable ways—means we should prepare on as large a scale as possible for abandoning it. And what we should be preparing ourselves for is not trying to translate our current situation into a lighter facsimile for the future, a “greener” version of our current lives. According to economics professor **Michael Greenstone**, if we were to use the current available reserves of gas, oil, and coal, our planet would heat up over 16.8 degrees Fahrenheit, an enormous amount over the target of 2 degrees.⁰⁷ The transition needs to be just as “apocalyptic” as the many systemic breakdowns that are threatened by extreme human overrun and overreach. We are, and will be, confronted with things

that will radically alter the world in ways we cannot control. We need to prepare a culture to respond to this challenge one that comes from care and respect for all things that include landscapes, non-human entities, and people, especially those who have been historically suppressed, enslaved, and made miserable by the current dominant global culture. We need to radically rethink how we relate to the planet and each other. Things have to dramatically change, and this will probably be uncomfortable, and emotionally difficult. Governments and their militaries are certainly preparing for climate breakdown.⁰⁸ In the U.S., far right wing "preppers"⁰⁹ are a particularly unnerving individualist, well-armed, libertarian response. In Europe, the dramatic and frightening rise of right wing, racist nationalist parties must be seen in relation to an increase in migration due to wars that are over oil, access to natural resources, and influence that keeps western countries living at the standards they are accustomed to. The welfare state in Europe is thriving on climate breakdown, and the misery it creates, while at the same time it generates stricter rules for denying its victims access to the fortified good life. ►

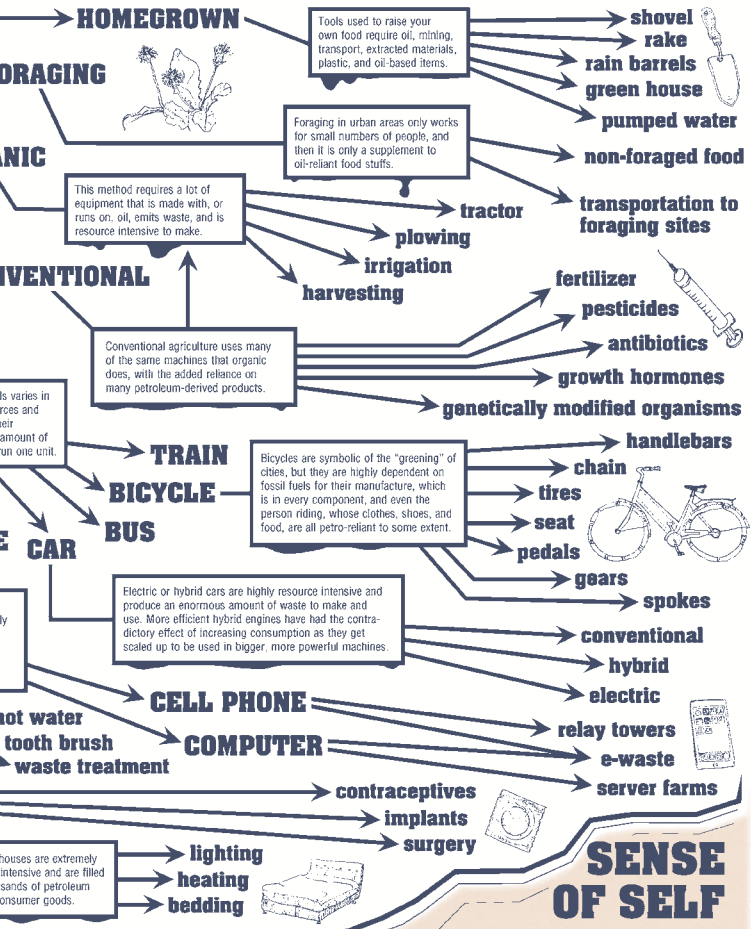
**The Oil
Betweeen
Your Fars**

Oil is natural in the sense that no one put it there in the ground: it is the result of natural processes, the arrested decomposition of plant and organic matter over millions of years. And yet everything that is done with it—the pumping, the refining, the grading, the distribution, the use in transport, manufacture, heating, the generation of electricity—is full cultural. Oil is a natural element—and one that has a history. What's more, its history, at least over the last two hundred years or so, is inseparable from the history of the advance and development [...] of modern industrial civilization.

— **Allan Stoekl**, from his
Foreword to Oil Culture¹⁰

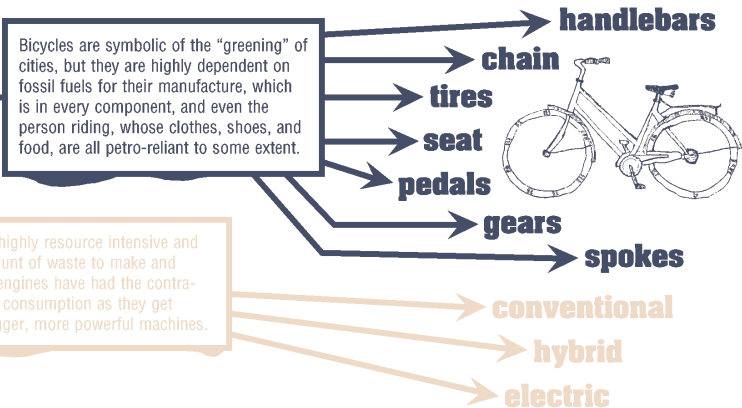


A full-size, high resolution, printable version of this map is available



One way to register the pervasiveness of oil in your life is to sit down and think through all the ways in which it impacts you. You can make a map of these relationships like the one pictured above.¹¹ This map only tells a small fraction of the story when a much more detailed and nuanced account is possible; each node on this map—food, energy, transportation, work, health, shelter, clothing and environment—could be the center of its own inexhaustible mapping exercise. I do this kind of mapping regularly. It helps me to more easily visualize how oil permeates all our activities. What this map shows is various aspects of a life and how they interrelate. They all either depend on oil in their manufacture or in how they operate and come into our lives. When you look at this map and think about how oil impacts your life, please give consideration to how many of these things others do for you and how much you do for yourself.

A good example for us to consider is a bicycle as it does not directly need fossil fuels to run; it does not burn oil derived products for its locomotion except indirectly. Every component of the bicycle needs various levels of petroleum to make the parts, or energy to assemble the parts, or to ship them to where you live. You could not have a frame, wheels, gears, lubrication, brakes, lights, spokes, seat, chain, locks, baskets, handlebars, handgrips, or any other part of your bicycle without a large amount of fossil fuel use—it is a fossil fuel dependent technology.



Even when you go and ride your bike, the food you have eaten, that gives you energy, is also produced with large amounts of petroleum inputs at multiple steps in its production and reception. Bikes are highly symbolic cultural artifacts; many cities around the world have created bike lanes to give the appearance that they are addressing climate breakdown. I am an avid biker and prefer bikes to cars whenever possible. However, even if bikes were the only vehicles in all the world's cities, it would sure feel good, but the waste needed to produce 7 billion bikes for all the world's people would be incredible. ►





▲ Workers on a barge extracting bikes from canals in Copenhagen, Denmark. PHOTO: MARK KLASSEN, 2015.

◀ Piles of abandoned bikes are a common site in Copenhagen, Denmark. PHOTOS: BRETT BLOOM, 2015.

The city where I live, Copenhagen, brands itself as the greenest city in Europe, if not the world with fantastical claims of being carbon neutral by 2025. One regularly encounters heaping piles of bikes that have been abandoned, stolen, or just forgotten by their owners. They line the streets, fill the canals, and are a quiet gluttony that plagues the city. These piles for me are a symbol of the culture of overconsumption that runs rampant while trying to convince itself it is green, more delusionary non-solutions induced by thinking the world from a petro-subjective vantage point. There is a deep disconnection between the tremendous amount of waste the bikes actually are and how they function symbolically in a way that does not reflect this at all.

When it comes to food, there certainly are some methods of raising it that are less oil-based than others. Even an activity like foraging involves oil. It either includes oil in the transportation to get to a place where you can forage, or it comes in the form of the other food you have eaten to be able to do the foraging close to home (walking and collecting). It is nice to make a dandelion salad or to pick nettles for a soup. Try finding enough to live on for an entire year in the area where you live, and for a family of four. Copenhagen is a small city packed with half a million people. I could spend a lot of time harvesting these things and maybe could sustain myself on them for a while. Having a balance of nutrients though



would not come from these plants alone and maybe I could gather nuts and fruits, kill some birds, and find food to sustain myself. An enormous amount of my time and energy would be given to this activity and I would probably not be able to work a job to pay for an apartment and all the other things I would need to stay in the city. If everyone in a large urban center decided to forage like this, it is hard to imagine that this activity could sustain more than a very small number of people until the food was all gone and the very act of foraging was destroyed in that place. I also worry about the high amounts of pollutants that would be in an urban based diet, poisons that come from fossil fuels in the air, dumped on the ground, or spilled regularly from all manner of machines and human error and neglect.

In addition to making maps, I also find it useful to talk out or write down the ways in which oil impacts my life. I live in a building in Copenhagen that was built over 100 years ago. The labor and machines to make it were not reliant on oil or other fossil fuels to the extent to which the building currently relies on these things. The new double paned windows sitting in their aluminum frames, which I look through onto the teeming street life that swirls around our inner city Scandinavian apartment, are more efficient, and we are happy for them. They are not the original windows that came with the building. They do give pause and provoke reflection on their origins. We are

not just looking out windows, but through the oil that made the windows possible, that ran the machines to process the aluminum, extrude the glass, and get them to our flat. The oil, though made invisible, is absolutely necessary for me to have the window or the view at all.

Our building is sufficiently insulated for the Copenhagen winter, but only in direct relation to the costs of heating it, which is reliant on the gas being abundant and affordable. If the gas were not cheap, then it would be a disaster to us economically. For now, the environmental costs of this "cheap" gas are externalized and impossible to see directly as the gas is pulled from the North Sea far from our little flat. The walls in our flat are not as thick as they could be to reduce our energy consumption dramatically, and to even further reduce reliance on consuming large amounts of gas. We heat our flat with the radiated heat produced from burning gas. The metal radiators that transmit the heat were made with oil and other fossil fuels. The natural gas that is burned to heat the water running through the radiators has been extracted from the ground and its burning adds to the growing carbon overload of the biosphere. A sunny comfortable afternoon in the winter involves being bathed in all kinds of burnt things from the ground. Even in the summer, as I write this, and think about how to convey the oily sheen everything has, my comfort, my sense of well-being is so deeply

dependent on oil that is gives me a tremendous amount of anxiety.

I am sitting in my living room looking around at my domestic lifeworld. I sit on a second hand, fake leather couch, plastic, a petroleum product, as I type these words on my computer. This infernal machine is made of many nasty things including oil and aluminum, rare earth minerals (tantalum, tin, tungsten, gold, lithium, lanthanum, neodymium and many others), and a good deal of pollution, both in its manufacture and in its ongoing use, and if I am honest, its future as a hunk of scrap or waste that someone far away risks their life to dismantle. The tank top I wear—50% organic cotton, made in Bangladesh—cloaks me in oil and exploitative labor relationships. Does the half-organic cotton make up for the low wage misery and enduring pollution that Bangladeshi workers must endure to provide clothing for Westerners? This is the logic and process of oil use. The closer I look, the more apparent this invasive relationship becomes.

I go to the kitchen and open up my refrigerator. The organic grapes I grab are in a plastic container and were raised in Spain. I have watched documentaries on Danish public television that have chronicled the miserable, nearly slave-like, working conditions for North African migrants in Spain. More oil gets burned in the raising, transporting, packaging, and delivering, of the grapes to the store where I pick

them up. The soy milk I put on my cereal comes from a totally different landscape. I can only speculate about how far away it is, maybe Brazil, maybe the United States. The relationship of the production to the consumption of the soy is completely cut off. I fill my belly with these abstractions. I eat heaps of metaphors and abstractions along with every bite of food. This must impact the way I think about—or cannot think about—the world and my relationships to it. I do not see where my food comes from. It all aggregates effortlessly and conveniently so I do not have to think about these things at all. I just walk down the street and shop not thinking about the consequences of anything I do.

There is an enormous amount of violence in the production and consumption of things that sustain our lives. In his book *Empathic Civilization*, **Jeremy Rifkin** reflects on the scale of this violence:

*No other creature has left such a destructive footprint on the Earth. Cultural historian **Elias Canetti** once remarked that “[e]ach of us is a king in a field of corpses.” Canetti said that if we reflected on the vast number of creatures and Earth’s resources each of us has expropriated and consumed in the course of our lifetime to perpetuate our own existence, we would likely be appalled by the carnage.¹²*

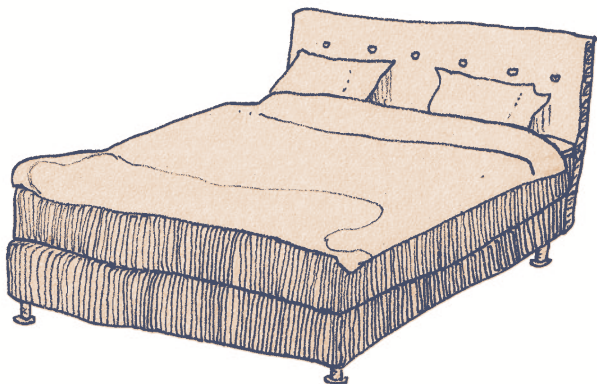
It is sadly not a surprise or shocking to us to hear that slavery, or near slave like conditions exist for those producing our organic food. We are used to hearing about the slavery it takes to make our clothing, iPhones and computers, sneakers, t-shirts, and most goods we consume. The use of oil has increased our reliance on slavery and the use of energy that is abusive, violent, and ultimately destructive to our collective existence. **Derrick Jensen** in his book *Endgame* writes of the violence Western, oil-based society is based on. He mentions an idea by author **William Catton** of the notion of “ghost slaves.” Jensen writes, “A ghost slave would be the equivalent to how much energy one human would spend in one day (that 2,000 to 3,000 kilocalories **Catton** mentioned).”¹³ He goes on to state that each of us uses the equivalent energy of ten “ghost slaves” per day. What this means is that we no longer rely—as we did for millennia before the current era—on the calories that our bodies can produce from eating and metabolizing food raised in a sustainable and endlessly repeatable manner from our local area, our land base, but that we rely on the energy of extra bodies taken from other landscapes.

Our cities and our lives within them are defined by oil. Oil mandates the performance of routines we carve out in the places we live—from what and how we hear to the way seeing is delimited and impoverished. The infrastructure that bolsters and

shapes our daily excursions and movements demands reliance on oil and a repetition of its many layers of logic and metaphorical resonance. Cars and trucks and buses can move rapidly down the paved streets. These monsters sputter and spurt their innards until the streets are stained with countless spills and spits of gasoline, lubricants of all imaginable mixture, motor oil, anti-freeze, windshield wiper fluid, spray wax, exhaust, tire marks, broken off pieces of plastic and metal, giving the entire agglomeration of interlocking micro-textures of asphalt and concrete its slimy pollution capturing sheen. Spaces like streets or sidewalks are hard, do not let water through or let plants grow. They minimize and abolish the healing green spaces we need to feel calm and settled. We have to flow smoothly like the machines burning oil. Everything must move smoothly for it all to keep going. Any friction, texture, and wild complexity, is abolished; no space is made for it. We do not think of our cities as places for wild encounters. It is made to keep them out and for order to shape and control our lives.

Oil continues to penetrate ever more deeply into the intimate spaces of life. In 2005 nearly 10% of all new people in Europe were conceived in an IKEA bed—one can only imagine that this has increased as the conglomerate sets up outlets in more and more locations annually. This is troubling given the company's reliance on selling cheap items that are



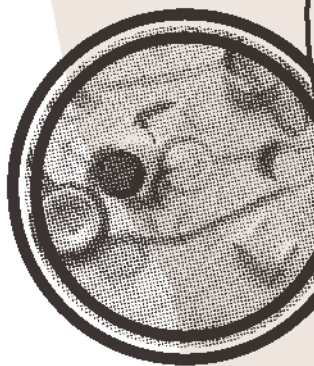


▲ Ikea bed. ILLUSTRATION: BONNIE FORTUNE, 2015

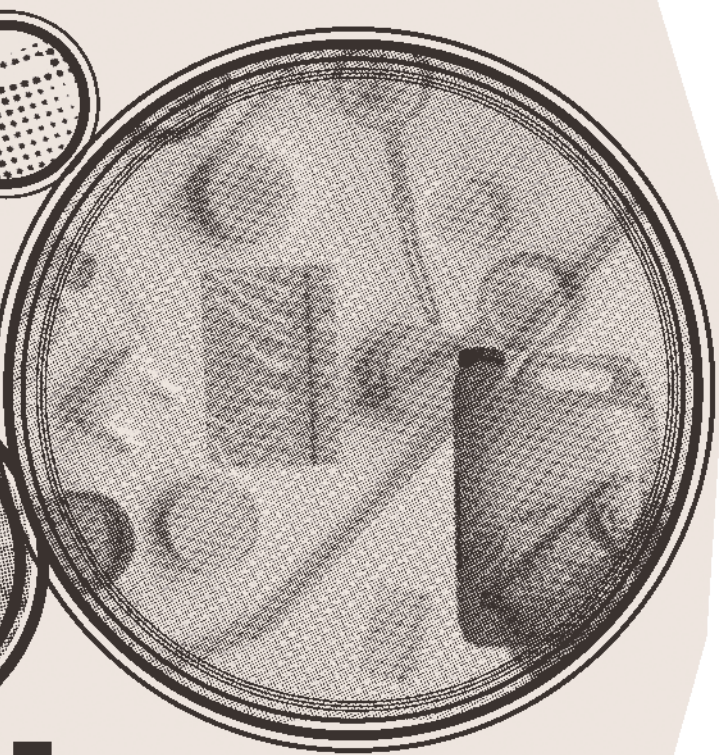
regularly disposed of so people will continue to buy more. This is the main concept: you know it is cheap and will last a short time, but you are also excited that you will get to buy a replacement for it not too long after. There is a place to recycle all kinds of materials in the courtyard of the building where I live. The large number of IKEA products that one encounters in the big bins here is staggering. People jettison entire apartments full of IKEA products when they move because they are excited to replace them with cheap, new ones. Even if your bed does not come from this store, it is still laden with oil at every step of its life.

P

is for...



Plastisp



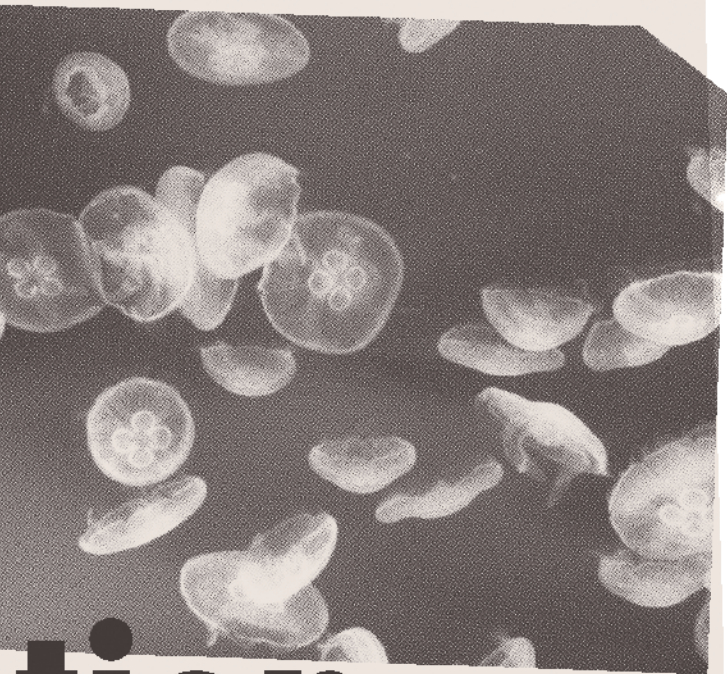
here

J

is for...

Jellifical





tion

PREVIOUS PAGES

Alphabet of the Anthropocene:

P is for Plastisphere

J is for Jellification

BONNIE FORTUNE & BRETT BLOOM, 2014.

Jellification of a sea happens when fish stocks are overfished and natural predators of jellyfish are diminished, sea acidification is high from the absorption of too much carbon, and runoff from farms causes depletion of oxygen, all of which create massive jellyfish blooms that have a further devastating impact on already severely damaged seas.

I am a sucker for the books, films, blogs, of people who give advice on living waste free lives and that seek to have no impact on the planet with their presence.¹⁴ How does the production of books, blogs, films and the consumption of all of these things that make these folks money figure into their “no impact” lives? Even if you were to find a way to be like these folks and to completely unplug from all of the things you regularly rely on, you would still have to live with the activities of others. You would breathe the fumes from their cars and the tiny particulates that permeate city air. Human oil waste materials are found in every part of the globe including near space. Our reach has been total, you will have to suffer the activities of others who are not going to change with you and your eco village, or off the grid house, which should be becoming more clear, are not free from oil either. The term “**plastisphere**”¹⁵ has emerged from the ubiquitous presence of plastic in our oceans and how it is creating bizarre relationships between microorganisms, small animals and plant life. Small fish and mollusks are eating the plastic. They in turn are being eaten by larger creatures that enter into the food chain of still larger animals, including humans. We have all seen the maps of the giant plastic gyres found in the most remote oceans of the world or the gruesome images of dead albatrosses with stomachs filled with ingested plastic. Our garbage travels much more easily than we do. Factory emissions

from China are pulled up into the jet stream and carried to the coast of California and are partially to blame for increased thyroid cancer in children. Predictions suggest that another tsunami, or earthquake, hitting Fukushima would push the damaged nuclear reactor into the sea effectively killing the Pacific Ocean. An individualistic response to climate breakdown is the height of arrogance and irrelevance. It is a perspective that comes from thinking oneself a consumer and how to be the best consumer, not a radical agent. We do need to feel good about our lives and to reduce the harm that a petroleum-based world has on us, but not to the distraction of fighting back its invasiveness on a scale that confronts global problems. We need to put that energy towards collective action and culture.

All of these relationships we have to oil, its consumption and the production of our lives, makes us who we are, how we relate to the world, how we think the world. You may think you are an individual with the attributes of freedom, free will and a host of other nice conceptions, but this is incorrect and fantasies that distract from closer attention to how your very understanding of everything is prefigured for you. You are an individual, but your life depends on taking the resources of another landscape and using those things in the one where you live. It relies on the consequences of getting a lot of something for almost nothing and the costs being abstracted and

obscured. Your relation to where you live, how you interact with others is a giant abstraction brought on by the dual factors of your petro-subjectivity and life and the creation of what I call the **Petroleum Space / Time Continuum**¹⁶ and all the ways in which it abstracts your life. It reinforces your subjectivity at every point in your day. There seems to be no way not to exist in it without an enormous effort to take it apart. ►

Renewable

Energy is

Profit

W hat is referred to as “clean energy” has a lot of hidden externalities—those things that make it not clean at all. It is important to ask what the cost of this energy

is if you use it to power your city, your home, your landscape. You would be unwilling to pay the high price of toxic waste that someone, some landscape, must bear on your behalf so you can be clean. People who have the choice to consume something like “clean energy” would also have a choice to move away from the deadly, destructive, polluting processes that produce their energy. Not everyone has that choice; it is a privilege to have the choice to live near “clean” energy and away from the pollution that made it. It looks extremely grim for those who live near place that process materials like neodymium an important rare earth mineral used in making the magnets in wind turbines (it is in your computer too). The processes to make neodymium are toxic. The waste gets dumped into the communities of poor people in cities like Baotou, China. There, a company processing it was putting all the waste into a pond behind the factory. The impact on the local community is horrifying:

Dalahai villagers say their teeth began to fall out, their hair turned white at unusually young ages, and they suffered from severe skin and respiratory diseases. Children were born with soft bones and cancer rates rocketed.¹⁷

This cannot be considered clean by any sane person. We need to stop calling these forms of energy production "renewable" and refer to them as what they really are "fossil fuel dependent." At best this is euphemistic for the destruction that occurs particularly in making magnets for windmills. The article does not cover the waste generated in first harvesting the materials, and then forming them into windmill blades and towers. Many windmills situated on land are connected by concrete roads for easy access adding to the amount of waste and destruction of rural lands they are responsible for. We must ask questions of all forms of fossil fuel dependent energies. Solar panels are equally toxic, have destructive externalities, and in no way are a solution for the future. As an article from *National Geographic*, almost apologizing for knowing how bad solar panels are to produce, states:

*Fabricating the panels requires caustic chemicals such as sodium hydroxide and hydrofluoric acid, and the process uses water as well as electricity, the production of which emits greenhouse gases. It also creates waste. These problems could undercut solar's ability to fight climate change and reduce environmental toxics.*¹⁸

One enormous problem of petro-subjectivity is the way it guides our thinking, the logic we use to solve problems. In an attempt to leave the fossil fuel society behind, we are turning to the highly distracting non-resolution of fossil fuel dependent energy. Making solar panels and wind turbines is a narrative that looks and feels really good and gives us the sense that we are doing something constructive to get ourselves away from reliance on oil. However, these items are

resource intensive, can only be made with oil use, and give us a false sense that the ways we organize our lives is not the true problem that we need to address. Our petro-subjectivity is a factor in thinking that these sources of energy are a solution; we cannot help but apply the same destructive logic. Petro-subjectivity clouds our thinking. Solar panels and windmills are made from materials that can only be processed affordably with the use of cheap energy. Many of the materials that go into them are no longer available in sufficient quantities to make solar panels and windmills for everyone. The emissions to make the concrete, steel, aluminum to make solar panels and wind mills to meet everyone's current energy needs would be devastating.¹⁹ They are based upon the same relations to resource extraction and the destruction of place that using oil is. It is the same logic. They displace the pre-existing landscape, fauna, and ancient relationships spanning millions of years, filling it with big hunks of metal that do not relate to place in a beneficial way, but seek to impose and take, that is, remove many things from it.

A wind farm produces multiple acts of violence and removal. It takes energy from one place and gives it to another. This is not benign. The wind has things to do, things it has been doing for a very long time, and is not just a local expression, but is interconnected to larger wind and weather patterns. What is the agency and right of the wind to do what

it will? Why does it seem odd to ask such a question? Windmills do not let the wind do what it does and all the relationships that rely on the wind. Windmills take the self-organizing agencies away from the terrain replacing it with a simplistic, selfish, one-way, and exceptionally short term activity. There is no reciprocity in a wind mill. It is a giant knife that cuts up the wind into parts to take elsewhere. They take like a miner takes a seam of coal. It just does not look as dirty where the taking happens. The windmill takes lives and it takes beauty; it takes habitat and nurturing away. You probably immediately thought that the lives taken were human lives, which reveals a lot about what gets valued in the relationships I am describing. That bats and birds are not valued equally as human lives is creating tremendous problems for us in terms of pest and disease control, biodiversity retention, and other important factors in having healthy places that we coexist with. Another way to put this is that if you do not value the things that nurture you and keep you healthy, your life will in turn degrade. There are those arguing for wind mills that tell us that they kill less creatures than a high rise building made of glass and steel as if this brings comfort or is in any way morally justifiable. Why do we not then turn the argument into one of getting rid of, or ceasing to build, such structures? What are the lives of thousands of beneficial creatures and a healthy landscape where energy is produced

in comparison to my need to charge my iPhone and scroll through Facebook as I walk the dog?

Petro-subjectivity is human-centered thought and only benefits people. It helps enact all kinds of violence. And that violence is present in current forms of renewable energy. The emissions from producing wind turbines and solar panels are foisted on some other bunch of people far away who must live with polluted air, toxic waterways, diminished life expectancy, tumors in their children, decimated landscapes full of carcinogens. The energy to mine, process, and transport the steel for a windmill alone is incredibly destructive. It adds to our collected emissions—fantasies of carbon neutrality never take into consideration the people that must suffer the continued pollutions of those wealthy enough to purchase such a thing as a windmill. The windmills kill birds and bats and have been shown to impact ancient migratory flight patterns developed over millennia. Batteries of windmills are horrible to look at as opposed to a forest or open sea. They steal the beauty, the energy, the intact wholeness of one landscape to fuel, preserve, and produce these things in another. They are shortsighted as they have an incredibly short life lasting for no more than one to four decades without overhaul.²⁰ They also require heavy infrastructure of access roads and sometimes massive concrete bases to keep them from falling over in especially strong winds. This is the logic of

coal, oil, of destruction. This is petro-subjectivity. It is not sustainable. It is not renewable. It is theft.

Violence in fossil fuel dependent energy can come in ways that get very little scrutiny and have not entered the consciousness of a larger public. The state owned Swedish energy company *Vattenfall*, one of the largest generators of electricity in Europe, is a good example of how the deployment of wind mill installations can enact other kinds of violence in addition to the ways they mask ecological problems of their manufacture. *Vattenfall* is establishing wind mill installations in an exceptionally windy part of northern Jutland, the big peninsula in Denmark that sticks up out of Germany. They are setting them up in a small community near the town of Løgstør. The company prefers that people do not live near or around their windmills. They are buying up houses and farms in large quantities pushing people off the land and out of the community, what artist and resident **Finn Thybo Andersen** calls "liquidating the community."²¹ This has a demoralizing impact on the people who remain. It also attacks the tax base and erodes the community's ability to cohere and pay for its needs.

Windmills and solar panels that eat up landscapes are an urbanization of those spaces. The landscape's healing, calming power, its agency to do what it will, is taken away with the incessant machine needs of making energy, the frenzied hectic sameness of urban

space. It makes sense that people react strongly to the affront of their presence. It is not just an issue of the aesthetics of the rural. In fact aesthetics are always tied to an ethics and it should be clear now, windmills are anything but. Windmills are an unethical abuse of a space that does not want nor need them. Windmills are parasitic.

One reason we think that wind power is an acceptable replacement for coal or oil is that we already accept that we are entitled to as much energy as we can use. We focus on the wrong set of concerns when we think of replacing oil with wind power, coal with solar power, and so on. We are concerned way too much with the nasty emissions, usually right where we live and where we can see them. Wind power does take this away so we think we have solved something. It only shifts the focus away from the place where the emissions and waste end up. The problem with fossil fuel consumption is that we use way more energy than it takes to sustain us. There are now so many of us that the vast majority of us could not just live on the resources from our land base even if we wanted to. We have become so thoroughly dependent on the over consumption of the bodies of other things coming from far away places, and our own land bases have become depleted, it is hard to see a way forward. But there are many ways forward and they require a lot of organizing and care. ►

In the Pacific Northwest
had schooled himself in the
evergreens; on a breezy day
him, blindfolded, to any place
and place him, still blindfolded,
tree—after a few moments
listening, just what species
fir stood above him (whether
a Douglas fir or a grand fir
western red cedar). His eyes
said, to the different dial

I met a man who
the speech of needled
day you could drive
patch of coastal forest
, beneath a particular
nts he would tell you, by
ies of pine or spruce or
ther he stood beneath
fir, a Sitka spruce or a
ears were attuned, he
ects of the trees.

—David Abram, *Becoming Animal*

From the sound of the water alone I've learned to distinguish the age of a tumbling stream. Older flows, such as those in Appalachia that escaped the last glaciation, have been tuning themselves for many thousands of years. Their watercourses and stony beds, smoothed to paths of least resistance by the ageless cycles of torrents and floods, sing differently. To my ears, they're quieter, more

musical, more eloquent. Youthful streams, with their newly exposed and angular, unsmoothed rocks, push the water aside brashly, with a resulting clatter. In all cases, the rocks are the notes. I sometimes attempt to tune a stream by repositioning a few prominent rocks, listening for the subtle changes in sound.

— Gordon Hempton, *One Square Inch of Silence*

**Before the children of Europe
who walked here believed stones
carried heat, changed their form
watched long enough. To them
of power and life; all over the world
not forgotten the wisdom of people
sacred stones to bring fertility
farmer limes his fields with "lime"
chemistry there is no information
think of rock can be to dream
the old search for the philosophy
to all substance.**

took these hills, the people
nes to be alive because they
rms, and moved if you
m, rocks were concentrations
world, where people have
primitivism, they touch
y. But here, when a bottom
nert" granulated rock, in his
ng poetry, no myth. Yet, to
origins and be reminded of
opher's stone, that elixir basic

—William Least Heat-Moon, *PrairyErth*

Plants, like animals, have a
the "circadian clock" that is
night cycles. In our case, the
all parts of our life, from when
we have to go to the bathroom
when we feel energetic. The
body's behavior are called
they continue on a roughly
even if we keep ourselves in
gets sunlight. Flying halfway
our circadian clock out of sync
signals, a phenomena we call

—Daniel Chamorro

**n internal clock called
s in tune with normal day-
is internal clock regulates
when we are hungry, when
om, when we're tired, and
ese daily changes in our
circadian rhythms, because
twenty-four-hour cycle
n a closed room that never
ay around the world puts
ync with the day-night
all jet lag.**

Witvitz, What A Plant Knows: A Field Guide to the Senses

Conservation is getting nowhere because it is incompatible with our Abrahamic concept of land. We abuse the land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect. There is no other way for land to survive the impact of mechanized man.

—Aldo Leopold, *A Sand County Almanac*

**A world without electric lights,
a world without engines, is
a different world entirely.
It is a world that is alive.
Our world of science and
industry, of monocultures
and monotheisms, marks
a decisive shift in human
seeing. Our world is not alive;
it is a machine, not an animal,
and we have become starkly
desensitized to the reality
beyond the asphalt and the
street lights.**

—Paul Kingsnorth, *In the Black Chamber*

Dismantling

Petro-Subjectivity

De-Industrializing

Our Sense of Self



he previous sections of this book may give you the impression that I am highly pessimistic about our ability to change human culture and to effectively minimize the worst aspects of coming climate chaos and collapse. I am not pessimistic

about doing things to try and effect change; this text is very much a contribution in this direction. This text has been edited for this publication, but was conceived as a chapter in a much longer book. I hope to get it out to many people who can take the material and open things up further. My optimism is tempered by what I know and fear about climate breakdown and all the suffering that has already been and will be unleashed on people, animals, and landscapes. My hope emanates from an intuitive or instinctual place and is something that comes from the desire to survive, or a profound need to believe that we can survive, and heal the world. There are encouraging things all around that help nurture this optimism.

I think that the movement to pressure universities, banks, major newspapers, municipalities, and other entities, to divest from fossil fuels is inspiring and will continue to grow. I am equally excited about massive re-wilding efforts like the one led by Trees of Life in north eastern Scotland, who demonstrate that we can restore huge eco systems

and make them healthy again. Efforts to rewrite national constitutions like Bolivia's "Law of the Rights of Mother Earth" based on the knowledge and ethics of intact very old indigenous land ethics are extremely fortifying. These things all require a lot of people to make them happen, a concerted effort to start processes of massive change. The changes cannot come from individuals and consumers, but must be collectively realized.

I am encouraged by the many recent large-scale exhibitions, symposia, publications and protests that relate artistic discourse and climate breakdown. I feel it is not enough to do these activities without addressing where this knowledge and work is being produced, who it is for, but most importantly that there is not enough work being done on the ways we are in the world in direct, lived, experienced ways.

It is largely from the work I have done to challenge my own petro-subjectivity that my optimism springs most strongly. I have come to see to what extent our sensory world in urban spaces and industrialized rural landscapes is dramatically limited. There is no unscripted, wild behavior, encounters or other experiences allowed. The spaces of cities, and surrounding terrain, are so denuded of the kinds of environs we evolved into over millions of years, that we cannot imagine the full range of emotions, experiences, perceptions and other ways of being that we are capable of. This is not nostalgia



for a simpler or idealized time; it is an understanding that our built environment has shifted the world around us too rapidly and dramatically in ways that are not healthy or consider our full range of being. Cities are machines for stripping us of our desire to live, feel, and be free. We are making our rural spaces more and more industrialized at an incredible rate. Paying attention to and creating the conditions for our full range of perceptual capacities gives us a tremendous leap into what it will mean to expunge petro-subjectivity from our selves and our landscapes.

One way that I have found highly effective to access these capacities is combining various forms of embodied learning in workshop settings. Participants in the workshops are exposed to several ideas and practices of embodied learning. Embodied learning methods un-tether our full perceptual, emotional and ideational capacities when directed at a given situation. This happens with the help of simple techniques—like meditation inspired perceptual exercises to shift the way one looks at or hears something—to suspend reflection or rationalization until after the exercise is completed. Directed perception comes first followed by reflection, often with results that surprise or upend our routine ways of sensing and understanding things. This way of learning easily breaks down received ideological and metaphorical routines through which we regularly limit our incredible abilities. This approach can be

used to perceive and generate wild narratives of our existence. I am convinced that the narratives we need to create new myths and stories of human survival will come from experiences like these. New narratives practically explode out of people with just a little work in even the shortest workshop situations.

In the next section of this book, I describe in detail one exercise in the course of a workshop and what it can give access to. Embodied learning, when directed towards certain tasks or considerations, reveals to us that oil orders our lives and we spend most of our time shutting down what it is we perceive. It helps us start to see and understand the layers of ideology, metaphor, and abstraction distracting us from this realization, from doing what we can do. These exercises are to take us all out of our routine ways of interacting with one another and the world around us. The various sessions are to facilitate an atmosphere that is attentive to difference and concerns. It is to create a shared encounter from which we can collectively imagine ways to sustain these experiences and unleash the forces that will dismantle industrial society and begin to heal all that we have diminished.





**Learning carefully
from the sea,
its vast silences,
and ancient stories**

I conducted a two-day workshop in Helsinki, on two different islands in the Baltic sea, with 10 participants in July 2014. The workshop was coordinated with the exhibition *Dissolving Frontiers*, one of many exhibitions, incubators, projects, and more gatherings that are part of "Frontiers in Retreat," an ambitious 5-year initiative that partners 7 artist residency spaces "on the frontiers of Europe" with over 20 artists working at the intersections of art, ecology, and climate change. The workshop was about de-industrializing one's understanding of self and place towards a more embodied sense of the world and an urgency to build different kinds of relationships. One hope I have is to work with others to start articulating cultural formations that will help us survive whatever chaos and destruction is coming our way with global climate change and increasing income inequality. In the workshops we did various kinds of exercises together and then discussed them. The exercises are about realizing one's incredible capacities for both experiencing the world and the opening up to very unfamiliar and uncommon interpretations of what it is one encounters. This comes without prompting and people interpret their direct encounters with every day stimulus— like bird sounds, wind blowing through trees, vast landscapes—in unexpected ways.

An exercise that we were doing, that I want to share here, was inspired by combining listening instructions from people who have done pioneering



work around sound, listening, and thinking about how we can be more fully present in the world. First, the composer **Pauline Oliveros** and her ideas of Deep Listening have had a big impact on the exercises I conduct. Deep Listening is listening with our full range of capacities and not just our ears, paying attention to all the sounds we hear at once, how they interrelate, how they hit our bodies and are registered in unexpected ways, and so on. Specific to this exercise, was work by the acoustic ecologist **Gordon Hempton**—author of *One Square Inch of Silence*—to preserve natural silence and combat noise pollution in national and state parks in the United States. **Hempton** has spent decades listening to and making recordings of landscapes. He has some powerful things to say about how to refine and pay attention to our incredible sense of hearing to absorb entire landscapes at one time. Our task was to listen to the Baltic Sea, to the 30-50 square kilometers that were in front of us as we sat on a stormy, rock lined coast. Not only were we going to listen to this enormous space, we were going to try and listen to its silences instead of its noises.

We went to a spot on the shoreline of the island. I gave instructions to everyone to look at the vast distances we could see from our vantage point. Participants were asked to think about all the silences that were there to make it possible for one to understand what it was we were seeing, hearing,

and experiencing. There was a lighthouse on a small island we could see a couple of kilometers off the shore. I asked everyone to think about a firework being set off next to the lighthouse. We would quickly hear the sound locating it without effort. We would instantly understand the distance, the silence that the lighthouse had been enveloped in just moments before, and all the silences around that remained in order for us to locate this one sound. The sound would occur for us both in the moment, but also in the context of its very recent past and future silences. We are always hearing the silences when we hear sounds; we just don't realize this and pay attention accordingly. And our perceptions of time are extremely elastic, too. Many workshop participants talked about stepping out of time, or at least time as they usually conceptualize and experience it.

We listened to the silences in the land and seascape during the day's strong wind and sporadic spats of rain. The wind had an immense presence, feeling very much like it does when a throng of people pushes onto a crowded subway car. It was even more of a confrontation as we had only a short time before completed an exercise that sensitized us to how we gather sounds, how they hit our bodies in many more places than just our ears, and the enormous range and layers of things we are able to perceive when we take the time to listen deeply. We were cautious towards the intensity of the wind insinuating itself





in our awareness; the strength of the wind turned our ears into an active part of the soundscape. The wind alone is completely silent. Only when it crashes into and careens around things can one discern an audible trail. This was certainly the situation as the wind grabbed the sea and threw it repeatedly at the rocky seashore.

We were on the shoreline of the island of Suomenlinna—an old military base and UNESCO World Heritage site—that is part natural formation and part massive landfill. It is an odd place filled with stables, barracks, bunkers, canons from multiple military epochs of technology, museums, churches, harbors, and more. The image above shows bunkers disguised as hillocks. Many more line the shore facing the open Baltic Sea.

We stumbled down one of those staircases often found in large outdoor parks where the angle of descent is awkward and the spaces between steps are not scaled for an adult human. The harsh sea weather had also had undue influence on the staircase, turning it green in places, causing plant life to settle in others. The stairs descended from an old fortification wall down to the place where we would do our listening, to learn something from the sea.

The workshop participants were eager to do another listening session, to test their new found awareness at a different location, as the first one provided such strong and varied responses. We all had heard the same things, or so we thought, but the narratives of what we each had heard, what we thought it was, the emotional impact it had, prompted significantly different understandings. There were some agreements amongst the listeners about what they had heard or how the impact of a sound—the loud voices of two drunk men shouting

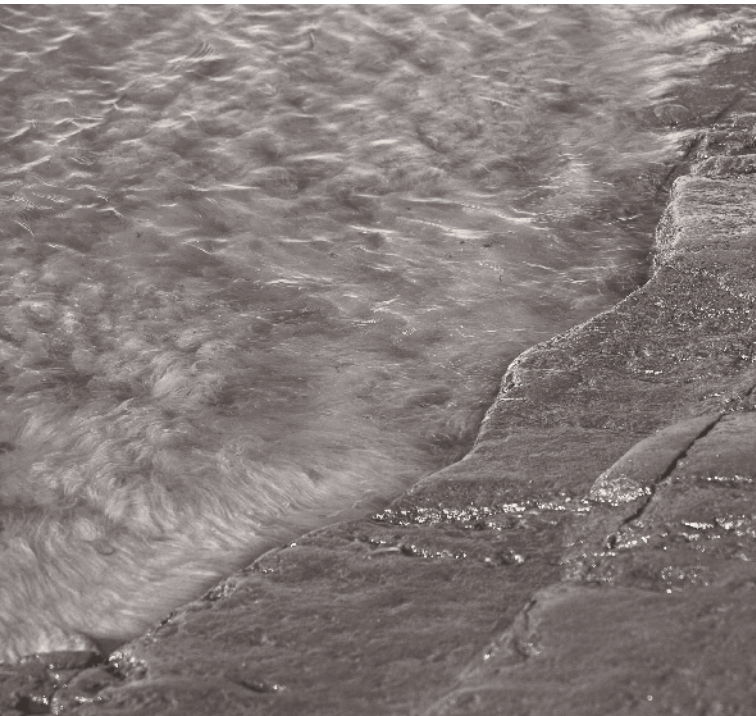
at each other for example—had registered on their senses, but what to make out of it afterwards and in conjunction with the entire experience was very different for each person. The same thing happened during this exercise.

We sat on rocky outcroppings close to the wall of sound that was by now pummeling all of us. The sun was teasing us—appearing and disappearing—the stimulus of our bodies warming and cooling adding additional impact to our listening exercise, almost warming the very act of hearing for some, making others more receptive, they said, to what it was they were going through. We found our places on the rocks, some closer to the crashing waves than others, sitting, working ourselves into an intimate connection between our bodies and the hard surface, getting ready to listen. We breathed deeply filling our lungs fully and then emptying them utterly, relaxing our bodies until we felt all muscles release their tension and settle into the task. We were ready to pay careful attention. Because of the intensity of the wind and water, it took very little time to get lost in the phenomenal encounter. It was already difficult to talk as I gave instructions on getting into a relaxed state and the task of reflecting on the silences of the seascape. Upon closing my eyes, the vast spaces that had been there moments before rushed onto my body, ears, hands, and my rather unprepared consciousness.





Several of the participants said afterwards that they had to turn away because of the intensity of the wind and sound. When we talked after listening for about 30 minutes, many of us had very similar understandings of what we had encountered. We had all heard a very powerful story from the sea. This is very important to understand. Things tell us stories, not in the sense that a rock starts speaking English or Finnish or any other human language. But, we nonetheless construct narratives instantaneously out of what it is we observe and understand. No matter how romantic, detached, analytical, mystical, skeptical, and so on, you might be, you have to construct a story of your experience. You translate the sounds of the wind and water hitting the rocks into first your own understanding, which will defy adequate words of description. You will then have to tell that story to others. Water hitting rocks smoothed by thousands of years of pounding from the sea sounds different than any other thing you will ever experience. We register this and attempt to communicate it to others.





The sea has a story to tell. It is a story that it has been telling for thousands of years. It can tell it in many different ways. The same spot on a shoreline can tell this story in an infinite number of variations given what the wind is like, the direction it is blowing in, the air temperature, whether it is raining or not, and so on. What we heard was the sound of many waves crashing against the smoothed rocks. We know from encountering rocks before that it is no easy task to shape and smooth them as the waves have done. It would be nearly impossible for us to recreate the same process just with our bodies and no tools even if we did it for decades on end. We understand what a rock is in a physical way as much as we do in a conceptual manner, though we are taught to privilege the latter understanding over the former.

We had heard a powerful thing during this short listening session. The sea was talking to us. Part of

the story it had to tell was that it had been telling this story for a time that we are not really used to registering, deep time, time that extends beyond many generations of human life spans. The sea was telling us that its story has been uninterrupted for this long period. What you hear at first are the waves crashing on the rocks, and this is familiar to anyone who has been to the sea. When you pay attention closely, you start to hear the diversity of tones, patterns, flows of energy that overlap, sometimes complementing one another, sometimes not. They all combine to tell the story of the relationships of the sea to the rocks making the sounds intimate and more available to us. The crashes of the waves on the rocks, the pulling back of the sea, that wonderful crackling noise it makes, were happening all around us in multiple variations. Because we had been sensitized by listening carefully, we could hold them all in our heads and understand them together. What you hear is the multiple patterns that sync and at times produce pleasurable or jarring dissonance. Many of us stated that we felt that we were sitting on the edge of a crushing abyss. The





way in which we were listening pulled the soundscape right on top of us. It comes incredibly close—and this is an experience I have had on numerous occasions—and when you open your eyes you are shocked by the visual distance of the sound's source. The sound is always mediated and situated by seeing. Taking site out of the experience allows us to pull the sound as near as it always is and to give it our close attention.

Saara Hannula, one of the participants in this exercise, had this to say about her experience:

If I think of specific moments that have stayed with me, a few things come to the fore. One of them is the deep listening exercise we did by the sea, and the responses that it evoked in our group. I was very impressed by the fact that so many of us were overwhelmed by the sea and the wind when exposed to them without any protection. I wonder whether it has to do with the fact that we are hardly ever asked to surrender and open ourselves to the raw elements, or things that are beyond our understanding and control. It is quite possible to



go through life without having to do it by necessity, if one happens to live in the Western world.

However, I think this process of exposing oneself to the immense forces that reshape our world is key now that the situation is getting more and more out of control and the conditions are increasingly unpredictable. We can no longer resist change or pretend to manage it with the tools that we have access to. We are no longer sheltered.

I was moved by how intensely the sea and the rocks were insisting on the story of their relation to one another, that we have all heard so many times before, but have not sat down and given it this kind of focus under these kinds of conditions. It is not a regular thing that we are encouraged to do: to try and receive all that soundscape has to offer. Yet there is much to learn from behaving in this way. We can get a glimpse of other time scales—geologic ones in fact—translated to our own short fragile ones. We have to be willing to slow down and give our care, openness, and attentiveness. We are no longer tuned to a world we evolved into, but live in a deeply impoverished terrain that serves purposes not in our best interests.



Petro-subjectivity is not a permanent, inevitable state of human existence. It will pass whether we make any effort or not. Though if we make no effort, it will disappear because we cease to exist or an enormous number of us die off in horrendous ways. Human cultures come and go. Each has its own sets of ontologies, ideologies, and ways of relating to the world. The vast majority of human history is not recorded. Thousands upon thousands of years of people making and remaking the world are lost to us. It is staggering to think of all the different cultures that people have made that we will never know. We are capable of making the culture that will get us away from the current one in which we relate to each other, the landscapes we inhabit, and the creatures we share the planet with in a destructive and consumptive mode. I will continue to do the work to articulate and address petro-subjectivity, to do what I can in conjunction with others, to move us out of a petro-subjective cultural mindset and into a new individual and collective sense of self. ●

Notes

- 01 The subject position or the subjectivity of individuals has long been debated by philosophers, psychologists, and others from **Descartes to Freud, Marx, Heidegger**, and most importantly for me **Michel Foucault**. Rather than entering that philosophical debate I would just like to clarify how I am using the term. For me subjectivity is a way to relate to the sense of self one has, regardless of what the processes are that produce this. I see and experience the results of how oil makes us relate to the world and this is wrapped up in how we talk about the world and act accordingly. The problem is as much one of ontology and philosophy as it is myth, metaphor and storytelling.
- 02 **Lakoff, George.**, and **Mark Johnson**. *Metaphors We Live By*. Chicago: University of Chicago Press, 1998.
- 03 **Kiderra, Inga**. "Backs to the Future: Aymara Language and Gesture Point to Mirror-Image View of Time". *General UCSD News (Blog)*, June 12, 2006. ACCESSED 14 MARCH 2015. [Http://ucsdnews.ucsd.edu/archive/newsrel/soc/backsfuture06.asp](http://ucsdnews.ucsd.edu/archive/newsrel/soc/backsfuture06.asp).
- 04 **Lakoff** and **Johnson** 1998, p. 67
- 05 In the book *Feral: Rewilding the Land, the Sea, and Human Life*, **George Monbiot** suggests swapping the term "climate breakdown" for "climate change" as the latter tells you very little about what is happening with global warming and the havoc it is

wreaking, and the former tells it directly: ecosystems are breaking down. **Monbiot, George.** *Feral: Rewilding the Land, the Sea, and Human Life.* London: Allen Lane, 2013.

- 06** The current global fracking boom can only be seen as an extension of our high reliance on oil and while it has reduced the price of a barrel of crude oil in the short term, the external costs to the environment to people, to landscapes, rivers, etc., have already been extremely destructive. We must think of the extraction of all materials as part of the same way of relating to the Earth and its constituents.
- 07** **Greenstone, Michael.** "If We Dig Out All Our Fossil Fuels, Here's How Hot We Can Expect It to Get". *The New York Times*, 8 April, 2015. **Greenstone** then proposes a carbon trading market as a way to reduce our carbon emissions. He fails to propose that we dramatically reduce consumption and change our behavior altogether and calls campaigns to "Keep it in the ground" that are more dramatic, but more realistic, maximalist. He demonstrates a complete lack of ability to imagine a future outside of the destructive logic of oil use and continued economic growth.
- 08** **Nafeez Ahmed**, writing for the *Guardian*, has been doing invaluable work covering the ways in which climate breakdown is impacting warfare and how national militaries are preparing for it. See the

following articles: "The age of climate warfare is here. The military-industrial complex is ready. Are you?", Friday, May 30, 2014; "Pentagon preparing for mass civil breakdown," Thursday, June 12, 2014

- 09 The mainstream reality television show called "Doomsday Preppers," produced by *National Geographic*, represents some aspects of this emerging culture. To see raw versions of the same, a search on youtube will reveal this culture, a lot of its fantasies, and some truly frightening expressions of masculinity, race, and social collapse.
- 10 **Barrett, R., and D Worden.** eds. *Oil Culture*. Minneapolis: University of Minnesota Press, 2014.
- 11 This mapping exercise is derived from the permacultural resource mapping done by **Bill Mollison** to compare such things as a single egg produced by an industrial process versus a single egg produced through a permacultural process, a process that **Mollison** and others helped develop. It shows where large amounts of waste exists and gives a way to visualize how to cut them out and make systems that do not rely on them so heavily.
- 12 **Rifkin, Jeremy.** *The Empathic Civilization*. New York: J.P. Tarcher/Penguin, 2009, p. 21.
- 13 **Jensen, Derrick.** *Endgame Volume 1: The Problem of Civilization*. 1st ed. New York: Seven Stories Press, 2006, p. 106.

- 14 Examples are: *No Impact Man: The Documentary* (2009) based on the book with the same title, or, *Zero Waste Home: The Ultimate Guide to Simplifying Your Life*, by **Bea Johnson**.
- 15 **Zettler, Erik**. "The 'Plastisphere:' A new marine ecosystem". *The Ocean Blog* (Blog), June 2013. ACCESSED 5 JANUARY 2015. [Http://ocean.si.edu/blog/%E2%80%9Cplastisphere-new-marine-ecosystem](http://ocean.si.edu/blog/%E2%80%9Cplastisphere-new-marine-ecosystem).
- 16 The Petroleum Space/Time Continuum is the set of relationships that are enacted when we use fossil fuels to define how we do things that are spatial and perceptual and can be articulated in terms of how they take away our bodily capacity to register things like the landscapes we inhabit. If we move too rapidly through them because the speed oil can provide, how are we at all able to register their well being? This and other questions will be explored in a forthcoming text.
- 17 **Parry, Simon**. "In China, the true cost of Britain's clean, green wind power experiment: Pollution on a disastrous scale". *The Daily Mail*, 26 January, 2011. ACCESSED 23 JANUARY 2015. [Http://www.dailymail.co.uk/home/moslive/article-1350811/In-China-true-cost-Britains-clean-green-wind-power-experiment-Pollution-disastrous-scale.html](http://www.dailymail.co.uk/home/moslive/article-1350811/In-China-true-cost-Britains-clean-green-wind-power-experiment-Pollution-disastrous-scale.html).

- 18 **Nunez, Christina.** "How Green Are Those Solar Panels, Really?". *National Geographic*, November, 2014. ACCESSED 23 MARCH 2015.
[Http://news.nationalgeographic.com/news/energy/2014/11/141111-solar-panel-manufacturing-sustainability-ranking/](http://news.nationalgeographic.com/news/energy/2014/11/141111-solar-panel-manufacturing-sustainability-ranking/).
- 19 My understanding of this comes from the sobering analysis provided in Chapter 5, "Other Plans," by **Lierre Keith** in **Keith, Lierre.**, and **Aric McBay.** *Deep Green Resistance*. New York: Seven Stories Press, 2011.
- 20 There are various articles making a range of claims, both pro and against wind power, that wind turbines on and off shore last anywhere from 12–40 years. Even at 40 years, this is hardly good news and really is by definition not renewable energy. It is energy that looks less destructive and does not leave its waste where the energy is generated. The waste is left elsewhere. Even if these machines lasted hundreds of years, they would still enact the same violence to the landscape.
- 21 **Thybo Andersen** is among others fighting Vattenfall. This comment and account of the company's activities comes from this article: **Thybo Andersen, Finn.** "Vattenfall's Vandalism Against the Community". *Politiken*, 9 January, 2015. ●

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Breakdown Break Down is a long term effort to organize cultural workers, artists, activists, and those interested in surviving climate breakdown, to de-industrialize our sense of self and produce the civil society that will help us endure ecological collapse.

The global culture that made oil use all pervasive in our lives has stripped us of much more than functioning ecosystems, glorious biodiversity, and the hope of surviving the next 100,000 years of the sweltering impact of our arrogance. Our human potentials, capacities, complexities, our wild potentials have equally been dulled and stripped from us leaving us as sick as the landscapes we inhabit.

We are interested in asking questions that are not being asked about what has been lost with climate breakdown. We work to take apart the dominant culture and ideology that is generated by the consumption of oil and the resulting breakdown of our climate. We are cultural workers who are struggling for a post-oil aesthetics and ontology. ●

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HOMEGROWN

ING



Tools used to raise your own food require oil, mining, transport, extracted materials, plastic, and oil-based items.

Foraging in urban areas only works for small numbers of people, and then it is only a supplement to oil-reliant food stuffs.

This method requires a lot of equipment that is made with, or runs on, oil, emits waste, and is resource intensive to make.

TIONAL

Conventional agriculture uses many of the same machines that organic does, with the added reliance on many petroleum-derived products.

TRAIN

BICYCLE

BUS

AR

Bicycles are symbolic of the "greening" of cities, but they are highly dependent on fossil fuels for their manufacture, which is in every component, and even the person riding, whose clothes, shoes, and food, are all petro-reliant to some extent.

Electric or hybrid cars are highly resource intensive and produce an enormous amount of waste to make and use. More efficient hybrid engines have had the contradictory effect of increasing consumption as they get scaled up to be used in bigger, more powerful machines.

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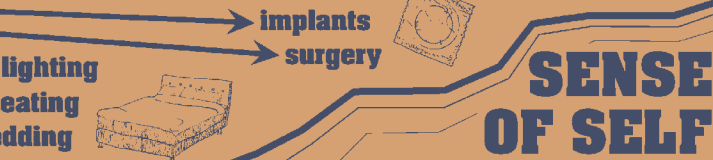
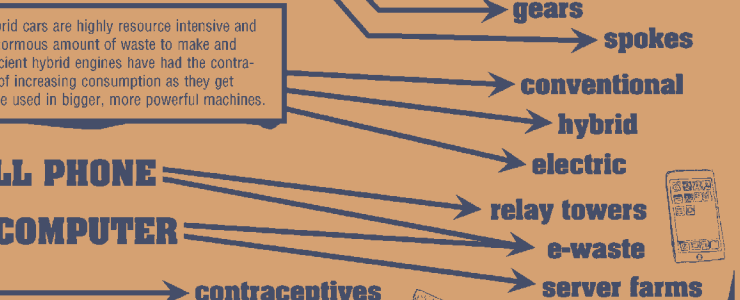
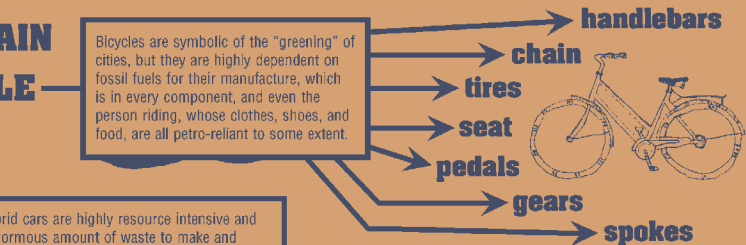
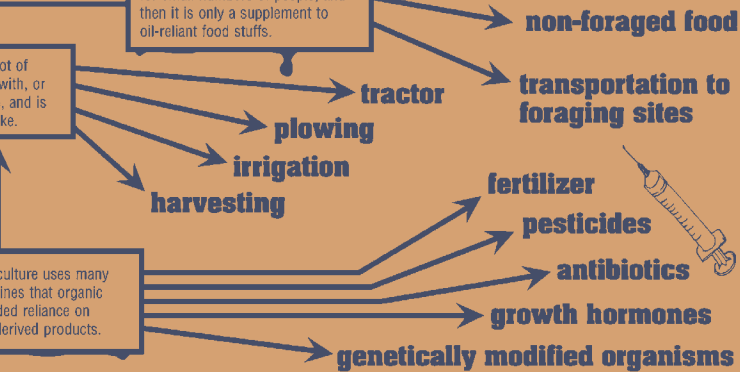
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Petro-subjectivity is something that each of us experiences constantly. It is a sense of self and the world that shapes who we are and how we think. It stems in part from the fact that the use of oil is present in every thing we do. It has shaped the concepts that govern our thinking. Our use of language and the basic concepts that structure our existence are breathed through the logic of oil relationships and form the metaphoric universe we bathe ourselves in when we speak to one another about who we are, what we do and what the world around us consists of.



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