



# “What Must I Do?” at the End of the World

May 16, 2014 @ Artists Space Books & Talks

## I. Introduction

Only a few days ago, two independent teams of scientists released reports on the melting of the West Antarctic Ice Sheet, an unstable ice sheet half the size of the continental US that has reached its tipping point. Though earlier estimates of sea level rise over the next 100 years had us pegged at 1-3 ft, with the melting of the Western Antarctic scientists are now projecting somewhere between 6 and 12 feet on average globally. And by the way, a study of global warming reports has shown that every prediction scientists make is highly conservative so as to avoid seeming alarmist, thus we can likely expect much more than what they say. What’s important about this recent announcement is not the prediction of rising. Instead it’s that there is literally nothing that can be done to stop this melting, short of an act of the gods. Put simply, the Western Antarctic Ice Sheet’s deterioration is irreversible, as are the rising seas with it.

It’s no surprise that our time is infused with the apocalyptic, a major change from even 10 years ago when the rapture rantings of evangelical christians were condescendingly confined to the realm of pure absurdity or when the proclamations of the end of civilization were shrugged off as not so cool. But the apocalyptic today functions for us on many levels. Take two of America’s most critically acclaimed television shows. The Walking Dead, the most popular show for Americans 18-49 (15.7 million people watched the season finale last month), follows a band of survivors who work out new ways of living and fighting in the aftermath of the zombie apocalypse while coping with the fact that they themselves may in fact be the Walking Dead – not the flesh-eating zombies. Then there’s Game of Thrones, the most pirated television show of all time, whose constant reminder that “Winter is Coming” signals an end that comes repeatedly, wiping away the petty disputes and concerns that characterize the present. That Winter is Coming was graffitied everywhere around Gezi Park then should come as no surprise; it’s not just a popular show, it’s a

popular feeling – wash it all away. Apocalypse has always been tantalizing for its potentially liberatory effects; a world turned upside down means a world where a life of powerlessness becomes the opposite, or in an even more basic sense, the promise of apocalypse is that we won't be going in to work tomorrow. As a friend's father in Beirut said during the Israeli bombing a few years ago, "it almost makes you wish for a normal day... almost."

On the other hand, the apocalyptic today, just as yesterday, carries with it massive amounts of fear. A recent National Geographic issue questioned, "If All the Ice Melted," complete with a cover graphic of a submerged Statue of Liberty and satellite imaging of coastlines so far retreated that they would submerge nearly every major city in the world. In some colleges, syllabi have been developed to help students cope with the anxiety and uncertainty of living in an "end time." One of the most popular texts is *Odds Against Tomorrow*, a recent novel that follows New York-based disaster management expert Mitchell Zukor down the rabbit hole of fear and apocalypse, and which features a drowned New York on the cover and in the narrative. Alongside this is an explosion of "see it before it's gone" tourism that promotes not only the disappearing rainforests of the Amazon but also many of the world's cities, which, as National Geographic will have already warned you, are set for liquidation. The bright side at least, according to geoscientist Jan Zalasiewicz, is that once the cities slide underwater, "they will be removed from the realm of erosion into the realm of sedimentation as if placed in a pickling jar." Coming soon, charming underwater ruins tourism.

None of this eschatological excitement, fear mongering, or highly rational fear could exist without its material basis, its seemingly incessant confirmation. From the desiccated bovine corpses in South Dakota and wildfires of the drought now encompassing all of California, to last summer's floods in Colorado that swept away entire small towns, the bad news seems to keep coming. Compounded by Hurricane Sandy and its blackout of the most powerful city in the world, or Hurricane Katrina in 2005 and its catastrophic inundation of one of America's most down and out cities, the picture is seemingly bleak— however much we "fix&fortify" or return to a 'new normal.' And 2014, only a third of the way through, has seen several milestones achieved: the first month with an average of over 400 ppm of carbon dioxide in the atmosphere, and two days ago, the aforementioned runaway ice melt in the Western Antarctic ice sheet. Like Douglas Adams' restaurant at the end of the universe, we can watch our end over and over while we eat our morning cereal or grab a \$9 Bud Light at The Standard after work.

But the mood too can be captured just as well in the very nature of our lives. Boredom and the certainty that nothing would change predominated in the 80s and 90s, but today anxiety and uncertainty course through us. Perhaps, as a friend said, that's why we were all so engrossed by the saga of Malaysia Airlines Flight 370, the possibility that in one of the most highly securitized industries that a multi-ton plane and all of its passengers could simply disappear, arousing at once a terror of being on that plane and an excitement about the possibility that something, anything escapes manageability. Then there's our ever more frantic search for something real, something authentic, or the paddling around in the quagmire of the impossibility of any truth. Perhaps all of the "see it before its gone" tourism is a rough analogy to the millions of selfies taken each day: desperate acts to capture something before it falls into oblivion. We see it too in the thousands of young people who want to farm, to put their hands in what's left of the topsoil, or we can see it in the proliferation of prepping, where preparing for a future disaster tips over into a different orientation to life and reality.

Meanwhile, to contain the giant reservoir of unwept tears that is America, 13 percent of the population is currently prescribed antidepressants, including one in four women between 50 to 64. And new balms are now emerging to soothe environmentally related "mental disorders" such as "solastalgia" –the psychic or existential distress produced by environmental devastation of one's own home or land— "ecoanxiety," and "ecoparalysis," which "ecopsychologists" are diagnosing in greater numbers every day.

Alongside ever-growing accounts of colossal earthly transformations that proceed regardless of human involvement —epitomized in a ‘world without us’— we know our time to be equally defined by a massive wave of human efforts to break through the age, to create a new existence from within a world that is passing away. In the last several years, movements and insurrections in Europe, North Africa, and the Americas have swept away regimes, generated new planes of consistency, and opened up paths that once seemed impossible. One can speak of these events in the same breath because from Tahrir to Maidan, by way of Gezi and Zuccotti, something is growing that is irreducible to whatever small event may have sparked them: messages on placards from Egypt to “don’t afraid” in Oakland, green lasers to blind the police from Athens to Kiev, combatants traveling from the American Fall to the Quebec Spring, inspirational videos in Tunisia that resonate in Spain, the Guy Fawkes mask on the face of Greeks, Turks, Palestinians and Israelis, Arabic language riot tactics circulated by Anonymous across North Africa, and of course the ubiquitous squares and parks filled with thousands of people sleeping in tents, cooking in massive free kitchens, meeting in absurdly large assemblies, surrounded by barricades and street battles for months on end. What each poses in its singularity and what they pose together in their embryonic consistency, is a fundamental redefinition of revolution: not intellectually, but vitally. To think the present or the mood of our age requires attention to these insurrectional and revolutionary events. And attempts to call them done, to actively deny them —“we all got a bit carried away didn’t we/oh we were once so earnest”— is indicative of a frailty of the heart and of the gut.

Certainly, this is a threshold moment, with active attempts to put an end to the order of things and the washing away of that very order, a dissolution that is both physical and metaphysical. Who can say for sure, but, perhaps in only a few decades, this building where we are talking right now will have been submerged, or washed away by some cataclysm. Or worse, maybe it will be occupied? Hopefully not, for all of our sakes!

But really, what then? What ground will there be to stand on?

## II. The Anthropocene

In such a time, the coming to the fore of the Anthropocene as both a concept and a phenomenon starts to take on a different sense.

Crises of epochs are usually registered affectively, sensibly, before cognitively. We lack words or names for what we’re going through. Yet, suddenly, it’s winter, suddenly revolution is possible; suddenly history returns. Suddenly, a new epoch is ours. The Anthropocene emerges in this historical context, both as a name for our age, but also as an expression of the age. So we’re not here to celebrate or to critique the concept —but to look at it as the phenomenon that it is, and to use it as a basis for communication.

Let me begin by saying a few words about the history of the idea. Dutch atmospheric chemist Paul Crutzen and biologist Eugene F. Stoermer first proposed the Anthropocene in Global Change Newsletter in 2000. According to them and other proponents of the term, although the official stratigraphic time scale says we are still living in the Holocene —the geological name for the nearly 12,000 years of relatively stable climates that includes the entirety of human civilization— we are in fact living in a new epoch whose origins lie in the 18th century when humans became “geological agents” with a more significant impact on the Earth than any other process, element, animal, or body. On the geological time scale, each layer of bedrock represents a specific ‘period’ of the Earth’s history, with new epochs named when there are significant changes in

these strata, changes which in the past have been caused by erupting volcanoes, the movement of rivers and their silt deposits, ocean tides, earthquakes, etc. This new epoch, they thus proposed, should be named the Anthropocene or the “epoch of man,” because Man is fundamentally marking the strata of the Earth. Though the Anthropocene is often reduced to the impacts of global warming or processes contributing to climate change, its scope of evidence encompasses a much wider range of processes.

To illustrate what it means to say the epoch of man, and to make the case for the scholarly validity of the Anthropocene, geologists typically offer as their evidence facts and processes like:

**Deforestation.** 80% of the earth’s natural forests have been destroyed, half of the world’s tropical forests have been cut, most of North America has been logged. As a result of this and industrial agriculture there has been massive topsoil loss, every inch of which took 100 years to accumulate.

The reshuffling of the biosphere, deliberately and not, through global transportation chains. Invasive species are taking over in many places. Flora and fauna, like this kudzu, moved around the world, invading and taking over local ecosystems, blocking out sunlight, dominating water sources, or actually asphyxiating roots and branches, etc.

**Urbanization.** More than half of the world’s 7 billion people now live in massive built environments, many of which now cover 100s of square miles and comprise more than 20 million people.

The widespread destruction of habitats, resulting from the construction and development of buildings, offices, suburbs, resource extraction, industrial farming, highways, pipelines and so on.

**Mass extinction.** 1 in 10 plants and animals will be extinct by 2050, including tigers, koalas, millions of plants and insects, and sea turtles. There’s a sad story of turtles approaching artificial light as opposed to moonlight and thus laying eggs in the wrong place. Polar bears could be gone in less than 100 years due to melting ice. Warmer ocean temperatures are killing coral reefs, considered a sensitive early indicator that “tipping points” have been crossed. It’s predicted that global seafood fisheries will collapse by 2048, at which point more than half of the world’s butterfly species will have also disappeared.

The homogenization of environments and decrease in biodiversity due to things like industrial agriculture and monocropping, which have created sprawling barren landscapes in which nothing can grow.

**Desertification from deforestation and intensive industrial livestock grazing.** The Amazon rainforest is becoming a desert for example.

The acidification of the ocean, caused by the absorption of carbon dioxide into the sea (not just atmosphere, ocean is a regulating sink). This saturation of the ocean with carbon is making it impossible for the billions of marine organisms that rely on calcification to build their skeletons and destroying their existing ones. The bottom of the ocean is strewn with dissolving starfish, dead mollusks, and coral reefs. Coral reefs, the “rainforests of the ocean” support 25% of marine life. 30% of the coral reefs worldwide will be dead in the next 30 years; the Great Barrier reef will be gone by 2050, as will the tropical fish that live in it. Then there’s the proliferation of jellyfish that’s occurring in these acidic dead zones, until it becomes too acidic, and then they’ll die too.

And, of course, climate change and global warming. The emission of greenhouse gases into the atmosphere is leading to an increase in overall planetary temperatures with effects including shifting rainfall patterns, spikes in hot and cold weather, increased risks and strength of hurri-

canes, rising sea levels, etc. Global temperatures have increased 1.53°F (0.85°C) since 1880.

The very fact of the Anthropocene names a particular disaster we are living through.

While the term is technically still an informal one and has not yet been accepted in the official geological time scale, in 2009, an Anthropocene Working Group (AWG) of the Subcommission on Quaternary Stratigraphy (SQS) was established to consider the proposal of the epoch and provide evidence of its environmental signature. As a sign of its ascendancy, the Anthropocene is now advocated by the recently elected President of the Geological Society of London.

In spite of its still informal status, the Anthropocene has been used in the sciences since around 2009—I remember human geographers were using it then but it was still not widespread—and has more recently been picked up by the press and the art world. The Anthropocene graced the covers of both *The Economist* and *National Geographic* in 2011, was featured in 2012 as one of *Time*'s “10 Ideas That Will Change the World,” and has become the topic of sustained coverage in the *New Yorker* with Elizabeth Kolbert's many pieces. Especially after Sandy, the term has become a major fad in art and academia, filling in as the latest buzzword to which any concept or form, however geriatric or banal, can be attached. It's like a game to see who can bring out their dead the fastest, to weigh the concept down with various additions—gender, race, class, & children in the Anthropocene—to imprint on whatever art object—this is Anthropocene painting, video, music—or as a clever descriptor to add to whatever you're saying—*that's so Anthropocene* or *it rained again today, #Anthropocene!* The term has also been picked up as a tool to raise awareness of humanity's impact on the environment, with the attendant idea that this heightened awareness will lead to sustainable or environmentally friendly action: recycling, energy saving light bulbs, leaving no trace, going vegetarian, using a canvas tote bag, and so on. Others use it to highlight the responsibility of humanity for the earth's future, calling humans to harness their inherent or inherited dominating power to steward the Earth, to design their way out of the crisis, from geo-engineering and asteroid mining to soft infrastructure and biomimicry. The Anthropocene has also been attached to academic debates on the relationship between humans and so-called “nonhumans”—a term used to refer to animals, plants, waterways, machines, or microbes—debates which variably advocate reconnecting human and “nonhumans,” recognizing that “today” we live in a world in which humans and non-humans are intertwined, or, as is the fad, realizing that humans and non-humans have never not been intertwined.

But I think we can especially see the popularization of the Anthropocene in the infrastructural transformations underway to make post-Sandy New York resilient. Originating within cybernetics and systems theory, resilience isn't just designing the ability to bounce back; it is the positing of life as composed complex systems that are coextensive with their very own crises. This dispositif is being thrown together at a lot of different levels, from art institutions and large museums to major magazines and newspapers. MOMA's 2010 ‘Rising Currents’ exhibition may have been the first to present NYC as a real-time experiment in resilient design, but it was not alone; its vision of the city as an integrated but vulnerable socio-ecological system was quickly reprised elsewhere. At the BMW-Guggenheim “Urban Lab”—a mobile exhibit/venue based in NYC, Berlin and Mumbai—participants were taken on ‘ecosystem tours’ of wastewater treatment facilities, waterways and landfills, and invited to interactive workshops on ‘resilience’ in neighborhoods like the Lower East Side. Participants in the Whitney ISP ran an ‘ecosystems’ exhibition at The Kitchen, the High Line, and other urban metabolic sites like the North River Wastewater Treatment Plant. At each of these sites artists and viewers were invited to experience the urban environment as an ‘entangled’ network in which nature and society could no longer be seen as separate systems. Outside of the arts, decentralized experiments with renewing New York's bivalve heritage, some of them going under the name Oyster-tecture, promise a Hudson River and New York Bay replete with citizen-managed oyster beds to both filter out polluted water and attenuate storm surge. In this process, humans and oysters are meant to act side by side as ecosystem managers, to attenuate storm surges and the blackouts, floods, and logisti-

cal bottlenecks they generate. Meanwhile the Department of Homeland Security is developing plans to more effectively work with self-organized citizen groups like Occupy Sandy, and FEMA now gives grants for neighbors to meet each other and train in emergency response. From social media to neighborhood preparedness, the resilient (smart) citizen will be less an individual and more a connected and communicating cyborg. In the constantly threatened and threatening ‘new normal,’ resilience hopes to bring everyone and everything — oysters, citizens, smart grids, and Twitter feeds— into a anxiety-ridden ‘democracy of things’ where we will all play the role of crisis managing critical infrastructure. And the Anthropocene has been pasted directly over this framework.

### Technofossils

While at the time of the term’s first proposal in 2000, attempts to measure or understand the chronology of the Anthropocene’s stratigraphic signature did not yet exist, today geoscientists are heavily focused on that question. This is because geological epochs and stages are defined according to consistent sets of fossils left in rocks and ice, and so, in order for the International Commission on Stratigraphy (ICS) to accept the epoch as a formal chronostratigraphical unit, they must provide sufficient evidence that the processes they’re talking about will have a unique and long-lasting signature in the strata. In the first ever instance of geoscientists using anything other than biological fossils to help classify a chronostratigraphical unit, the Anthropocene Working Group are not looking at dinosaur vertebrae frozen in amber or ancient leaf imprints found in stone, but at whole cities, like New York and London, which they see as “one of the most extensive, durable and geologically distinctive aspects of the Anthropocene” (Williams et al, 399) and thus as representative index fossils of the epoch’s recent, current and near future. Reprising more or less the same list of so-called “critical infrastructure” or “vital urban systems” that one would find on the DHS website, geologist Mark Williams explains the key elements of what they call the Urban Stratum:

“Megacities have produced a fossil record of complex burrow systems at and below ground level... they represent a new phenomenon in geology, one that is driven by conscious thought and by mechanization. They include the trace fossils of locomotion by people, including metros, canals, both surface and subterranean (i.e. tunnels, walkways, roads and train lines), of power (conduits for electrical cables and gas and steam lines) and of ideas (telecommunications links). They also include fecal traces (Sewers and buried rubbish dumps), dwelling structures (underground buildings and foundations), resting traces (underground car parks) and even feeding traces (if quarries and mines, or the basements or foundations of fast food restaurants are considered)” (Williams, et al, 2013).

In a similar vein, head of the AWG Jan Zalasiewicz has proposed that these constitute a new kind of trace fossil he calls “technofossils,” a category which would include everything from NYC itself to bottles and ballpoint pens, fly ash particles, aluminum metal, or mines, and whose examination is the object of the new “technostratigraphy” field he has proposed to establish. Likewise, a 2013 article from the Geological Society argues that underground subway systems constitute a new and particular style of trace fossil—“metro trace fossils” —and that the beginning of construction of the London Metro or one of the oldest metro stations (Baker Street or Euston Square, 1863) could be the lower boundary line or beginning point of the Anthropocene (the GSSP, where they put a ‘golden spike’). (Williams, et al, 2013, p. 398).

While the discussion of Anthropocene fossils is complex and ongoing, what is remarkable in it is not only the new object (technical rather than organisms) of palaeontology, but moreover the temporal shift that’s taking place: paleontology itself is the science of the animal and plant forms of life existing in prior geological periods from their fossilized remains. From the Greek word *palaios*, meaning old or ancient, palaeontology is normally the science of beings or the being of prehistoric times, and has always been about studying past geological artifacts. However, the ob-

jects now under consideration as Anthropocene fossils —such as subway tunnels, underground gas lines, megacities— are those of our present day, still functioning civilization. So it seems that, for the first time in history, geologists are now dating an epoch in the present tense. That is, they're studying contemporary, still functioning, infrastructures —as fossils, studying the constituent elements of our civilization the way they once studied the remains of a long-vanished life form.

Absolutely inadvertent shifts such as these, which mark our epoch as one of catastrophe and ruin, have led many scientists to express similar sentiments to those of Paul Crutzen's collaborator F. Sherwood Rowland, who remarked to his wife one night coming home from work, "The work is going well, but it looks like it might be the end of the world."

### The Devastation

From the recent NASA-funded study, which announced that industrial civilization is headed towards an "irreversible collapse" unless population stabilizes and the distribution of resources can be worked out, to the latest military report on climate change, declarations of the end of civilization are not in short supply. By most accounts, we have an ecological catastrophe on our hands which government's either lack the political will to ameliorate or the technical fixes to patch up: New York's going to be under water, there are going to be resource wars, the dollar, the oil reserves, fertilizer supply —they're all going to collapse.

We insist however, that the Anthropocene —its declaration and its coming to the fore as an organizing concept— provides a much greater revelation. Amidst all the talk of coming crisis and disaster that colors our lives, the geologists who are measuring the Anthropocene are telling us that the disaster is not the next hurricane or some coming crisis; rather with the Anthropocene, the catastrophe is the epoch itself. Through their attempt to name and measure the "Epoch of Man," studying cities and subways as fossils in real time and conjuring future geologists from outer space to study a world in which this civilization's completely vanished, geologists have called our entire civilization, and its requisite way of life, as already a ruin. And even if they can't quite say what even the New York Times apparently can, "that this civilization is already dead," their methods show it quite clearly. So the Anthropocene as growing and diffuse recognition of civilization in its twilight. What do those on the edge of death do, but start writing memoirs, wondering, "what will my legacy be?" The geologists can only point to catastrophic scars.

The end of the world, then, is not this or that disaster coming in the future —a flood, the next hurricane, the collapse of Midwestern agriculture. The end of the world is not a potential future extinction of homo sapiens. The end of the world is what we are living through right now. Most importantly: "the end of the world" that we are living through is not the end of the world but rather the end of a world—the end of a certain way of living, a certain way of organizing existence. Whereas the deluge of newspaper accounts of "the collapse of civilization" focus almost primarily on environmental factors (mass extinction, desertification, melting ice) —we insist that the devastation named by the Anthropocene is just as much a spiritual, existential, human devastation as it is an environmental one. It is impossible to separate the collapse of ice sheets from the collapse of Man. Yet here again, in the very name itself, the Anthropocene seems to exceed what's considered polite or acceptable to say.

To say the 'epoch of Man' is to point to a particular metaphysics, an arrangement of life and its relation to the world, which emerges with force in the 18th and 19th centuries. Liberal life and its after life, transports us through the flesh of the world without ever touching or being touched by it. Neither epistemological illusion nor transcendental given, it is the historical product of several centuries of western government, whose apparatuses work not by imposing order on a pre-existing existence but by arranging and producing existence itself, producing it as a duality. On one side, human beings simultaneously detached from their conditions of existence and made to

identify freedom and happiness with that detachment (Man); on the other, the rest of the world turned into a standing reserve, an inert, orderable supplier now surrounding but never touching Man. The endlessly managed sum of these two sides, liberal life is the recursive global apparatus within which turning mountains into coal providers and constructing the plants and distribution networks they powered is at once connected to the lives those infrastructures sustain.

Everyone is eager to critique the “promethean” or “humanist” subject required by this civilization’s anthropology. But this focus on Man misses what’s actually happened to him over the past 40 years, which is that Man has been mangled and practically dismantled. First, there was the post-1968 horizontal reorganization of work and existence in the West that opened the enclosures onto the whole of existence via the demand that we create our selves, constantly, at every moment, and at all costs, to survive or to exist at all.

Then there is the cyberneticization of government. From the internet to the building of massive networked and automated infrastructural systems, over the past several decades governing has become more about creating and managing systems and information, rather than subjects. Creating these new systems created new threats coextensive with the systems themselves: broken gas pipes, power grid errors, disrupted connections, or failures of the control systems to track and monitor them —each small disturbance portending cascading disaster across whole networks. Thus today the problem of government is how to design resilient infrastructures that can better ‘adapt’, ‘respond’, or ‘absorb’ disturbance events. Hundreds of thousands of miles of fiber optic cable, overhead and underground power lines, server farms, flight routes, ports, highways, satellites, coal veins, smart grids and pipelines: this vigilantly managed global system of “vital systems” makes up the only thing that could ever be called a “whole earth.” Within it, we’re just expected to track, transmit and tweet, constantly —if even a pause in communication has become disorienting, it’s because to be is now less about being an individual than it is about being information.

But poor Man, it gets even worse! Most recently the myth of man standing triumphant over nature has fallen from grace not because of its devastating implications but rather from its failures in actually controlling nature or these systems at all. Fukushima, blackouts, the Deepwater Horizon Oil Spill: the infrastructures that were supposed to have mastered and perfected the world not only cannot, but moreover it is increasingly from within these networked infrastructures themselves that disasters emerge, disasters producing more disasters producing more cascading disasters, which man can only watch helplessly while his thumbs tap some impoverished reaction.

As Brad Evans and Julian Reid have put it, “We are living out the final scenes of the liberal nightmare in all its catastrophic permutations.” This is a devastation we’ve felt for a long time, but never had words for, and all the attempts to name or grasp it failed horrendously (capitalism, oppression, etc.). Not only have the geologists opened up the proper domain to understand this —the metaphysical— but they’ve also in naming the epoch after its first-principle-in-ruins, forced us to face our age in all its schizophrenia. So the epoch of man —referring backward to liberal life, but also naming our present, as that life in disarray. That’s why every photo essay of melting ice and growing desert that illustrate the Anthropocene should be accompanied by an image of a selfie, a bottle of Prozac, and Zuccotti Park.

If there’s something powerful in the Anthropocene, it’s the name’s ability to conjure the epoch, to put words to something we all feel but formerly lacked language to describe.

Has there ever been a civilization that NAMED ITSELF A FAILURE? Seemingly accidentally and despite themselves, the stratigraphers have climbed over all of this like any old pile of debris and placed us directly in a position to understand the present. The Anthropocene is like insisting on history, a shorthand to refer to the present of melting glaciers and revolutions.



### III. Implications

So, “What Must I Do?” at the End of the World, the title of this talk but also the situation we find ourselves in. While every time has been different or new, I think it suffices to say that we find ourselves in an unprecedented moment, in which even questions like “what must I do?” no longer make sense. Here’s why:

1. To deal with the kinds of realities we are facing today, to deal with what is essentially a revolutionary imperative –the total transformation of our lives and relations— we have at our disposal only the tools left to us by the same fading civilization. The platitudes, certainties, and metaphysics of classical politics are not only old and inadequate forms –and wrong from the outset— they are the very grounds of an order that we need to overcome. We don’t need to wait for the geologists from outer space to come analyze earth to comprehend that the ideas of transformation and of revolution we have inherited are as fossilized as the subway system. But it does pose a problem.

What does it mean to think revolution anew, about life, about our global historical political situation, with the knowledge that, for example, parts of New York, all of Miami, Louisiana, etc. will literally be underwater in less than 100 years and that most of the tools we have at our disposal are blunt instruments? No philosophers, no revolutionaries, have confronted a historical reality quite like this. At least in the past people knew that the literal ground would still be there under their feet; us, we’re not so certain. This partially explains why our time is so confusing, so anxious; we are being called to a monumental task: acting in a way that is adequate to our circumstances, adequate to a metaphysical disaster of planetary proportions, and adequate to what could potentially be the final historical conflict. But all of the lines that defined previous eras of historical conflict no longer hold: class against class, oppressed people against colonialism, anti-globalization against globalization, or whatever. To be adequate to our times, we need new ethico-political alignments, and we need to think the new terrain upon which the die has been cast.

2. At the most basic level the Anthropocene declares a war for the very nature of both our present and future. But this isn’t a war that is the continuation of politics by other means. After all, we are living in a civilization whose entire metaphysical undergirding is in question, and its constitutive elements –subjects and objects, the delimited spheres of the politics, economy, nature, society, and individual— are part and parcel of the very disaster. Thus the terrain we have been thrown upon is that of life itself and the ensuing conflict is over the possibilities of life and existence.

In a civilization that has acknowledged its own end, what is at stake isn’t a matter of who’s in charge or how things will be managed. It means that everything, absolutely everything, is up for grabs, and we refuse to cede the field of experimentation to the likes of Google, Michael Bloomberg, or whatever’s left of the Left. A future in which we help design a more participatory government, where we play the role of resilient infrastructures, or in which every relation is turned into data, promises only the continuation of the catastrophe. We can at least, though, take a cue from the first two we mentioned, as they take the world as their battlefield, and are getting organized to transform it.

Waging war means giving life to worlds, giving to them their necessary poetry, tactile skill, fighting spirit, or culinary know-how. We wager that life –while viewed by many as small in comparison with the “scope of the disaster”— is the only question capable of confronting the disaster.

3. One of the most jarring ways that the Anthropocene transforms our terrain is by thrusting us into an incredibly different experience of time, inaugurating a now time wherein what was once only to come has already arrived. The time of a catastrophe-that-is-already-present collapses the underlying temporality of government and thus of politics. The time of government in its various iterations is apocalyptic; it is a unidirectional, teleological movement towards the end, which renders the present a fragmentary, in-between time, merely on a course towards completion and redemption. Of course, the fact that God never seems to show up for the final reckoning, no matter how many prayers or emails we send, necessitates the economy of souls on their long, highly curated march to the end of time. What the Anthropocene breaks is precisely this only after: only after God, Jesus, or the Mahdi comes will there be redemption. And as Jacob Taubes notes, this kind of time orders revolutionary thought as well –after the revolution, the moment of completion beyond, and the evil world in between.

With the breaking of the only after, we enter a time in which there is no waiting or –following recent pronouncements— in which it is already too late. As someone we know said: “I used to think that, when we got together after Occupy was over, we were just socializing – eating together, getting drinks, talking, writing, etc. Like, the situation was gone. But then this thing with the Anthropocene hit me, and I realized: nothing ended when the Occupy camps were evicted. There is no “no situation!” This is the little realization that changes everything.” This is at once a liberating and terrifying zone of indistinction, upending our deeply held convictions and putting into question that which is most solid about our existence. But in an inversion of Christian apocalypticism, which when faced with the imminent coming of God rejects everything worldly as unnecessary and without worth –sell your house, sleep with whoever, eat meat on the Sabbath, and so on— in the now time of the Anthropocene, what matters is absolutely everything. This is because the temporal shift accomplished is also a spatial one: we are thrown back to the world between earth and sky, god and man.

Revolution begins from this world, where we are, irrevocably, and from which nothing is missing.

4. The fact that the truth producers of this civilization have delivered it a terminal diagnosis means that a new political imperative is at our feet. What can it mean at this point to be the critic, the opposition, or the negation? Not very much because at the end of the day, even the civilization is against itself, roundly acknowledging its own failure. To carry on the oppositional paradigm leaves us with simplistic inversions of this civilization’s values or, worse, a series of cosmetic treatments for a sinking ship. What can a dying civilization even give us? That’s why the attempt to narrow everything down to “our one demand” in the beginning of Occupy Wall Street failed. It wasn’t that there were too many people with different ideas, it was that this civilization has nothing to give us anymore, and it knows it—they want to crowd source solutions from us, that’s how desperate they are. But what we can take from this situation, is that there’s a necessary positivity to inhabiting the catastrophe of the present –no longer oppositions, but rather positions, positions that can define for themselves what their gods are, what their territories are, how they exist in the world, what they can do. This in turn poses a necessary materiality, and from Gezi to Oscar Grant Park, the question of material force was met as a strategic problem: how can we eat, where and how can we all sleep, how can we defeat the police, how can we grow more powerful? Or more darkly, think of Fukushima, the thousand-year half-life of various radioactive elements now dispersed across the islands of Japan. This very quickly brought up material questions too, not simply of how can we shut down the nuclear power stations, but, really, how can we live, given the fact of nuclear contamination?

5. We consider it symptomatic of our time that there’s so much that is already taking up the ques-

tion of how. There's the farming attempts, experimental urban communes, proliferating hack spaces, or traditional skills practitioners— each of whom ethically approaches the world and opens up seemingly sedimented tools and practices to entirely other uses. And while some might think that our entanglement and dependence upon the existing order of things is too great to overcome, in reality it's just a matter to be worked out. Part of really dwelling in the Anthropocene is recognizing that we can organize ourselves, that we can live otherwise, but it's also giving ourselves, concretely, the means to do so.

The fact that we are living in a ruin leaves everything to be reinvented, expropriated or rebuilt from the ground up. In the recent book, *First Revolutionary Measures*, Eric Hazan illustrated this well with what is soon to be New York State's official snack: yogurt. To produce a cup of yogurt currently entails industrial cow farms and dairy factories, packaging factories, coloring agencies, taste testers, technicians to print the packaging, logistics firms to route and direct the transportation of the yogurt to the grocery stores where we buy them, etc. While his proposal to create giant 'noncapitalist' dairy factories of ad-less flavorless yogurt sounds just as nightmarish as the Soviet Union or the present, the question of yogurt as a revolutionary question is a good one. Revolutionary times and disaster times have in common the suspension of the various infrastructures that, on a normal day feed, soothe, and transport us. If we're going to have yogurt in 50 years, or in a revolutionary time, how will we do so? The fact that people are learning this today is not inconsequential at all. The next question becomes one of organization – how do we share, transport, and create together.

Admittedly many current experiments and potential territories tend toward being “captured,” but many of the apparatuses that capture them are also hemorrhaging. Every line could potentially take another direction. The question that all of these experiments now have to face is one of taking up a position in the war in progress— for good or evil, they must make a decision, they must become partisan—in whatever way.

6. When we are thinking the question of material force, of our positivity, it is to define completely different possibilities for another way of life. But for a moment here, I'd like to address the question of survival, the level to which many advocates of resilience and sustainability would like to relegate us, and into which the ubiquitous discourses of extinction and a “world without us” often trap us. As we noted earlier, the fissures produced by the Anthropocene are functioning in a total mobilization to prop up what's left of the order of things, or engineering from these parts a new zombie arrangement. The project of governing today, whatever we call it, literally has no goal, no purpose, other than to hold itself together, to hang on. We say this a lot, but we really have to grasp that, and the ways in which it would like to circumscribe our horizons to match its own. That is, we are now asked to really become explicitly what we already are, what we have been raised to be since the day we were born —people that just survive, who are resilient. Things are just going to get worse, so we should be grateful for what we have, a job, the MTA, that winter's ending. Surviving machines, but surviving machines imbued with government's idiotic disposition, its neurotic, constantly assailed nature.

We refuse this, and that we don't accept it means that our only choice is to get organized together.

7. On the question of obsolescence or going forward or going backward. As soon as we talk about getting organized and the techniques this entails, if there's not a mention of rocket ships or pillaging outer space, someone inevitably says “but you know we can't go back.” To that we would say simply that what we are doing is beginning from here. But saying “here” does not mean simply accepting what is given as good, or the inevitable result of “progress.” Many tools and tech-

niques were rendered outmoded or obsolete not by “technological advances” at all, but through a deliberate process of imposing ways of governing and valuing what we now know as work, reversing the fact that the “manager’s brains [were] under the workman’s cap.” That being said, we don’t validate prior conditions as a golden age or treat them as somehow better simply because they aren’t the present. We don’t advocate the aestheticization and moralization of techniques –I only cut kale with my obsidian hand axe on a salvaged olive wood cutting board. Nor do we accept this civilization’s mythology of progress and its forced march; after all the same civilization, remember, is saying now that it itself an epic disaster –Anthropocene! The question for us is not about high or low, sci-fi vs. fantasy, but a question of what it means to set tools and techniques free of their measurability and equivalence, to restore them to a relational and situational existence in worlds. In the end, “we can’t go back” is just another way that this civilization tries to say “nothing else is possible,” and the fact that it shouts all the more vehemently today is only proof of the opposite.

8. Finally, I’d like to gesture to a variety of realities taking up the question of revolution within the material conditions of the present.

Take the increasing defection from the ranks of scientists. There’s former NASA climatologist James Hansen, who first testified about global warming in the 80s and who several years ago started occupying campuses with students and taking part in civil disobedience. There’s Kevin Anderson professor of Energy and Climate Change at the University of Manchester who argues that “the remaining 2°C budget demands revolutionary change to the political and economic hegemony.”<sup>[1]</sup> Or Brad Werner, geophysicist at UCSD, who recently gave a presentation titled “Is Earth F\*\*ked?” (full title: “Is Earth F\*\*ked? Dynamical Futility of Global Environmental Management and Possibilities for Sustainability via Direct Action Activism”) and said the only possibility lies in “resistance” – “people or groups of people” who “adopt a certain set of dynamics that does not fit within the capitalist culture” including “environmental direct action, resistance taken from outside the dominant culture, as in protests, blockades and sabotage.” Based on his extensive mathematical modeling, he has hoped to demonstrate that revolution today represents the only “feedback” capable of not annihilating everything. Maybe the discursive and practical terms people find to express their revolutionary intuitions are a bit outmoded, but we are more concerned with the proliferation of this phenomenon and the fact that we can only expect more of this.

In other places exodus has begun, such as in Japan with Those Who Go West. Sabu Kohso and Shirou Yabu have written on this and the situation around it, but many in Japan are fleeing not only the diffuse radioactivity of the Fukushima Daichi reactors’ meltdown but also the crushing weight of the Tokyo metropolitan apparatuses. In their flight, they are also getting organized to live differently: some are taking up farming as an escape from their civil service jobs, other are self-organizing radiation measurements of food and public spaces, while others are taking on the project of organizing a new insurgent territory that can perhaps overcome the power of Tokyo itself. That more exodus will happen in the future is a certainty, one need only think of New Orleans and the relocation of nearly 150,000 people in the aftermath of Katrina. And while Fukushima may have provided the impetus for the exodus in Japan, it’s clear that many of the thousands who have left the Tokyo-Fukushima region are trying to define for themselves the course of their futures. This is the lesson to take.

Meanwhile in France, there is a very explicit attempt to build up a revolutionary territory around Tarnac in the central plateau region. The call to populate the area has woven together a fabric of farms, workshops, bars, groceries, and hack spaces, but unlike the experience of 60s American communes, it is not a withdrawal from conflict, but a secession that takes with it the material means to become stronger. The temporality of politics –where life was considered simply the

time waiting between insurrections, between movements— has been abandoned for a now time, concerned with experimentation with life and its techniques, preparing now a rich life for the future exit from this civilization.

What each of the above speaks to in their own way is that revolution today is not a moment off in the future, but an existence we build today. This makes the matters of revolution, of our own happiness, of our own lives, of our own power, a series of inseparable questions. What's living, what's dead, what can we use? What will we have to destroy, leave fallow? These are concrete questions.

## IV. Conclusion

The Anthropocene in its accidental profundity, names the threshold moment in which we exist, a time of the collapse of a civilization and of revolutionary potentiality. If it engenders a deep uncertainty concerning the nature of our own existence and the elements that have for so long made it up, it also makes us wonder whether the cities we inhabit will be here in 50 years. In fact, the incredible number and diversity of uprisings over the past years radiate with this urgency, exhibiting a mood of confusion, disarray, and unease, but also an kind of freshness, a readiness to see the world born again, to make the world again, in whatever way.

Faced with the catastrophe, there are those who get indignant, those who take note, those who denounce, and those who get organized. History depends on those who get organized.

