Space junk

The signs are there for those who pay attention to them. Reports of melting glaciers and impending crashes. Crashes of the ocean’s fish stocks, mass extinctions on a scale not seen in 65 million years. Stock market crashes, internet seizures and data breaches, doomsday viruses online and off. Plane crashes and mysterious disappearances in Indian or Mediterranean seas. Rising sea levels and strengthening storms, with tag-teamed hurricanes battering and flooding coastal areas. Hundred-year droughts arriving in back to back years. Swirling accumulations of trash in the middles of the world’s oceans. Accumulations of toxic particles, radioactive dust, and microscopic plastic pellets in the bodies and bloodstreams of every living thing on Earth. Accumulations of space junk in the atmosphere. Mountains of waste, electronic and otherwise, building up to WALL·E-like scenarios, but without Disney/Pixar’s (or the Buy-N-Large corporation’s) interstellar cruise-ship escape.

Sooner or later, the trash will hit the fan, the crash will burst the dam, the supercollider will hit with the full force of its impact. The mad rush for land, for survival, for salvation, will begin in earnest, even for the most protected of us.
These are among the material ecologies that make up the era tendentiously and contentiously called the Anthropocene, the New Era of the Human. There are other kinds of ecologies besides these material ones: social ecologies, and perceptual ecologies. I’ll explain why it’s better to think in threes than in twos, and why the social, the material, and the perceptual make a useful frame for thinking of the ecologies that constitute the world.

Our social ecologies work the same way as our material ecologies, with blowback to widening inequalities and horrific injustices coming in the form of movements of growing refugee populations — economic refugees, climate refugees, refugees from wars fought over the stakes of all these crashes and the political violence and terror that accompanies them.

Between the material and the social are the fleshy, intersensual dynamics from which the material and the social, or the “objective” and the “subjective,” continually emerge. Drawing from the ecosophies of Félix Guattari and Gregory Bateson, I will call these our mental or perceptual ecologies. Blowback there comes as guilt, bad dreams, ghostly observances fracturing our sensory perceptions, inarticulate rage against those who question the tacitly held consensus. This is the hauntedness of the present by the abyss of an ungraspable and inconceivable future. It is these affective undercurrents that are our responses to the eyes of the world haunting us from out of the corners of our vision. (More on those eyes later.) They are what makes us feel that things aren’t right — a hint at the traumatic kernel of reality that both psychoanalyst Jacques Lacan and, with a different inflection, Buddhist philosophers have placed at the origin of the self, but which in a collective sense is coming back to haunt us globally.

We misperceive the nature of the world for the same reasons that we misperceive the nature of our selves. Every social and linguistic order interpellates its members — it shapes and hails them into existence with a call of “Hey you!” Each does it differently. But over the course of the storied history of humans — not the meta-narrative of the Anthropos, just the patchy tale of humanity in its quiverings and coruscations — most such or-
ders have incorporated into that interpellation some sense of responsibility to more-than-human entities or processes. In whatever way they were conceived—as spirits or divinities, or as kin, or in terms of synthetic narrative or conceptual metaphors like life-force, the Way, the path, li and ren, 礼 and 仁, the four directions, Muntu and Ubuntu, Buen Vivir, Nepantla, some gift-giving and life-renewing sacrifice, and so on—these have typically borne a central connection to the kinds of relations we now categorize as ecological. (At least for those social orders that worked.)

Modern western capitalism has fragmented these relations, setting us up individually in relation to the products of a seemingly limitless marketplace. But it has left us collectively rudderless. So if scientists, the empirical authorities of our time, tell us we are fouling our habitat, we have yet to figure out how to respond to that, at least at the global scales where most of the problems become manifest.

This is why it is the relational, more than the substantive or “objectal,” that humans, especially westerners, need to come to terms with. That is in part the argument of this book. Commodity capitalism has been profoundly successful at encouraging us to think that objects are real, and at projecting value into those objects so that they serve the needs of individuals, even if they never manage to do that (which is, of course, the point). The effects of our actions, on the other hand, are systemic and relational, and we won’t understand them unless we come to a better appreciation of how systems and relational ecologies work and of how we are thoroughly enmeshed within them.

At the same time, it is the objects that haunt us: the refuse swirling around in the middle of the Pacific, the mountains of excreted e-waste, the stuff we send down our chutes, out our drains, off to the incinerator, the river, the ocean, the atmosphere—the black holes, out of sight and out of mind, from which we hope they never re-emerge. When they do re-emerge, in our fantasies and nightmares, we reify them as the Thing, a Demon, a Host—as in Bong Joon-Ho’s thriller of that name,
about a river monster embodying the legacy of industrial pollution in South Korea’s Han River. The objects become sublime.

If our consumptive, commodity-captivated and spectacle-enraptured society has privileged the object over the process, the thing at the center of our attention over the relations that constitute it, this thing-centeredness should not surprise us. In part, it is an effect of the human perceptual apparatus, with its heavy reliance on vision, a sensory modality that shows clear edges to objects and that facilitates distanced observation and predation. Where traditional cultures de-emphasized the visual in favor of the auditory or multisensorial, the narrative, and the relational, societies like ours — fragmented and individualized, intensely visually mediated, and ecologically and historically disembedded societies (in the sense described by Karl Polanyi in his paradigm defining *The Great Transformation*)¹ — push the ontological objectivism, literally the “thing-ism,” about as far as it can go.

An object flies out the window

Two earlier working titles of this book were *Why Objects Fly Out the Window* and *Against Objects*. The second one was not intended to be taken literally. How could I be against objects if, as will become clear, my argument is that objects are not real, at least not in the ways we tend to think they are? Or, as the founder of Tiantai Buddhism, sixth century Chinese master Zhiyi, would put it: they are real, and they are not real, and both of those are equally true at the same time and could not be otherwise. (More on him below.)

The point is not the objects, but nor is it what they mean. There is a current philosophical fashion for objects — a celebration of the uniqueness and distinctiveness of everything one might happen upon — that posits itself as a critique of human meanings, or at least of the idea that it is human meanings alone

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that count, or that human meanings are central to whatever does count. In the debate between these object-loving ontologists and the human-meaning lovers they critique, it is reality itself that is at stake—a reality that I will argue is not one of objects, but of something more elusive than that.

The objects of my title, then, are sneaky little things that have come to populate a world where their underside— their actual reality—has become invisible. They are also a not-as-sneaky reference to the object-oriented metaphysics that have been gathering adherents in the world of popular philosophy. Many of the ideas in this book were initially developed in conversation with leading proponents of those metaphysics—conversations that took place on blogs and web sites more often than in print. Those interlocutors included Graham Harman, Levi Bryant, Tim Morton, and Ian Bogost, all of whom have identified as “object-oriented” philosophers (though Bryant has recently shifted camps somewhat), alongside tangentially connected observers like Peter Gratton and Ben Woodard. And they have included many allies on the “relational” or “processual” side of this debate such as Steven Shaviro, Christopher Vitale, Leon Niemoczynski, Adam Robbert, Jason Hills, Matthew Segall, and many thinkers to whom I am indebted including Bruno Latour, Isabelle Stengers, William Connolly, Jane Bennett, Karen Barad, Brian Massumi, Erin Manning, Donna Haraway, Tim Ingold,

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The short answer to the question implied in my original title — why do objects fly out the window? — is not for any reason of their own. They fly because they are the sort of disconnectibles that can fly under the right conditions. Typically this occurs when there is a sufficient difference between two atmospheres encountering each other for the first time: as when a high-speed vehicle opens its window to the outdoors, unleashing a wind capable of carrying away many objects-suddenly-become-paper-airplanes. Objects gain their ability to fly when other objects (or subjects) induce those conditions around them. Objects are precisely the kind of thing that can be removed from their processual contexts and made to enter into new ones. And in a highly artificial world, where such disconnectibles proliferate, and where the zone of encounter between environments produced by one disconnectible (say, a moving vehicle, or a moving national economy) and the connective network in which it moves disconnectedly gets amped to the max, objects fly all the more quickly. They fly all around.

There is, I will posit, an important difference between the world of disconnectibles that has flourished since the emergence and spread of carbon burning industrial civilization — the world marked by the dawning of the singular Event named the Anthropocene, or, as I prefer, the AnthropoCapitalocene, or A/Cene — and the world of connectibles that preceded it and that continues to support, encase, subtend, and resist it. There may be no clear line demarcating the pre-industrial from the industrial eras, the pre-A/Cene from the A/Cene; these terms overgeneralize from a long and densely tangled set of lineages. But there is value in distinguishing between these variants based on the simple fact of the sheer production of objects: that is, based on the rapid and dramatic proliferation of objects, the extent of

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3 Steven Shaviro has been particularly active in the “object-processes” debate; see Shaviro, *The Universe of Things: On Speculative Realism* (Minneapolis: University of Minnesota Press, 2014). For other relevant titles, see Appendix 1.
their dissemination, and the breadth and depth of impacts they have on the world that burbles, thrums, and hisses alongside them.

In other words, there is value in distinguishing between disconnectibles — which this book will call objects — and the processes out of which those disconnectibles arise, within which they move, and to which they return.

Those disconnectibles are one kind of object. This book will propose a second and more precise definition of object, one which does not last longer than a moment. The things that do last longer than a moment I will call entities or things. In contrast, real objectness, objecthood, object-being, is something that arises in a flash of relationship with an equally elusive subjectivity. Objects in this second sense — let us, in an irreverent nod to psychoanalyst Jacques Lacan, call them objects-a — are defined by the relationships they have with subjects, or subjects-a. And vice versa, subjects-a are defined by the relationships they have with objects-a. These relationships arise for the moment that they arise — a flash of experiential reality — and then they are gone, subsumed within the substance of a universe that can scarcely be sighted before it is something else. Encountering an object-a is one move within a circle, or rather a circulation; it is something that a subject-a does. The next moment that object is no longer there, and neither is the subject. Both objects and subjects are winking in and out of existence all the time; what continues in and around and beneath them is process.

A world full of disconnectibles, however, encourages us to see objects everywhere, and nothing but objects. What you hold (if you are reading this from a book) is an object, but it is an object intended to perform a certain work upon you and upon others. As it does this work, it enters into processes that preceded it, parallel it, and have existed independently of it (more or less) until now. Process-relational thought is the thought that is intended to redirect thought toward the contexts, the relations, and the processes that surround, subtend, and inhabit objects.

Process-relational thought is not new; it is in fact ancient. This book is an attempt to articulate it in terms of recent de-
bates over objects, processes, events, images, and the meanings of recent global events and developments in particular. It is not a philosophical treatise. Its spirit is more of an animated restaurant conversation than a systematic legal case. It is intended less for philosophers than for those it might reach through its sheer, object-like ability to fly out of windows. It is a paper airplane, and where it lands is anyone’s guess.

**Things (scribbled on a restaurant napkin)**

1. Things are always already in process. More complex things are more in process, or in more (and different) processes, than simpler things.
2. Growing/developing things tend to become more complex; their trajectory, when they are on a roll, is uphill, which takes effort and builds capacity. Other things tend to become less complex; they roll downhill. But these tendencies are contingent on complex interactions with their environments, and on habits enfolded out of previous such interactions.
3. Being in process, things elude capture. Those that are captured become other things, and generally simpler things, than they were before.
4. You can never do only one thing.
5. You can never isolate one thing from the rest. When you try, that thing ceases to be what it is, or it drags other things with it.
6. Knowing is doing; doing is knowing. But neither of them is only and fully the other.
7. Mind and matter go hand in hand; facts and values dawdle together. Separating them is possible only at the expense of a diminution of each.
8. The present is all that there is; how you respond to it is all you can do.
9. Every action feeds a relation, tweaks a process, builds (or unbuilds) a network.
10. A world full of things made by the AnthropoCapitalist Thing makes it seem that things are *merely* things, simple things,
physical things, dead things. Even *those* things aren’t that (because the mental and physical always go hand in hand). But *other* things certainly aren’t that.

**Thing-notes**

1. “Things” is a generic term for bits and pieces of world and universe. They are related to matter, but are never matter alone (mind or form are always part of them). Things do; things are done. There is no such thing as still life. Complexity and simplicity are relative.
2. Entropy and negentropy are general trends. In reality, most things don’t just move all in one direction.
3. Everything becomes different from itself anyway. The question is always *what to become*.
4. But you can try.
5. Form is substance; substance is form. But… same story.
6. Epistemology and ontology are never fully independent of each other.
7. Segregating them commits the error that Whitehead called “the bifurcation of nature.” More on that soon.
8. The past is what is no longer present, though its effects may remain and continue to shape future possibilities. The future is what is not present yet. Absences are present as absences; they, too, shape what is present. The present that you can respond to is not the entirety of the present. One cannot respond to things that one is not sensitive to; they don’t make a difference, so they cannot make a “difference that makes a difference.” But in general, this point #8 summarizes most of what we need to know in life. Everything else is extra.
9. Or many at once.
10. The AnthropoCapitalist Thing (henceforth, A/C Thing) includes humans, ruminants, cereal grasses, fossil fuels, combustion engines, cities, techno-economic networks, and a proliferating array of things made for the Thing and things made to *make* other things for the Thing. Even things made by the A/C Thing seem to be getting livelier and more com-
plex: digital life, nanotechnology, online worlds. We are building a complex meganetwork atop a complex meganetwork, but with relations between the two—Terra 1.0 and Terra 2.0—growing ever more tenuous and fragile.

**Metaphysical entry point**

Metaphysics is the philosophical field that studies the general nature of reality. Ontology is its sub-field that focuses on the make-up of reality, or the kinds of things that exist, and on how they do that.

One of the recent efforts to develop a realist metaphysics adequate to the world in which we live is that called “object-oriented philosophy,” or “object-oriented ontology.” The starting point of OOO, or OOP (its representatives have occasionally been lampooned as OOPs), is the premise that the best description of the world is one that attends closely to the objects that make it up. This is its realism more broadly, and its “objectivism” more specifically.

While this premise sounds, at first blush, not unlike phenomenological philosopher Edmund Husserl’s call, a century earlier, “back to the things themselves,” the difference is that Husserl approached those “things” through the human perception of them. To that perception, later phenomenologists like Martin Heidegger, Maurice Merleau-Ponty, Jean-Paul Sartre, Paul Ricoeur, Luce Irigaray, and Jean-Luc Marion added an emphasis on interpretation, language, discourse, decision, embodiment, gender, and other dimensions of human experience.

Object-oriented philosophers reject this interest in correlating human perception to reality, which Quentin Meillassioux has labeled “correlationism.” They are interested in decentering human perception and experience so that it is no more valued in principle than any other kind of experience, or indeed than anything at all. In part, this is out of a desire to account for a world

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that, as Levi Bryant has put it, “far from reducing the number of existing objects as alleged by reductive materialisms, has actually experienced a promiscuous proliferation and multiplication of objects of all sorts.”

Let’s name a few of these objects. In fact, let us borrow a list of such objects from one of eco-radical Derrick Jensen’s polemics against industrial civilization. Jensen and his co-author, Aric McBay, ask us to consider whether life would be worth living “without CDs, plastic pacifiers, plastic wrap, sandwich bags, syringes, bottled water (and soda bottles), single serving packets of potato chips, automobiles, straws (and crazy straws!), plastic grocery bags, freezer bags, ice cube trays, bubble wrap and packing peanuts, carpet-backing, Styrofoam life preservers and take-out trays, disposable pens, disposable diapers, hairspray and plastic hair brushes, plastic toothbrushes (and toothpaste!), milk crates, packing tape, plastic forks, telephones, computers, hair clips, billiard balls, shower curtains, beach balls, balloons, latex condoms, and polyester pants?”

One thing all these things have in common is that they exist—they are as real as you and I, and for object-oriented ontologists that it enough: they need to be accounted for.

But there is something more specific shared by the objects on Jensen’s list. It is their plasticity—a plasticity that, for all its malleability (by definition) and intended disposability, presents an obduracy that comes closer to permanence than to the kind of usable life that, for centuries, carried the day among objects. What they have in common, in other words, is that once they are used by people for the limited time of their intended use, they all become space junk. They are thrown away, with the ca-

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veal that, globally speaking, there is no “away.” So they pile up around us, and inside us.7

This desire among philosophers to acknowledge the proliferation of objects is a valuable step insofar as it returns philosophy to a concern for the world, and not merely for humanity. Yet it is important to recognize that this proliferation results, in large part, from the tremendous proliferation of commodities in a capitalist world-economy — the most productive economy the world has seen, whose productivity relies on the extraction of substances from their processual relations to produce things that appear to have no such relations — objects that are simply there, for us to admire, desire, purchase, use, and in the end discard. The “objectivity” of these objects is a product of a set of relations; it is illusory, or partial in any case, to the extent that these objects are not simply objects as such, but that they, for all their specificity, arise out of certain kinds of processes (extractive, productive), give rise to others (consumptive, waste-producing), and entangle their owners in relational ecologies that are morally imbued, materially generative, and dramatic in their effects on the world that is passed on to future generations of humans and our planetary co-inhabitants.

The approach I advocate in this book shares object-oriented philosophers’ goal of a metaphysical realism — which puts us all into the newish category of “speculative realists.”8 But it approaches this goal from a direction that is in certain respects their polar opposite. It begins from the premise that, in an ultimate sense, there are no objects, only events, and that what defines those events is a relational encounter in which subjectivity is central. Seeking subjectivity in the world of plastic objects

7 For an insightful and varied set of responses to the “plastic ocean” that has been accumulating around humanity, see Julie Decker, ed., Gyre: The Plastic Ocean (London: Booth-Clibborn, 2014).

may be counter-intuitive, but that is the whole point. If we cannot find it there, we might as well not find it anywhere.

This does not mean that my approach begins as a “revolt against substance,” for the world of events—a world of relational process—is as substantial as any world of objects can be. It begins, however, from the subjective encounter. It begins, following the work of philosophers like Charles Sanders Peirce, William James, Alfred North Whitehead, John Dewey, Martin Heidegger, Isabelle Stengers, Bruno Latour, Donna Haraway, and Karen Barad, from “matters of concern,” and it does this because it is such matters that we are always in the midst of. It begins with a refusal to extricate the “knowing self” or “subject” from the relations that constitute it.

More specifically, the ontology I propose in this book—one of a series of variations that a process-relational ontology can take—is one that brings together two powerful insights from two of modern philosophy’s most original voices, Alfred North Whitehead and Charles Sanders Peirce.

From Whitehead, I take his turning inside-out of Cartesian dualism and of the two philosophical faces it brings together—one being idealism (or rationalism), the other being materialism (or empiricism). Rather than the subject and the object, or mind and matter, or value and fact, being two kinds of substance or quality that either interact in some form of dualism, or that subsume each other—into an idealism or a materialism—Whitehead takes subjectivity and objectivity to be active poles within a single, dipolar relational process. That process is the process that makes up every real entity in the universe, which is an entity of occurrence, an event, a becoming. Every being is a *becoming*, characterized by what Whitehead called *prehension*. Every becoming is a response to things given. As such, it involves emergent subjectivity taking account of, or “prehending,” what has become objective for it. Once that response is completed, it becomes material for the next response.

By rendering subjectivity and objectivity internal to all things, Whitehead gives us a universe that is alive and filled with experience. The things that appear to us to be “just there”—ob-
jects to be measured, handled, or otherwise kicked around, but not to be negotiated with or granted the respect with which one might honor, say, a companion or a divinity — are not things at all, except insofar as they are figments of our perception. Their reality — their experiential interiority, or rather the specific mixture of interiority and exteriority, the same kind of mixture that constitutes all real things as processes of subjectivation and objectivation — this reality eludes our experience except insofar as something of it — its objectivity or “outsideness” — is accounted for in our own subjective experience. And crucially, the same goes for them. We are all inside-outnesses winking into existence moment by moment through prehensive encounters, with stability achieved through the complex movement of masses of such winkings. What that means should become clearer as we go.

From Peirce (pronounced “purse”), I take his revolutionary reframing of the logical categories found in Aristotle, Kant, and Hegel (among others) into a tri-categorial schema according to which everything in the universe is composed of triadic, “semiosic” process: the firstness of things in themselves, the secondness of things in relation, and the thirdness of relations in relation. This parsing results in a triadic ordering whose fruitfulness will, I hope, become evident over time. But listing some of its variations might begin to give a flavor of it. There is potentiality (a firstness), existence (a secondness), and meaning (a thirdness). There is chance, actuality, and necessity; vagueness, singularity, and generality; quality, relation, and representation; feeling, reaction, and thought. By means of these categories, Peirce was able to define meaningfully ordered relations between everything else: aesthetics (the Beautiful), ethics (the Good), and logic (the True); phenomenology (the study of what appears), normative science (the study of how we ought to respond to it), and metaphysics (the study of what it all means); and so on ad infinitum.

Far from being merely an ordering principle, Peirce took this triadism as an insight into the order that underlies all things (not over and above, but in and through), and as a way of en-
suring that one of the three does not subsume or outflank the others (as Peirce thought occurred with most philosophies that preceded his). Peirce was a fierce logician and a brilliant mathematical mind, so these categories didn’t come cheaply with him; he worked on them his entire life. And because that life was marred by professional failure and much of his writing remained, and still remains, unpublished (and difficult to make sense of), his prime discovery remained unsung and underutilized. This book attempts to sing it.

This marriage of Whitehead and Peirce is purely my own and no doubt deviates from other presentations of either philosopher. It is an experimental proposal, still in the process of being worked out, and is inspired for me by the spirit of Gilles Deleuze, who deeply admired both philosophers, even if he did not write much about either. Marrying these powerful concepts from Whitehead and Peirce creates a theoretical engine that I believe can help us out of numerous intellectual quandaries that mark our time of social and ecological crisis.

There are two other, larger and more diffuse, players I will bring into my philosophical machine at certain moments. The first is a particular variant of Mahayana Buddhist philosophy, which will make its distinct appearance in Part Two. The second is a more general ally whose presence I would like to open a path toward, but which I feel largely unable to speak for in these pages: this is a “decolonial” movement in the worlds of non-western and indigenous thought, and in anthropological efforts to dialogue with those forms of thought. I hope the influence of the latter is felt in Part Three, but its full development (and recognition) requires another book.

Let us, then, begin with some matters that concern us.
Matters of concern

Everything begins with matters of concern. Such matters are always, as they have ever been, matters that involve us, touch and brush up against us, envelop us, or otherwise call on us to respond to them.

By “us,” I have in mind not only humans, the collective “we” who have become the default in-group of philosophical thinking in the western tradition. I do not exclude humans; they constitute a relevant and useful category. But neither would I circle my philosophical wagons around them. This “us” is more like a call, an appeal, a network-building probe or vector. Sometimes the extent of that network has been taken for granted: members of a tribe or nation, philosophers, citizens, humans. But in times like ours, the “us” ought to be much more open than that, and this opening-outward is the vector I would like to pursue in what follows, even if the tools I use—language, of a philosophical kind—will not reach all of us directly. The “us” is the coming-into-being of responsiveness, in its many forms.

As for the “matters,” they are such because they matter, they make a difference; so we call them to mind, we pay them attention. Mattering, they come to mind; minding, we come to matter. Matter and mind are nothing of themselves except as they come, and in the time that they come, to each other. The same can be said of subjects and objects: they are nothing except as they arise with respect to each other. “Concern” is precisely that “with respect to” that brings them together.

It has been argued that “concern” sounds too distant and paternalistic, that “care” is more direct and exposed. The terms are somewhat interchangeable. Karen Barad puts it beautifully

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when she writes that “matter feels, converses, suffers, desires, yearns and remembers.”¹¹ Even so, matter alone does little without, say, processes of form-building. A wave crossing an ocean contains no matter, but it shapes and moves the matter in its path, moving molecules up and down as it moves; its substance is its form, which is always related to the other waves of which it is a vector. To speak of the “mind” of a wave is of course also presumptive. Its internal energy is a part of larger movements whose full extent we have some trouble grasping because of the limits of our own imagination.

Let us, then, eliminate the terms “matter” and “mind” in their usual meanings — as, respectively, mindless stuff and immaterial agency — and refocus the words on the how, or the minding of matterings. To engage with matter is to mind what matters, to care for it, to “take a concern” — which for Quakers is to take something as an obligatory call to action. (More on those Quakers in Part Two below.)

To be sure, there are things, things that happen. There are matters, matters that come to mind. The sequence I will posit, considered as an ideal or logical progression, not a chronological one (this is important), follows the triadic phenomenology laid out by Peirce: there is, first, the thing, then the happening, then the matter of which the happening is a sign, a reminder, a call, a prompt, an issue, a problem, a pattern, or a law.¹² There are, in other words, spontaneously generated qualities — not Platonic Ideas, but simply the potentials inherent in anything, structured by their forward movement coupled with the play of chance. Peirce calls these firsts; taking a hint from Deleuze, we might call them virtuals, which means that they are effectively


(causally and generatively) real. Then come the relations, as certain of these potentials become actualized in real encounters, real events, in a multiplicitous universe. These are seconds, or actuals. Finally, there arise the mediated consistencies, habits, patterns, regularities, laws, generalizations, and meanings—these are the thirds, generals, or relationals (as opposed to mere relations).

This dynamic of firsts, seconds, and thirds is always at work. Peirce insisted on its universality: if any of the three is ignored or de-emphasized—the bursting forth of chance, connective causality, significance and generality—we will be drawn up one or another philosophical rabbithole. This triadism constitutes the heart of the worlding of the world (any world). In this way things become, and in this way they come to signify.13

But to call the things “objects” is already to suggest too much about them. There are, from this perspective, neither subjects nor objects at the outset, just things in their singularity. This is the world of virtualities, differential fields on the cusp of breaking into something: a wave, a motion, an event. They are not yet a world, but they enable worlding. Breaking, those virtualities become happenings: they intervene into the times and spaces of other things, each imposing itself on another, each resisted by others. This is the world of relational events, which is the world in the process of being made, of being woven into tangles of force and counterforce. This is the world that scientific analysis likes to probe, methodically and systematically. Finally, there is the world of significance, the world that is now fully a world, inhabited. Humanists prefer to start here, analyzing our significances as things not to be taken for granted, but always produced, negotiated, and lived. But where humanists often stop short is in recognizing that neither the happening nor its significance is peculiar to humans. Humans do it, but so do

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13 Peirce’s triadic outline of the logical categories of all experience was an obsession throughout his philosophical career. It took many forms, and in the end was the single contribution he felt was most original and significant in his philosophy. For one version of it, see Peirce, “The Principles of Phenomenology.”
many others: we make sense of things, which thereby become signs, meanings obtained about a world through the things, the images, the objects we encounter. We feel, and respond, to that which happens, and in responding we generate a world.

I am describing here a view of the world as made up of relational processes, events of encounter, acts of experience, and nothing else. Everything there is takes place; which is to say that it gives place, it places. Its taking place is what gives it existence, but its specific kind of existence comes from what constitutes it at the outset, as the thing that it is, the thing in its firstness; the dynamics of its prehensive encounter with other things; and the subjective aim that is realized in the encounter. In coming to exist and relate to others, the origins of both are selectively taken up and turned into potentialities for the next set of existents. As Whitehead described things— that is, events— these are constituted by the encounter of an emergent subjectivity, a mental moment of pure feeling, with some matter that is there for it to behold and to respond to. The occasion is dipolar: at one end mental or subjective, at the other physical or objective. But the subjectivity lasts as long as the moment, which begins with a “prehension,” a taking into account, and rounds off with a satisfaction, a “concrescence,” at which point the subject becomes an object, a datum, for the next set of moments that may emerge. And so on, ad infinitum.

With Peirce, what becomes clear is the semiotic and triadic (or “depth”) nature of prehension— that is, the fact that any meaning created (which he called an interpretant) is performed through an intermediary, a representamen that stands in for something else, that “something” being the distant and withdrawing semiotic object. There are two movements going on in such a triad: there is the prehensive grasping of the object(s) of one’s concern; and there is the withdrawal (for instance, by differing and by deferral) of the original object from that representamen, and thus from the grasping. It is the prehension, or the act of “possess[ing] or intuit[ing] a datum, a given,” that provides the openness, the forward motion or evolutionary momentum at the heart of things. And it is the withdrawal, the de-
ferral and *différance* (to use Jacques Derrida’s term, but applying it not only to language but to everything without exception), that provides for the elusiveness and opacity of the universe.

Peirce’s triadic account of signs— which are moments or events of signification—insists on the rootedness of those signs *in* the world, their connection to and dependence on things that preceded them and that are there in the virtual-processual chance-structure of the universe. What constitutes a “sign” can be something as basic as the way a sequence of nucleotides is decoded in the synthesis of proteins, or something as complex as the idea I have of my self or of “democracy.”

In this way the world proceeds, an “advancing assemblage” of “processes of experience,” a simmering ocean of becoming, subdivisible into streaming, temporal, relational vectors. None of these processes is exactly alike: there are different kinds, varying in texture, in extent, in stability, in rate of change and style of movement, in manner of organization. In the encounters between emergent processes, the organization of such processes folds over, takes on a layering of surfaces and depths, of outwardness and inwardness, and interacts to create larger processes, larger networks, whose consistencies give us the world, or worlds, that we and others perceive and inhabit. Perceiving, we respond, and responding we come to inhabit; we habituate. The world, in the end, is a world of evolving habits shot through with chance and with novelty, which seed it with further novelty, further habituation, further evolution.

Between Whitehead and Peirce and the other thinkers who have variously contributed to a process-relational account of things, there are discrepancies, gaps, and divergences one could spend lifetimes lumping, splitting, splicing, or smoothening over. The list of such thinkers might include Heraclitus, Zhuang

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Zhou, Nāgārjuna, Śāntarakṣita, Zhiyi, Fazang, Suhrāvari, Dōgen, Mullā Sadrā, Bruno, Spinoza, Leibniz, Schelling, Goethe, Nietzsche, Haeckel, Bergson, James, Dewey, Aurobindo, Nishida, Nishitani, Hartshorne, Bateson, Merleau-Ponty, Souriau, Simondon, Deleuze, Guattari, Deely, and many still among us—Michel Serres, Nicholas Rescher, David Bohm, Robert Cummings Neville, Robert Corrington, Isabelle Stengers, Bruno Latour, Sandra Rosenthal, Michel Weber, Roland Faber, Jason Brown, William Connolly, Catherine Keller, Freya Mathews, Karen Barad, Christian de Quincey, Jane Bennett, John Law, Manuel DeLanda, Brian Massumi, Ken Wilber, and others.¹⁶ Between them one can find debates over the constitutive weight of continuity versus discontinuity, novelty versus habit, unbounded creativity versus a mere choice between options, relational symmetry versus asymmetry, structural topographies and “levels” of reality with their respective forms of emergence, and other themes. A wall built with the materials these thinkers together provide might not withstand the spring’s first flood. But a life-raft built from them could carry us far from where we started. And since nothing stays in place for long (at least if what they tell us is true), it is the carrying that counts, not the flood control.

Having laid out this set of primary constellations to orient us, we must eventually return to what we have in our midst, which are always those matters of concern. Projects, in other words, but projects that take their start from situations.

Projects in the making

An ant colony builds itself from the actions of its members: gathering leaf litter, sticks, bits and pieces of the environing world, tunneling, communicating, building, nursing. None of these ant “individuals,” not even the queen herself, could act in this way without the rest of the colony. Both the body and

¹⁶ For an introductory bibliography of contemporary process-relational thought and its close relatives, see Appendix 1.
the mind of the colony — its “objective” or material parts, those we can see, describe, dissect, and measure, and its “subjective” parts, which are the moments of felt decision that turn an ant this way rather than that way in its crossing of a trail in a forest, or those that bring a team of ants together to haul a large leaf or dead grasshopper — these are all dispersed in space, they are *spaced*, detached from each other physically (or so it appears when we observe them), but *mentally*, in terms of the interactive processing of signs and relations, they are networked together into a coordinated collectivity, a form that seemingly aims to reproduce itself. That aim may be dispersed across many arising subject-objectivities, which are its actual occasions, but its global coordination is something, not nothing.

The networked form of the colony is not only made of those ant bodies, but also what they are *capable of* and what they *do* with things — with soil, leaves, sticks, pieces of food. By most measures, anthills are cities: they include complex systems of transportation, communication (pheromone-based), ventilation, sewage disposal, food production (the farming of plants, the growing of fungus, the raising of aphid cattle), cooperative labor, warfare, and slavery. As entomologist Mark Moffett details in his comparison of ants and people:

> Both alter nature to build nurseries, fortresses, stockyards, and highways, while nurturing friends and livestock and obliterating enemies and vermin. Both ants and humans express tribal bonds and basic needs through ancient, elaborate codes. Both create universes of their own devising through the scale of their domination of the environment. [... Both] face similar problems in obtaining and distributing resources, allocating labor and effort, preserving civil unity, and defending communities against outside forces.17

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In the worlds of ant colonies, what are the “objects” and what are their “relations”? An individual ant could hardly exist on its own, though a lost ant might be able to find food and maneuver its way into another colony. (What will happen to it there is another matter: if it is an Argentine ant from San Francisco being dropped off in San Diego, it will fit in seamlessly within its new host group, which is of the same colony or “nationality,” as Moffett calls these groups. But if it is dropped off in Mexico, or in one of the other three colonial territories of Californian Argentine ants, it will likely be quickly murdered.)

A colony could hardly have emerged without its environment, such that the colony-landscape network, the subterranean city with its above-surface hinterlands and the patterns and relations holding them together, is itself an object of sorts. But if one is to say that the reality is made up of “objects” engaged in “relations,” one would have to draw lines (around ants, or colonies, or something) that, like light waves and particles, are sometimes there and sometimes not. The result would be little better than acknowledging that reality includes textural lumps and nodes in the networks that make it up.

Lumps, nodes, and networks are descriptions of things from their outside. A process-relational view insists that there is also an inside to everything, an interiority, but that this interiority is not normally evident at the level of the everyday distinguishable object. Such distinguishing will vary depending on the thing doing the distinguishing; ontology and epistemology, in this way, are tightly interwoven within each fragment of existence. Rather, the interiority is of the moment, the event, the act ofprehension and concrescence. The reality of the ant metropolis, then, is one of events of feeling and decision, acts in response to those matters of concern, the entanglements of subjectivation and objectivation that are occurring everywhere in their own time. What we—non-ants observing ants—see is not the real events themselves, but only what our own subjective grasp makes available of them to us.

A process-relational ontology takes the world to be dynamic and always in motion. Its fundamental constituents are not
objects, permanent structures, material substances, cognitive representations, or Platonic ideas or essences, but relational encounters or events, moments, or acts of existence which take on formal properties as they interact. An actual occasion, as Whitehead calls such an act of existence, is a “drop” or “throb of experience,” a process of “actualization of potentiality” that is inherently “emotional” and “prehensive” in nature. Whitehead revises Descartes’ claim that “the subject-object relation is the fundamental structural pattern of experience” by disentangling this relation from enduring substances (and from the knower-known relation) and placing it instead in the momentary arising of each actual occasion.  

“The basis of experience,” Whitehead writes, is “emotional” (Peirce refers to it as one of “feeling”). Its “basic fact” is “the rise of an affective tone originating from things whose relevance is given.” A subject emerges in concern for an object, with each defining the other in the process. “An occasion is a subject in respect to its special activity concerning an object; and anything is an object in respect to its provocation of some special activity within a subject.” Individual subjectivity, for Whitehead, or “our consciousness of the self-identity pervading our life-

21 Ibid., 131.
thread of occasions, is nothing other than knowledge of a special strand of unity within the general unity of nature,” a unity in which the “general principle is the object-to-subject structure of experience,” the “vector-structure of nature,” “the doctrine of the immanence of the past energizing in the present,”22 “the transference of affective tone, with its emotional energy, from one occasion to another.”23 “Each occasion has its physical inheritance and its mental reaction which drives it on to its self-completion.”24

These quotes address the microscopic or molecular level of the view I am presenting. There are other levels, including a level of complexity in which the universe can only be conceived as a tumbling forward of such interrelated and interacting, differentiating and coming together, moments of experience. Whitehead’s descriptions of “nexus” and “societies” — constellations of mutually coordinating occasions, which enjoy a relative persistence over time, over space, or both — begins to account for the more stable entities making up the universe. The human organism is such a society, at least insofar as it works in a unified way (which it does far from perfectly). The self that thinks “I” is little more than a kind of superintendant of an apartment building, as Jim McAllister puts it: “I hear the complaints […], I have to feed the furnace, put out the garbage, sweep the hallways, but I have no experience of the lives of the apartment dwellers,” who happen to be the trillions of cells, bacterial assemblages, and all the rest that makes up the grand assemblage I call myself.25 Other relational descriptions — dynamical and emergent network theories, assemblage theories, actor-network theories, and others — are better at accounting for the different ways that different things come together into patterned networks, with

22 Ibid., 143.
23 Ibid., 144.
24 Ibid., 146.
agency (subjectivity) and givenness (objectivity) distributed in
divergent ways through those networks.26

A process-relational ontology that attempts to provide a re-
alistic depiction of the world must take note of distinctions be-
tween different sorts of relational processes. Such processes can
be fast or slow, thick or thin, complex or simple, opaque or trans-
lucent, extensive or intensive, linear or multilateral, smooth or
stratified, hierarchical or egalitarian. Relational processes have
unfolded historically in ways that have given the world its com-
plex and variable textures: its folds and forms with their relative
thicknesses, speeds, durations, movements, rhythms, consist-
encies, patterns, and trajectories. The universe, in this view, is
continuous (for the most part), but the continuities are pleated
and enfolded, inflected with waves, currents, undulations, and
vortices. It is a generative and open universe governed by in-
tensifying, differentiating, and habit taking tendencies. And it
is within these habit-formed folds and pleats that we, human
“subjects,” typically find ourselves.

No thing alone

If there are discontinuities in this account of the universe, there
is no thing alone, none that is capable of remaining itself un-
der every set of conditions. Because it is in process, there is al-
ways an interdependence between a thing and its environment
(which means, other things that preceded it and with which it
has been in recurrent, complex, prehensive or semiotic contact).
An organism and its environment mutually shape each other,
not only in the evolutionary history that the organism has in-

26 See, for instance, Gilles Deleuze and Félix Guattari’s assemblage theory,
Bruno Latour’s actor-network theory, and the many variations that build
on their work, such as Manuel DeLanda’s, John Protevi’s, and others’. More
generally, biologists study a variety of forms of relations—mutualistic,
commensal, parasitic, et al.—between species, organisms, and other enti-
ties. On the virtues of a process metaphysics in the biological sciences, see
Daniel J. Nicholson and John Dupre, eds., Everything Flows: Towards a Pro-
herited, but in the active life-history of that organism.27 And where there are many organisms mutually shaping themselves and their environments, there is, to misquote Jerry Lee Lewis, *a whole lotta shapin’* going on.

In Graham Harman’s evocative account, in *Circus Philosophicus*, of the world as a giant ferris-wheel filled with things, being observed and responded to by people and other respondent things, Harman describes an object that becomes his example of a “dormant object”—an object that is and remains itself *apart* from any relations with other objects. This object happens to be a flag, “a purple lozenge on a field of amber,” which used to be celebrated by a union of arrowsmiths, but the guild was disbanded long ago, and now the flag merely flaps in the wind, unrecognized.28 “Yet there is a certain reality possessed by this flag,” Harman writes, “no matter how cruelly ignored, and someday a new throwback union or sarcastic artist may arise to adopt it as an emblem once more.”29

The flag’s dormancy, in Harman’s account, consists in the fact that it no longer means what it used to mean for anyone, and that it therefore no longer triggers celebration—but that it one day might do that again. The implication is that the flag’s meanings, or at least the flag’s flagness—what makes it what it is—is all still there, hidden away in some withdrawn essence, and that it can at some future point re-emerge in its glory. But what Harman does not acknowledge is that in order for that “throwback union or sarcastic artist” to retrieve the flag’s forgotten meanings, they would need more than just the flag. They would need access to some retained memory of what the flag meant, or at least what flags in general mean: history books, web sites, rediscoverable underground archives, storytellers passing on stories to other storytellers, memories of attention-rapt bodily postures

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29 Ibid., 9.
as flags were raised or lowered, national or cultural identities, eyes that can perceive and distinguish colors. Each of these requires ongoing relations to keep the information — the social significance, the bodily held posture, the words and syntax, the ink on paper or data on disk — from deteriorating to the point that it becomes illegible and unreconstructible. If it is the flag’s meaning, and not merely the fabric and the colors, that constitutes its inner essence, then that meaning was never found in the material of the flag alone; it always required recording and decoding instruments of some kind, instruments that have persisted in some form elsewhere, beyond the actual lozenge on its field of amber flapping in the wind of Harman’s ferris wheel.

In his effort to privilege the object — the flag as a piece of the ferris-wheel — Harman has apparently forgotten the relational networks within which that object becomes what it is, networks that include practices and experiences. The flag, after all, is not a flag unless there are flags in the world, or the memory of them, or the possibility of them — by virtue of there being social solidarities that group together under symbols like flags, names, or identifiable howls or other calls. As long as those relational networks persist, the flag is never dormant because it is never alone.

In contrast to Harman’s account, what is real for process-relationists is always what is happening. (Of course, for any complex entity there are usually many things happening, at different speeds and involving different relata. There is no reason to assume that what I see happening is all that is happening.)

Experience, in other words, is as real as anything gets. Not only does this accord with our own experience of the importance of experience (without which we may as well be in a coma), the assumption it elicits — that all things have something akin to ex-

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30 Harman has more recently shifted to the view that objects can undergo “symbioses” in their “lifespans” — “turning-points” that mark “genuine points of irreversibility” which “transform” the “realities” of those objects, but leave their identities intact. While this concession to process thought is a welcome one, its implications for his ontology are hardly followed through. See Harman, Immaterialism: Objects and Social Theory (Cambridge: Polity, 2016), 47–48 et passim.
perience, some kind of interiority that gives them what is their own — suggests a need to respect those things whose experience we are not privy to. It is not because they are alone with themselves that they are important; it is because they are connected to many others through their experience, and ultimately to everything else in the universe. But let us leave ethics aside for now and focus on what the doing and mutual shaping might be for some of those others.

With living things, the case is fairly straightforward: all such things consume, produce, and metabolize other things. In the process, both the thing and its environment change, even if certain sets of formal relations are conserved over time. Individual organisms maintain a structural coherence; humans maintain a recursive sense of identity over time. Such sets of persistent formal relations make it possible for us to recognize certain things as “individuals” or “persons.” But any such designation is a social, context-dependent designation; it applies conditionally and relationally to selected kinds of things and not to others.

A human, for instance, is an individual to another human, or to a dog, but probably not to an ant, a bacterium, a quark, a fungal growth, a corporation, or a star. Its individuality is a matter of its location within a set of relations where its individuality counts, where it makes a difference, where it matters. Mattering, in this sense, is what makes a world. What matters is what is significant, what is to be taken into account; it is material, but what is material is always also processual, relational, formal, and energetic, always a mix of the subjective or mental (viewed from the “inside”) and the objective or physical (viewed from the “outside”). And by the same token, what to us appears individual, an object in its own right, to another sort of entity may be nothing of the sort. Each in its own domain defines its world, perceives and orders its world. Here is the Kantian correlation, the mind-world relationship that Meillassoux identified as the crutch at the heart of philosophy since Kant. But it is not an exclusively human crutch, separating an “us,” those who think, from a “them” who do not. It is spread through all things, an opening that takes root at the heart of each thing.
each event, each occasion of which the universe is made — and which comes to pass itself on to others at the end of that event, and so on and so forth.

But that world, the Umwelt of the thing in question — the term is ethologist Jakob von Uexküll’s for the experienced or lived world of any organism — is never merely that organism’s own. It is built of signs, of things standing in for other things, where the signs, or the meanings they carry, are not merely conceived “in the mind” of that thing. The meanings emerge out of a set of dependent, triadic relations, as Peirce described them. For something to carry meaning there must be, in his terms, a representamen, or sign vehicle, which carries the meaning by standing for something else; an object, which is the inaccessible “something else” being referred to; and an interpretant, which is the meaning created for a beholder at a given moment.31

Signness happens; it is a process of becoming. But it is anchored within the universe, and once it has happened, that sign, the vehicle of meaning, becomes datum for the next instance of semiosis. As the subject of an occasion (in Whitehead’s sense) takes another as its object, prehending and responding to it, so that other (the object) is always connected to a more distant otherness, a withdrawing otherness that lies beyond the given occasion. It is that which ties that occasion to the rest of the universe.

There are, then, the moments that move together in various ways to create the patterned regularities of the world we know.

31 Like Peirce’s sign, Whitehead’s prehension involves three factors: “There is the occasion of experience within which the prehension is a datum of activity; there is the datum whose relevance provokes the origination of this prehension; this datum is the prehended object; there is the subjective form, which is the affective tone determining the effectiveness of that prehension in that occasion of experience” (Whitehead, Adventures of Ideas, 176). Peirce’s description of the sign as the elemental process making up the universe stresses interpretability or the generation of meaning as the core of that process. Whitehead’s emphasis is on feeling or affective tone, which he elsewhere relates to “appearance” as opposed to “reality.” In both cases, novelty arises in the subjective form — Whitehead’s “affective tone,” Peirce’s “interpretant” — that emerges in each prehensive or semiosic occasion.
And this world is unique to the “we” who “know” it, though it is always connected to the worlds of the other we’s who know their worlds in their own ways. For humans, this world is made up of distinct objects: persons, cats, cars, and cans of soup, each performing the activities that makes them what they are. But for many unlike us — ants, amoebas, bacteria, electrons, oxygen molecules, biospheres, stars — things may be quite different. We share the same universe, however, and so we may as well use our imaginative abilities to describe that universe in a way that might apply as well to amoebas and stars. A process-relational ontology differs from an object-centered ontology, then, in its belief that the best first step toward a more cosmopolitically common ontology — a common world, whose members will always remain somewhat elusive to each other — is the claim that subjectively-experienced events and processes, and not enduring objects, are primary.\footnote{Isabelle Stengers, \textit{Cosmopolitiques}, 7 vols. (Paris: La découverte, 1997).}

That world has a relational complexity that eludes a division into objects. There are boundaries — firewalls, as Harman calls them — between the internal and external, or “domestic” and “foreign” relations of an object, an entity or set of relations that persists over time and external change. But even a firewall requires maintenance, and its activity is a matter of doing, of behavior, or at the very least of habit. A wave builds or recedes as it merges with the contours of other processual trajectories in its crossing of an ocean. A bear or tree goes into hibernation for the winter, then re-emerges into action when spring comes. A caterpillar recedes into a larva, which one day is shed by a butterfly. I learn how to consume vast quantities of alcohol, or become a heroin addict, or learn to spend most of my time in online gaming worlds, surfacing for food or drink only once or twice a day but dramatically affecting the features of the game world. My partner grows a fetus within her body, which is born and, in intimate interaction with her and other humans, becomes a child and eventually an adult. The Earth begins to convert carbon dioxide into oxygen, leading to the emergence of aerobic
organisms. Each of these is a transformation, which may be patterned over time in relation to its environment, or which may be singular and irreversible. Among the irreversibles is the point at which a body we call living collapses in its vital circulations, those that maintain it with a certain integrity of structure and allow for an integrated engagement with its outside, and restabilizes at a reduced level of activity, at which the hair becomes mere hair, the bones mere calcium compounds, the body mere body, no longer social, no longer person. At this level, too, molecular and electrochemical life continues.

**Topographies of morphogenesis**

Another way to get at the firewalls is by thinking of them as force-fields between form-takings. Let us build up the description of a moment as such a series of form-takings.

A dog is walking to a park. That park exists—it is its own thing, a park-thing, a first (for the purpose of our analysis). It consists of a particular layout and boundaries, of grass, mounds, ditches, and play structures, all of which can serve as affordances—for dogs, or for kids, or for other creatures. It is, of course, in process and never quite the same as yesterday’s park, just as Heraclitus’s river is never yesterday’s river, despite the similarities that are maintained through formal relations with other processes—traffic flows, city ordinance makings, lawn watering schedules, weather patterns, sunrises and sunsets, squirrel foragings, ant crossings and mound-buildings, and so on.

At night, the park retains the scents of the day that has ended. The next day, it adds the scents of those who were there this morning, or who run around in it now. It is different today, but not altogether different. Today there is that pooch I like to run after, to sniff and play with, and those hounds I better keep away from, or growl back if they get mean. I know the etiquette of encounter and the territorial affordances for running; none of that is much different from yesterday’s park adventure. My interaction with *this* particular Tuesday-afternoon-park is a *second*, a real encounter. The interaction of *that* dog with the very same
Tuesday-afternoon-park is a different second. Our meeting is yet another second. Time is not measured in seconds here; it explodes with them — with real events, with actual instances by which one set of processes, one wave, meets and meshes with another to produce something novel, a new disturbance pattern.

Accompanying all these seconds, these real interactions, is the sense that is made of them — their significance and meaning. One such significance for dog-me might be “going for a walk with my human,” or “going to that park again, woohoo!” The park visit is in this way akin to my human’s reading of a daily newspaper (though I might not know that) — it’s how I learn that foul-smelling Rover was here recently, having eaten some pig fat, and that someone has blotted out my own scent markings beneath this lamp post. (Sometimes I see Rover still there, or back again, as if the characters in the newspaper articles have come to life. Don’t I love going to the park!) Any particular significance and meaning I get from any of this — any particular thirdness — is likely to have been somewhat anticipated but also somewhat surprising, which means that it is part of the shaping of the interactions (the secondnesses) and of the thing itself (the firstness/es). The thirds cannot be disconnected from the seconds or from the firsts; they are all there in any eventing that occurs.

For analytical purposes, then, we are calling the thing itself — whatever we are bracketing out from the rest of the universe — a first. In this case, it is the park-world. (There’s no assumption that the park-world “subjectivates” in any way; it’s more likely to be an aggregate of subjectivating things, but that’s immaterial to this exercise. Inasmuch as it is a real, “encounterable” thing and is what it is, it is a first. It firsts.) My doggish interaction on this day with that park-world is a second, or rather a long string of seconds. It takes place during a specific duration of time which has a beginning (Hey, there’s the park! Woohoo!) and an ending (See y’all later!), rounded off by anticipatory preludes and more or less satisfactory dénouements.

How this park-experience relates to my larger world and the impactful significances it generates in that world, or in any
world, is a third, or (again) a string of thirds. The visit to the park may put me into a better mood (Mmm, yes!), make me stronger (Lookit here!), strengthen my appetite (Yumm…), lead to new friendships or enmities. My going to the park has also allowed my human to make new friends (or enemies), fertilized the grass, added to the pile of dog-poop-filled plastic bags going into the landfill or the incinerator, and even generated a little demand for more urban green space (or at least demonstrated that demand for a city councilor who had been previously unconvinced). These are all “upshots” or “realizations,” significances for someone of the dog-in-the-park experience.

This sort of analysis can go on indefinitely, stringing along firsts to seconds to thirds in concatenations that, at their maximum extent, include everything in the universe. In Ecologies of the Moving Image, I analyzed the experience of viewing a film.33 There was, first, the film-world, which is the world of a film that exists in its thingness, if one could separate it from its viewing — the film in its qualitative distinctiveness, with its internal structure of unfolding, intersecting lines of potential relation and tension, and so on. This was the film as a viewerly accessible object. Second, there was the film-experience, which is what happens to any particular viewer when they allow themselves to be taken into that film-world while watching it unfold. Third, there was the relation between this film-experience (the second-world) and the world at large (the third-world) — the way my viewing of this film interacts with and changes the world I had brought to it and, in aggregate, the world other viewers bring to it.

These three — film-world, film-experience, and film–real world relation — can be broken down in turn into three other triads. The film-real world relation is the largest, or most higher-order, of the set. It unfolds within three dimensions, which are roughly equivalent to the three “ecologies” I described earlier: the material ecologies, or the relations involving “stuff” that is there in and around the production and consumption of the

33 See Ivakhiv, Ecologies of the Moving Image, chs. 1 and 2.
film, which are materialities insofar as they are “stuff seen from its outside”; the social ecologies, or relations involving agency and its recognition — the interplay of recognitions of interiority or subjectivity in and around the production and consumption of the film; and, between them, the mental or perceptual ecologies, which are the actual, causally connective, prehensive (or sensory-perceptual) relations involved in the generation of social and material ecologies.

Why distinguish between these three sets of ecologies? Because the two poles, the mental and the material — which means the interiority or “subjectivation” and the exteriority or “objectivation” — are part and parcel of every relational event. This means that in a world where relational events accumulate and take on forms, interiorities and exteriorities come to define the perception of those forms. When we view the things of the world from their “outside,” we see material objects, things in their givenness. When we view those same things from their “insides” — which we can only do for ourselves, but which we can adduce is doable from multiple perspectives — we see mental subjects, or active doings. Each of them is part of the reality of the world of our experience, though the reality itself is fully definable only in their interplay. Science has come to masterfully describe the materiality of the world along with some of the apparent forces governing action, but ultimately the method of studying external relations alone breaks down. A fully coherent explanation can only come from acknowledging both the internalities and externalities as they are shaped in and through prehensive, or triadic, encounters.

Now if we take these encounters — these doings or seconds, these events of prehension — and analyze them triadically, we get something similar. There is, first, the “stuff” that is experienced, which serves as object to our subjective responses: the other dogs in the park, the trees or bushes, and so on. In the viewing of a film, there is the audio-visual stuff that shimmers on the screen in front of us (which, in my film volume, I called film’s “spectacle”). Second, there is the response itself — the subjective, prehensive encounter: my bark, the gleam of fear in the
other dog’s eyes, the running to and fro, and so on. (With film viewing, there is the sequential connectivity in my following the stuff happening on the screen in front of me.) And third, there are the subjective significances generated within these encounters: “mean dog,” “watch me as I run around the bastard,” “next time I’ll get him,” and so on.

The basic formula for parsing these components might be summarized very simply:

1. Stuff →
2. Stuff Happens →
3. So that’s what’s happening!

The first is virtual (in Deleuze’s sense), the second actual, and the third semiotic. The second mostly covers the causalities, though meaning always infuses (and helps to shape) the actions of world-dwelling agents. (More on who qualifies as such an agent soon.)

Finally, we can take the things themselves, the firsts — in our examples, the park-world and the film-world — and analyze them likewise. With the park-world, there is the apparent stuff that is out there as it is, in its objectness: the park as such, as an object-entity, a set of specifiable relations and boundaries. There is the interactive to-and-fro of the running, sniffing, looking, barking, biting, listening, interacting, pretending to be mean, being mean, and all of what makes up “parkness” in my dog-experience of it. And there is the agency that drives it forward — my desire to run around with those other dogs, our sheer dogness — which is always in process, always becoming-dog, never quite finished or sated in its dogability, its canimorphism. These are all morphisms, all becomings.

For animal-ish entities of a certain size on a certain planet’s land surface, the objectification might as well be called geomorphism, where the “geo-” refers to the ensemble of things in the background of our activities that we can rely on for their being there for us, in support of our active worlds. The subjectification, the becoming-dogness, is its own kind of thing, which we
(humans) might as well call canimorphism. And the middle-ground, where all the negotiation occurs — where the objects and subjects are parsed out to render things somewhat understandable, moment to moment — let’s call that biomorphism, since it is the kind of interactive, dynamic thing we recognize as definitive of the living.

With the film-world, we get a similar kind of “geomorphism” in the ways that things take on the character of being there, given and accessible but mostly in the background, and the ways they are spaced or distributed in particular ways. Classical Hollywood westerns are grounded on assumptions about wilderness (that sandy, rocky, spacious stuff) versus civilization (the homes and ranches and towns that have been laboriously carved out of the latter). We understand that division or distribution of meanings; it’s taken for granted. It is the geomorphism of the film, at least until it gets disrupted and renegotiated.

Since making, watching, and interpreting films is a human thing, the subjectomorphism of the film-world is best categorized as anthropomorphism (we’ll unpack this a bit more soon). In a film-world, this is the way in which the becoming-subjective of things takes on its own distribution of agency — who gets to be an agent, a hero, an effective challenger to the villain or problem faced by a community, and so on. Geomorphism is the givenness; anthropomorphism is the capacity to do.

But it is in between the two where the real negotiation always takes place — the interactive to-and-fro between becoming-object and becoming-subject. All the real activity is always here, driven forward by the aim embodied in the subjectivation, yet held together (and resisted) by the objectness of what is given. The creativity in the response is not infinitely open, but nor is it random. It is motivated in a particular direction chosen from the array of potentialities available to the act (and the momentary actor).

Everything in the living universe is like that, ceaselessly (if pulsatingly) moving forward. Peirce’s triadism helps us understand three things. There is that which is driving these movements forward: the emergence into thirdness, or the way in
which all things move toward taking on meaning for other things and for themselves, subjectivating as they semiotically flourish. Then there is the stuff that provides the fodder (or the matter) for that movement: the firstness, or qualitative “stufness,” of things. And there is how it all happens, which is the secondness of interactive co-responsiveness. There is the pulling toward the world, the world-that-becomes (the “third-ing”); there is the world being pulled, the world that had been and that is being tugged forward (in its firstnesses); and there is the pulling itself, in its specific shapes, feels, contours, and stretchings (the “seconding”). There is subjectivation, objectivation, and prehension.

“Anthropomorphism,” in this redefinition, has little to do with the traditional definition of this word. That definition was representational: the bird sings, just as I sing; it is like a human, so maybe it also means the same things as I mean when I sing. The bird resembles the human, but the human itself is taken for granted. My redefinition of the word is anti-representational: whatever the bird, or the human, becomes will be the form (the morphism, the morphology) that it takes. The human itself acts as if it were human, but this “as if” is left open, referring not to what is known (and past) but to what is potential (and future). It is the forward pull of subjectivation. Canimorphism is the same for dogs, avimorphism for birds, corvomorphism for crows, amoebomorphism for amoebas, and so on. Since we can never be sure what a body is capable of doing (pace Deleuze and Spinoza, but to be explored more soon), we are never sure where this subjectivation will lead.

Humans just may canimorph—and presumably have, to some degree, from millennia of co-evolving with dogs. Chimpanzees just may anthropomorph, as those brought up in captivity and learning American Sign Language to some degree do. (Others, retained in zoos, become little more than signifiers of chimpanzeeness, ossified chimpanzomorphs.) Or a human can strive to “become bear,” as “grizzly man” Timothy Treadwell apparently tried to do; or to become computer, to become virtual, to become cyborg. Success at any becoming-other will not likely
result in a human-bear hybrid (or another kind), but it will expand the capacities for humanness, or bearness, or machineness. The point is that there is no essence to the future or the capacity of a thing, only to its past. Essentialism weds us to the past, while radical constructivism disavows it, but a process-relational view simply recognizes the past as past, carried forward in novel and creative ways into the open, ever-becoming present. The degree of creativity an “eventity” is capable of introducing into a given moment may vary, but it is always somewhere between none and all. It is never nothing. And in that span is the openness of all things.34

The soul(s) of things

Let us return to the question of agency. Martin Heidegger rather famously (or infamously) declared rocks to be “worldless” and animals to be “poor in world”; for him, only humans qualified as rich in our worldhood. Biological aliveness and mortality play a role in these distinctions, but object-oriented ontologists have resisted them, for philosophically valid reasons.

Even as I have mostly resisted thing-language, I have suggested that only things that prehend — only unities that are centers of subjectivation, that relate to objects in their surrounding world, translating those objects (as data) into a newly concrescent unity — can be said to harbor agency. Most forms of panpsychism (a school of metaphysical thought that has recently been gaining adherents) agree that there is mental activity, or mentation, in all things, but then they specify the criteria for what qualifies as

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such a “thing.” If a thing is biologically alive, then of course it qualifies. Beyond that, it may as well; let’s talk.

Whitehead innovatively suggested that the subatomic world consists of such mentating, psychically active things. But that can only ever be speculation on our part. With larger entities, things get a little more clear. Whitehead distinguished between aggregates, such as a rock, and genuine “societies” such as a human, a dog, or a flower. Rocks may include some semiotically active doings (at the molecular or subatomic levels, for instance), but they may not be semiotically active in the unified or coordinated way that humans and other organisms are.

This is the kind of claim that object-oriented ontologists dislike. Timothy Morton has suggested, for instance, that, ontologically speaking, a pencil lacks nothing that a human or a flower possesses. It may not be aware of the ways it maintains its form, but it does maintain its form, and it is its own thing; it retains some mysterious underside that will never be known by anyone else.

If there are only objects that are “real” and objects that are “sensual” (perceived but not real), as object-oriented ontologists claim, then the pencil is certainly as real and as substantial as you or I, or as the spider descending in front of me as I write. The challenge for a process-relational account is to specify in what its reality lies. We can easily anthropomorphize a rock (in the traditional sense of the word) by imagining that it acts, rather like us. This is what animists have always been accused of doing (and animism is really just another, more loosely deployed word for panpsychism). There are animists for whom humans, and bees, and possibly rocks and clouds may be “persons” (though it may depend on the specific rocks and clouds), but for whom pieces of paper, electric backscratchers, and numbers may not

be. There are neo-animists who go further, acknowledging the personhood of their backpacks and laptops and business cards and fingernail clippings and thoughts and shadows.\textsuperscript{37} But do they all act, or are they merely involved in processes of interaction within which they play an active but not agential role?

One of the solutions to this quandary is to speak of distributed agency.\textsuperscript{38} For instance, as I sit writing, my shadow — which my body casts on the part of my office that it blocks from the sun’s rays — darkens the space around the flower sitting on the coffee table behind me. The flower, being a flower, presumably senses the presence of sunlight nearby and slowly twists its way over toward it. To say that the shadow is an agent here in its relationship with the flower is going too far, as it doesn’t act of its own accord on the flower. The shadow could be called an actant — something that “could be said to act” (in Bruno Latour’s non-committal phrase) — but it is more reasonable to say that the system of relations “sun-body-shadow-flower” incorporates a kind of distributed agency.

The shadow, however, is fully formed by the interaction of my body and the sun (and any other nearby light sources). Those relations exhaust it; apart from them, it is nothing. Tim Morton’s pencil, on the other hand, has more going on than the “external” relations that affect it. It has a structure of capacities that is its own. It has been shaped to do certain things — to be used for writing, primarily — but its form and structure give it additional capacities that may not have been intended by its makers: the capacity to roll off a desk, hit the floor, and cause a lead marking on that floor; to collect dust on a shelf; to be poked into an infant’s eye or nose; and so on. This certainly makes it an actant, a thing that affects the processes within which it is involved. But it is a stretch to say that it interacts creatively with the world around it, as an active agent interacts with its Umwelt. It does

\textsuperscript{37} On animism and some of its novel varieties, see Graham Harvey, ed., The Handbook of Contemporary Animism (London: Routledge, 2014).

not enworld, though it may be worlded by others who do. It does not pencilmorph in the sense that pencilmorphing is either (definition #1) responding to others as if they were (like) pencils, or (definition #2) becoming (open-endedly) pencil — penciling.

Unless we define “morphism” more broadly. The pencil is part of a morphogenetic network within which its pencilness plays an active, co-constituting role. Pencils, pens, and similar writing implements have made it possible to keep track of large numbers of tradable items, to write poems and books, to doodle in a way that made boring school lessons tolerable, and to add to one’s hair-do when placed behind the ear. They did change the world — so much so that we live today in a “pencilmorphed” world.

So in this sense Morton is correct: pencils do pencilmorph. But this is a different definition of morphing than the usual one, and different as well from my revised definition. Viewed through a Whiteheadian lens, the subjective agency of the pencil may reside in the molecules and other “actual occasions” making up that pencil, not in the pencil qua pencil, since it has no central, regnant unity directing the way in which it responds creatively to its environment. But even the fact that it is humans who have done most of the writing with pencils doesn’t take the penciling away from the pencils; it is their pencilness that enables that penciling to occur.

This is where it is helpful to bring a very different tradition of thought into the conversation, one that traces itself to the psychodynamic ontology of Carl Jung. James Hillman, Edward Casey, Thomas Moore, Susan Rowland, Robert Romanishyn, and others in the Jungian line of descent have argued for a revival of the idea of “soul” and for an acknowledgment that things have soul. This can be thought of in a purely relational sense — that soul or soulfulness is a quality of relations, for instance, between me and my pencil, or the painting in front of me, or the garden I have been patiently cultivating for several summers. In this sense it indicates a capacity for objects to trigger responses in others, and thereby to make us (humans and other subjects) shimmer and vibrate alongside them in ways that are not “of
our own making.” Or it can be thought of in an object-oriented sense, such that the soul of an object refers to its capacity to withdraw from relations. In this sense, “soul” is a way of indicating the ways in which things withdraw to their fathomless depths — the depths of the pencil, of a hammer, of a pair of peasant’s shoes (such as Van Gogh’s famous pair), a lotus flower, a sunset, and so on. In that sense, the shadow cast by the mountain whose side I live on clearly also has soul.

The two kinds of soul may be reconcilable, in fact, if we take soul not as a possession of the pencil, but as a quality of the relationship between myself and my pencil. Soul in this sense deepens the middle-ground between two (or more) entities. It is a “depth of field” that makes images — that is, particular kinds of relations — possible while making sure that they are never exhaustive. In this way, the concept of soul defers and disperses the question of agency (and of subjectivity) into the depths of matter — depths in which subjectivity might reside, but need not. It shimmers and hums within and around those things, setting off circulations of energy made possible by them. This, at least, is one way we might posit a sort of “object-process ontology.”

Soul, in this sense, refers to the depth — potentially fathomless — of objects as perceived by subjects, and at the same time of subjectivity in its captivation by objects. It is a quality of relations (which makes it relational) that is indicative of the recessive character of objects (which makes it object-oriented). It points toward objects’ withdrawal from relations, but is produced relationally, through networks in which it circulates. Soul can expand or contract, and there may be objects or relations or practices that lead to the expansion and deepening of soulfulness, and others that lead to its constriction. That would mean we could come up with ethical criteria or at least suggestive indicators for how to act and how to live (more on those in Part Two). In this sense, a pencil may have soul, but a world full of pencils, rulers, papers, and abacuses may be a little less soulful than a world full of old-growth forests, streams full of salmon, Japanese gardens, and whalesong. And it is the larger world of relational networks through which agency circulates that evokes
questions of *how to act* in relations involving pencils, salmon, and other loci of soulful action.

**Earth jazz**

To further evoke the enactive nature of soulful, circulating agency, consider musical improvisation. The universe gives rise to wondrous entities in its long history of spontaneity, relational responsiveness, habit-formation, and form-building. The habits start as rhythms, melodic chirps that turn into territorial refrains and calls, and that gradually manoeuvre their way into verse patterns, melodies, harmonies, and polyrhythms. Distinct songs develop for particular purposes and gradually get released from those purposes, taken up into improvisational routines and performances, some of which crystallize into larger-scale structures, but only ever temporarily.

There is a tendency to think that certain musical traditions—the classical European, Indian, or Chinese, for instance—are more “highly evolved” than others. But there is no height involved here, just distance: they may be more *distantly* evolved, in the sense that they are more professionalized, specialized, and extracted from any relationship with the rhythms of everyday labor (save for that of the musicians). That professional distance is something that genres like rock, folk, and blues have historically rebelled against, and in the process have helped to maintain a broader scope for musical ecology.

In their references to music and to the semiotic ethology of Jakob von Uexküll, Gilles Deleuze and Félix Guattari are penetrating guides into this musical-ecological-philosophical territory. Territories, for them, are built from a refrain. But so are openings to novelty: “One launches forth, hazards an improvisation. But to improvise is to join with the World, or meld with it. One ventures from home on the thread of a tune.”

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An analogous, if more straightforward, account of ecology as a kind of “earth jazz” is found in Evan Eisenberg’s *The Ecology of Eden*. Eisenberg writes:

All life plays variations on the same few chord changes. Each taxon improvises, following certain rules but obeying no predetermined destiny. Each responds to the riffing, comping, noodling, and vamping of those around it. Life makes itself up as it goes along. [...] How do you collaborate with Gaia if you don’t know exactly how she works, or what she wants? You do it, I think, by playing Earth Jazz. You improvise. You are flexible and responsive. You work on a small scale, and are ready to change direction at the drop of a hat. You encourage diversity, giving each player—human or nonhuman—as much room as possible to stretch out.40

That is as good a summary of adaptive management, one of the key principles of systems-theoretical ecological management, as any. Eisenberg’s Earth Jazz is about process and relationality.

An objectologist may reply that even an improvisational outfit as perversely relational as the Grateful Dead is not immune to the reality of objects: their song “Dark Star” is still “Dark Star,” “El Paso” is still “El Paso” and not “Morning Dew” (which it almost transmogrified into in one performance, according to the Deadheads commenting on YouTube), and Tom Verlaine’s band Television is still Television and not the Grateful Dead. (Verlaine once lamented the repeated comparisons made between his punk-ish “Marquee Moon” and the Dead’s “Dark Star,” a song that Jerry Garcia and company amphibiously wove into a meanderingly delightful half-hour improvisation.) Or, to put it into more cashable terms, that “Stairway to Heaven” is still “Stairway to Heaven” and not Spirit’s “Taurus,” as a California jury decided in June of 2016 despite the two songs’ similarities. And that rejoinder would be appropriate. But each of these

songs can be traced to their origins, to the processes that gave rise to them, crystallized them, and carried those crystallizations forward temporally and spatially. And those origins would be messy.

This is something that is relevant to blogger Skholiast's meditation on “Buddhism, objects, and eternity,” which captures a few key points in the objects-processes debate. Skholiast's defense of the idea of eternity is daring: “The ‘eternal objects’ of the sort I have in mind,” he writes, “are the aspect of any object, the ‘side’ if you like, that faces away from us in time. Within time, things come into being and pass away; they are determined by the churning or flow of a fractal interdependent causality. But eternally, in what one might not hesitate to call the World Soul, things are themselves, alone with the alone.”

Skholiast is hewing close to Whitehead here, with the latter’s “eternal objects” and his God who suffers with the sufferer and thereby redeems that suffering for eternity. Referring to the task of “re-enchanting the world” — a theme we will pick up in Part Three of this book — Skholiast contrasts the “religions of the book,” with their Platonist presuppositions, against recent eco-Buddhist efforts to forge such a re-enchantment “out of interdependence alone.” “The eternal object,” he writes, is “precisely the face of the object in the sense Levinas uses the term,” which is something ignored by the more fully relational forms of Buddhism. Then he cites an epiphany related in G.K. Chesterton’s “The Man Who Was Thursday,” when the protagonist has a glimpse into the double-sidedness of human beings:

> When I see the horrible back [of a man], I am sure the noble face is but a mask. When I see the face but for an instant, I know the back is only a jest. Bad is so bad, that we cannot but think good an accident; good is so good, that we feel certain that evil could be explained… Shall I tell you the secret of the

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whole world? It is that we have only known the back of the
world. We see everything from behind, and it looks brutal. That is not a tree, but the back of a tree. That is not a cloud, but the back of a cloud. Cannot you see that everything is stooping and hiding a face? If we could only get round in front…

This could be taken as a response to Paul Klee’s “Angelus Novus,” the painted angel (pictured as the frontispiece of this book) about whom Walter Benjamin wrote:

This is how one pictures the angel of history. His face is turned toward the past. Where we perceive a chain of events, he sees one single catastrophe which keeps piling wreckage upon wreckage and hurls it in front of his feet. The angel would like to stay, awaken the dead, and make whole what has been smashed. But a storm is blowing from Paradise; it has got caught in his wings with such violence that the angel can no longer close them. The storm irresistibly propels him into the future to which his back is turned, while the pile of debris before him grows skyward. This storm is what we call progress.42

Benjamin’s angel, turned toward the past, sees only the backs of men and the wreckage they produce. Were he to turn toward the future, he may see more wreckage, but beyond it he may see its redemption by the World Soul, the anima mundi whose soul and intelligence contains all sin, all forgiveness, all continuity. Chesterton’s protagonist concludes, in defiance of Benjamin: “One might say, for shorthand: objects have souls.”

Skholiast’s use of the Chesterton passage provides a redemptive twist to the objectologists’ notion of the perpetually withdrawing object, the object whose soul remains firmly and finally

unknown, which also, they argue, makes it as worthy of respect as any other. But it also suggests that much depends on how we know things at all, and that the how is a variable we can learn to play with. Earth Jazz, of the relationalist sort, does not presume to ever know the others with whom and with which it plays along. But it maintains that play we must, whether this means muddling forward (as the Dead do through much of that version of “Dark Star”) or attaining peaks and plateaus (as Deleuze and Guattari urge us to, and as Television manages toward the end of “Marquee Moon”) that settle into further and different plateaus, never retracing their steps but always finding rhythms to lock into for a while, and then to release into another set.

Earth Jazz in this sense recognizes that objects have souls—this is the precondition of living in an ensouled world—but it perceives those objects as players, relational processes, whose souls work their way into the playing, and which continue to develop, soulfully, in and through the playing. Soul, in this sense, is not the possession of objects; it is the way in which those objects are possessed (and prepossessed). It is their very nature.

Skholiast, like the objectologists, opts for an idea of “eternity” (or in their case, withdrawal) that is a little too separate from the playing itself. Instead of Eternity—or a side of things locked away into a realm where it can never truly encounter others—I will opt for what Whitehead and especially Deleuze proclaim a virtuality, a space where the unmanifest and unactualized continues to churn, while remaining intimately interfolded with the manifest and actualized. This virtuality is neither present as actuality, but nor is it separate from actuality. It is folded through, but there are many folds and pleats to choose from in its patterns. If this is an eternity, it is a changeable one consisting of “back sides” that are not the eternal dark side of a unrevolving moon, but the mobile and ever withdrawing arcs of a moon that revolves in its relations with us and with others. And if the temporary “back sides” include some that are cosmically scaled, then there is no need for an Eternity to lure us toward new possibilities. That, perhaps, is why Whitehead
himself replaced his “eternal objects” with the lure of “Eros,” which, he wrote, “endows with agency all ideal possibilities.”43 And it is why his student and influential interpreter, philosopher Charles Hartshorne, insisted on the non-predetermined nature of those “eternal objects,” rendering them as “universals” that were “emergent” in an open and indeterminate universe.44

Meanwhile, improvisations degenerate, their elements getting whipped into commercial formulas, national anthems, or martial hymns. And new ones emerge out of our efforts to engage with their provocations, and to invent new and contrasting ones.

Where we find ourselves

The point, for a process-relational philosophy, is to develop a vocabulary sensitive to the various kinds of relation, interaction, inhabitation, flow, change, emergence, network-building, and system-maintenance that make up a dynamic world, a world that develops new habits and actualizes new potentials at every step of its way. We find ourselves amidst those relations, tied to things, material densities, in specific ways, and come up against the challenges those ties, habits, and tendencies conspire to generate.

Our questions, our matters of concern today—such as how to satisfy the requirements of seven and a half billion humans, how to balance these against each other, and how to manage our activities so they remain within an allowable basin of error, rather than bifurcating through an irreversible shift in global climate systems to something unseen in millions of years—these are all questions of relational design (where design is a verb and not a noun), questions of composition. Habits and patterns of interaction have developed over time. Alliances have

been built — between humans, photosynthetic processes we call grasses, and herbivorous processes we identify with sheep, cows, and the like; and between humans and flesh-compounding processes that have given us fossil fuels. Interactions have intensified, but knowledge of the sustainability of those interactions has lagged behind their novel production. Humans, like other animals, are experimental and pragmatic modes of functioning for whom error follows trial, learning follows error, and innovation, where it occurs, follows or accompanies learning.

There are, in all such relations, matters of concern. There are things that happen, and that provoke a response. Observing the many things that happen, relational processes all, we note a scale of complexity and differentiation, of pattern-making at variable levels of order. There is feeling, feeding, oxygenating, reproducing, socializing, swarming, migrating, erupting, quaking, thinking, dramatizing, road- and city-building, boundary-maintaining and boundary-crossing, warring and peacemaking, atmosphere-carbonizing and ocean-plasticizing, and much more. These relational events, these networkings, are always and everywhere temporal, dynamic, interactive, effective, and affective. They are verbs rather than nouns, processes rather than objects; they are verbs connecting nouns or nodes, which are temporary congealments, eddies in the stream.

An amoeba responds to an object in its environment by moving toward or away from it, or by ingesting a part of it. The molecules of a slab of metal mingle with oxygen to produce rust. The slowness of the latter, and the minimal amount of agency compared to what we humans are used to, in no way eliminates the structural parallel with our own activities. Neither does the magnitude and impact of a much grander scale of event: a lake’s damming by a family of beavers; a gathering of world leaders upstream from the dam (say, in Bretton Woods, New Hampshire, in 1945, agreeing on an international financial architecture that will shape the world for the next forty-five summers); a volcano’s erupting 28 million years previous to that, extinguishing many of the life forms on the planet’s surface. Where in that
range future geologists will place the Anthropocene is, as yet, uncertain.

There are events, which become matters of concern, and that is where we find ourselves. Mattering, they come to mind. Minding, we come to matter. And in the moment of contact there is a feelingful act, a decision, a choice, which is the hinge on which all things (perpetually) turn. It is where the action is. And with each turn of the wheel, each point of decision, each feelingful response to the world, a next world, with its new arrangement of possibilities, comes into being.

Time’s arrow is in this sense asymmetrical, with novelty entering into every moment, changing the equation for the next moment and the next. As Whitehead put it, “[t]he creativity of the world is the throbbing emotion of the past hurling itself into a new transcendent fact. It is the flying dart, of which Lucretius speaks, hurled beyond the bounds of the world.”45 In the process, the world is continually renewed, and we are invited to be part of its renewal. How we, all of us — subatomic particles, organisms, suns — follow our invitations determines the trajectory of its further renewal. It is this matter of how we take up those matters of concern that matters most of all. (That will be the topic of Part 2.)

Slice of time

This model of time is worth contrasting a bit further with the more usual one. When we think of slicing into time to depict a moment of it, we typically picture it as a linear flow. Slicing into time, in this view, is like slicing into bread: on the left of the slice is the past (for those who read from left to right), on the right is the future, and the cut itself is where we are right now. The world as it appears to us is a cross-section of the loaf. Or, since we are in motion, we might conceive of ourselves as a train moving forward on the track of time: the tracks ahead of us are the future, those behind are the past, and we are the train.

Physicists, at least since Einstein, complicate this with the notion of spacetime as a container that we are caught within. The tracks may move forward ahead of us, but on some level it is assumed that future and past are also in motion — that they make up a curved continuum within which we are caught, unable to step out of (and thereby to become truly free), but somehow aware of the tension between the fact of our imprisonment within time and the desire to be able to act in it.

A process-relational slice of time — which means a slice of the universe, or pluriverse, since time is not a container but only the durational dimension of the things that actually make up the pluriverse — is not like this. It looks more like a circle or a sphere, the outside perimeter of which is expanding, and the inside of which is being sucked into a black hole at its center. If we like the idea of time as a train, this train is one that is going in countless directions at once, spreading outward from a center and laying down its tracks, while swallowing those behind it, as it goes. It is a spherical train, a train as chaosmos.

The expanding edge of the sphere consists of virtualities — firstnesses, in Peirce's terms — emerging into actuality, or secondness, and actualities emerging into significance, organization, pattern, habit, law, or (together) thirdness. It is these that give shape to the universe. The secondnesses are its outer form, its exteriorities, or what Gregory Bateson (drawing on Carl Jung) called “Pleroma,” which is the empty, asignifying “fullness” of what is observed and studied, say, by science. The thirdnesses are its felt meanings, its interiorities, its meshes of distinctions, or what Bateson (and Jung) called Creatura, that is, the meaning-laden Umwelten that creatures like us live.

Since we are there at the outer edge, we see only what is within our perceptual-semiotic orbit, where our Umwelten meet the world; but this is true for all actual entities. (That orbit expands with recording and decoding mechanisms of various sorts such as oral and textual literacies, optical and archaeological technologies, and so on; but let us leave that aside for now.)

If there could be a seer who was able to see everything, he or she would only see that outer edge of the universe, where the ex-
The expanding circle is continually becoming new. In Whitehead’s best known systematization, in *Process and Reality*, this seer, who is also a feeler and a sympathetic experiencer, is God. Opting for a non-theistic language (as do some of Whitehead’s interpreters), I prefer to think of it as *Rigpa*, the Dzogchen Buddhist term for the subjectless subjectivation that is “empty in essence, cognizant in nature, and unconfined in capacity.” Or *Satcitānanda*, the Advaita Vedanta word for the subjective experience of all that is, “existence-consciousness-bliss.” It is the background luminosity of the universe that surrounds the circle we are describing, bathing it in a sympathetic cognizance. Perhaps we can agree to call it God and leave aside the question of what kind of relationship one might have with it (for the moment).

The firstnesses emerge out of the differential structure of virtualities that makes up the interior side of the outer rim of the circle. This structure changes moment to moment alongside the processes of actualization that are its exterior side.

The sucking that occurs in the middle of the circle is that of unactualized virtualities sinking into oblivion. Actuality is, in effect, always escaping away from the great sucking at the heart of the universe, the “dark flow” speeding into nothingness. Some virtualities escape into *being*, the rest escape into *nothingness*. Which of them go one way and which go the other is something that is determined by the decisive acts occurring all around at the outer perimeter of the sphere. And insofar as we act decisively, we contribute to the forward motion. For Whitehead, it is at the circumference of the universe where everything happens, where the darkness of virtuality emerges into the light of actualization. At the same time, the actualized world is ceaselessly passing over into objectivity: it becomes object, which means it becomes virtuality, potentiality, stuff from which, or in response to which, other stuff emerges. For Whitehead, any-

thing that has died to its own subjectivity — become object (or “superject”) — in this way becomes available for the creativity of subsequent arisings.

It is here, at the circle’s edge, that the world that has been, the brute objectivity of the world that has concresced from previous acts, meets the spontaneously arising spaciousness of Rigpa, the emergently responsive luminosity of naked, subjectless subjectivity. In countless acts at this Edge of Things, this luminous subjectivity — which is neither mine, nor yours, nor anyone else’s, except that it is the becoming of each of us, subjectlessly subjectivating — selectively takes up the data arriving from the past, the virtual potentialities that are to shape the next moment, and the next, and casts aside those that will not shape it except by their absence.

At this edge, then, is where the universe constantly folds out into new orchestrations, improvising along a million lines of feelingful decision. In his exegetical account of Whitehead’s “pancreativism,” Michel Weber explains why it is that concrescence, which means the becoming of actuality, “does not happen in the World, but at the edges of the World.” It is there that novelty germinates, in and through the decisions that are part of every actual entity coming into being. “When [novelty] enters the World, it is fully integrated within its existing structure and modifies it.”

Weber continues: “Subjectivity, i.e., existence of actuality per se [i.e., becoming], is articulated with objectivity, i.e., being or potentiality. The former is the locus of (free) final causation; the latter of (deterministic) efficient causation. The durational present (i.e., the existence outside physical time) of the free concrescing ‘actual occasion’ is bound with the past experiences sheltered by the transitional actual entities.”

Subjectivity arises in intimate embrace with the objectivities that it responds to, which are the bodies cast off by the men-

48 Ibid., 27.
ternal potencies of other subjectivities. Put otherwise, “existence,” which is “actuality in the strong sense of the term — i.e., subjectivity as redefined by Whitehead independently of conscious experience […] — takes place in an immediate present that does not belong to physical temporality and to its deterministic order. It belongs instead to the durational temporality that has been eminently explored by Bergson and James. Consequently, being, i.e., the World, is always already potential, past, determined, temporalized.”

To say that existence takes place outside the World while being is both “past” and “potential” may sound paradoxical. Past is potential in that it is virtual; it is no longer real except insofar as it provides the conditioning determinations, the differential structures, with which becomings-subject contend with. Existence itself is the contending, the subjectivating, the feeling–responding–doing that constitutes all that is really real at any given moment. It is the World in its openness, its freedom, yet it is outside the World-as-already-there, because it is always what World is in process of becoming. “When the actuality-subject is satisfied,” Weber writes:

[I]t topples into objectivity — it is released into the World in solido —, and becomes available as material for further concrescences (i.e., it starts exerting causal efficacy). There are thus two ways of speaking of the “after” of a concrescence: to speak of ‘actuality-object’ is to emphasize that it is the outcome of a concrescence; to speak of “actuality-superject” (as Process and Reality does) is to underline that it is itself at the root of further concrescences.

The “secret of the Whiteheadian ontological reform,” Weber continues,

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49 Ibid., xv.
50 Ibid., 27–28.
is quite simple: the actuality-subject grows, concresces, at the edges of the World—\textit{beyond the bounds of the world}—, buttressing itself on the determinism materialized by the actualities-object. “When” its organic growth is terminated, it topples into objectivity and becomes an actuality-object fully integrated in the mundane plenum.\textsuperscript{51}

Everything in the universe follows this movement, each in its own way, with its own degree of freedom or creativity and its own durationality. The percolating rhythm by which actualization occurs, one concrescence after another—a rhythm which differs for everything that is actualizing, but which congeals into patterns \textit{across} differentiations—is the composite heart-beat of the universe.

Another way of saying all this is that \textit{the only reality is the present moment}. In the present moment we respond, feelingly and effectively, to things that affect us, and those responses create the conditions for the next present moment. What was possible a moment ago is no longer possible (in quite the same way) in this moment. “Virtualities” in this sense are possibilities or potentialities present to this moment. They are real in their presence, which shapes the moment; they are virtual in that they have not been actualized. Most of them pass, they go down the black rabbit hole. Some get cashed, or actualized—like winning lottery prize tickets that get redeemed for $5 and turned into quarters for the next set of slot machine calls. (This is the universe as Las Vegas.)

All of this happens everywhere at once, for everything from quarks to neurons to rhizomes to people to nebulae (or, at least, for anything that’s thinging, for \textit{anythinging}). At any given moment, the range of possibilities for action is determined by everything that led up to this moment, but the actual decision of what happens is left up to us to the extent that we (quarks, people, nebulae, whatever) are capable of acting on it. This capacity

\textsuperscript{51} Ibid., xv.
is the capacity for freedom in every moment, and it is present in every real thing going.

The only “cash” carried over from one moment to the next is made of the effects of what we do, which is what in South Asia has been called *karma* (and which has been repeatedly misunderstood by westerners, and maybe by easterners, too). If we carry less of it around with us — less gluey wanting-things-to-be-this-way-or-that-way — and instead receive and respond, go with the rhythm, doing what’s best in a world of shared experience among entities that recognize their solidarity with each other — that makes for the best jazz. What this looks like, if we could slice into the whole thing at once, is a circle that keeps expanding (on the outside) and contracting (on the inside), on and on. Or so it appears to the knife-edge that is doing the slicing. (To us, when eyes are most open, it is much richer, more divergent, and more beautiful.)

**Eventology 1**

For an object-oriented ontologist, an important question to answer is: *How do things enter into relation with other things? And what happens (in the world) when they do?* For a process-relational eventologist, on the other hand, there is no question of entering into relations, since they are always already entered into. The question is always how to alter existing relations, how to move them and shape them, how to respond to what is given. What are the different ways of moving with and against existing relations so as to reshape them, enhance them, enlarge them, soften them, tweak them, beautify them, link them with others?

If everything is an event, the question is how to distinguish between different kinds of events. Events can be defined as new relations arising somewhat unpredictably from the encounter of previously unconnected processes. If all things are taken to be organized sets of processes, bounded or unbounded, open or closed in varying degrees, then events would be occurrences that do not merely *repeat* cycles of activity, but that bring new things — new relations — into existence. They always feature
the setting-off of processual action into a new direction, or into many. The general parameters of an event may be more or less predictable, but there is always an element of unpredictability, because of the creativity instantiated in the “creative advance into novelty,” as Whitehead termed it, that constitutes that event.

To an eventologist, an archaeologist of what happens in the moment after it has happened, there are at least three kinds of events: events, Events, and Events. The first is the class of any and all events. “Wherever and whenever something is going on,” Whitehead wrote, “there is an event.”52 Events are things that happen—hyper-forms of relational enactment, consisting of assemblages becoming something other than themselves. What is required for something to be an event is a doing and a being-done-to: a bipolar passage between a becoming-subject and a becoming-object (or several such). An event is, in this sense, any smallest movement or shift in the structure of the universe, a universe that is made up precisely of such movements.

The second kind, the Event, is an event that wraps far more into itself than a typical observer (if there were such a thing) could have predicted. There is a certain confluence of trajectories and flows, and then suddenly, a manifold of new events has arisen. Things have shifted, dramatically. A set of relational systems finds itself suddenly spun into a higher orbit. One might as well call this a Hyper-Event—alogous to Timothy Morton’s “hyperobject,” but that capital “E” saves us from the questionable suffix. Such an Event encompasses not a single prehensive occasion, but a meeting of processual consistencies out of which arises an unpredictable set of distinctly new processes, which in turn expand the circle of affective horizons by which their effects reverberate into the universe.

Uprisings and political revolutions are examples of such Events, and their causes are always somewhat mysterious.53

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53 Alain Badiou’s conception of “the Event,” which is always unpredictable and radically contingent, yet which always ruptures a given social order, would seem to qualify as a form of “the Event” as I am describing it. While all
Historians may reconstruct some of their contributing streams and may come up with theories to account for them, but these almost always remain contestable. They are moments when suddenly much more is at stake than is normally the case.

Of course, there is no universal measure for distinguishing a mere “event” from an “Event.” The Events of interest to me will be different from those of interest to the ant crawling on the window in front of me. Epistemology in this sense always impinges on ontology; categories are affected by the perceptual capacities of those for whom they are relevant. In a process-relational view, all that there is consists of events, which we can take as open moments — relational alignments opening up onto particular sets of possibilities, of which some become actualized and others do not, through the activity of the singular points of agency woven into each of them. But revolutionary moments are big moments, those in which many highly dynamic processes converge to create possibilities for radical change spanning layers and levels of activity that rarely get aligned all together in one fell swoop.

Moments like these take a lot of groundwork to become possible — preparation such as the various action plans drawn up by Egyptian activists in the lead-up to Tahrir Square in 2011, or the manifestoes and years of agitation leading up to the Russian or Chinese revolutions. But they also arrive very much of their own accord, a re-alignment of stars and planets (or class formations and technological capacities) as much as of anything else. In the midst of such moments it is impossible to tell where things will end up. What will be the shape of the new constellation that emerges once the dust is settled? Which social and political groups will take power into their hands, and what kind of redistribution of power (and of its shadow, exclusion) will oc-

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of Badiou’s primary examples of such “Events” are of political revolutions (the Paris Commune, the Russian and Maoist revolutions, and May 68), his secondary examples range more freely across human (but always human) experience: for instance, falling in love, or Schoenberg’s invention of 12-tone seriality. See Badiou, Being and Event, trans. Oliver Feltham (New York: Continuum, 1995).
cur? Which figures, and which slogans and ideas, will rise above others? Which elements (military, police, churches, intellectual groupings, and so on) will turn against their traditional allies or masters, and which will not? Or will it all slide back into a hardened and more brazen authoritarian grip for another few years or decades?

When there is so much in play, the possibilities for change—for high-amplitude remodulation, quantum leaps, and unpredictable reconfigurations—reach the level of a chaotic that cannot be controlled by any single player. This is when the cosmos is really and truly a chaosmos, a fluctuating order that is generative of novelty on such a scale as to be out of anyone’s hands. Agency is splintered along a million points of light, points that can only be coordinated through an affective resonance and a momentum that is notoriously difficult to shape and direct.

There are moments that combust (Berlin and Prague 1989, Egypt 2011, Kyiv 2014, Chiapas 1994) and those that fail to combust (Tehran 2009, the protests at COP-15 in Copenhagen, the attempted coup of July 2016 in Turkey). There are moments whose combustion is partial and symbolic, more a redistribution of what is already burning than a combustion of the total field (as with the first public declaration of the Zapatistas on New Year’s Day, 1994). Each such moment consists of potentialities emerging out of a mega-constellation of processes and turning in a certain new direction—launching into a different orbit—which resuscitates the set of conditions that gave rise to it, in an altered yet loosely related form. What is time if it is punctuated by swirling moments, some of which leap into a new orbit and some of which fail to do so? It is a cyclical yet always differentiating space.

The larger the constellation, the less predictable its aftermath. The East European revolutions of 1989–90 left behind a mixed legacy, but only a die-hard Bolshevik or authoritarian centralist would argue that they did not open up possibilities that, whether realized so far or not, are better left open than bottled up as they had been under Soviet rule. Ukraine’s 2004 Orange
Engaging Objects

Revolution changed a few things for the better (making media more pluralistic, and giving people a taste, at least, of radical democratic action) but merely realigned others (such as the oligarchic clan formations that had carved up power since Ukraine became independent) in ways that ensured their pliability for larger powers-that-be. Iran 2009 merely slid back into a more hardened authoritarian rule. Iran 1979, on the other hand, catapulted a reserve of seething energy into a form of totalistic authoritarianism that was entirely different from, yet not distinctly better than, what it replaced. Michel Foucault wasn’t the only one enthusiastic for that revolution at the time, and many have harkened back to that outcome in warning against enthusiasm over current events.

Eventology 2

The events mentioned so far are cast against the background of a stable, more or less unified human subject. They are events of Humanity. None threaten that subject thoroughly and completely. Which leads us to posit a third kind of event, an Event sous rature: not a non-Event, nor (exactly) a non-event, but an Event.

Let’s take the Event of La Soufrière, Werner Herzog’s 1977 film about the anticipated eruption in 1976 of an active volcano on the island of Guadeloupe. As in his quasi-science-fictional films — Fata Morgana (1971), Lessons of Darkness (1992), Wild Blue Yonder (2005) — Herzog affects a tone of tender and lyrical, apocalyptic beauty, a resignation in the face of what appears to be humanity’s passing. Like Aguirre, the Wrath of God (1972), Heart of Glass (1976), Grizzly Man (2005), and several of his other films, it is also about the human encounter with an indifferent but powerful (capital-n) Nature.

The same elements that later appear in Lessons of Darkness, a film about the burning oil fields of Iraq, and in different permutations in several other films — moving vehicle and helicopter shots of a landscape emptied of humans, orchestral music including the Prelude to Act I of Wagner’s Parsifal, and the feeling
of a waiting, as if something momentous is about to occur, or has already occurred, or both — are already present in La Soufrière, though without the cinematographic intensity of Lessons of Darkness. At times the film is like an archaeological dig through an abandoned city, or a devastated one (the town of Saint-Pierre in Martinique). At others it is about sheer contact — between the camera and the world — and about its embarrassed failure, the “inevitable catastrophe that did not take place.” This is the failure that, Herzog seems to be suggesting, haunts the cinéma vérité desire to be there when It, whatever It may be, occurs.

Like most of Herzog’s films, La Soufrière blurs several sets of lines: between documentary and fiction (a line that Herzog prides himself on dissolving, though here he hews closer to the first pole), between observation and performative enactment (in that his own persona is ever-present — here taking his crew up to the caldera to poke their camera inside the steaming volcano, as if to dare nature to scald them with some smoke and ash), and between the hilarious and the deadly serious. The film highlights the barbed irony that when, in 1902, the inhabitants of neighboring Martinique were preparing to leave before an anticipated volcanic eruption, their governor persuaded them to stay; 30,000 died. Now, seventy-five years later, the inhabitants left (except for the few that Herzog’s crew finds and interviews, and of course, Herzog himself, attracted to the volcano like a moth to the flame). And the volcano… balked.

Herzog notes an “embarrassment” in this, “something pathetic for us in the shooting of this picture,” in that the film becomes “a report on an inevitable catastrophe that did not take place.” Catastrophe here, however, is accompanied with pathos and wry comedy, as with the schmaltzy, orchestral rendition of Eric Carmen’s pop hit “All By Myself,” its melody taken from Rachmaninoff’s Second Piano Concerto, adding a layer of surrealism to the camera’s panning across the island’s vacated landscapes. (Anyone who has heard the Carmen song — “All by myself,/ Don’t want to be/ All by myself/ Anymore” — knows it is the kind of melody that can never be unheard, even if the chorus isn’t actually heard in the film.)
Or take Lessons of Darkness, a film composed of documentary images of the burning oil fields of Kuwait in the wake of the First Gulf War of 1990–91. Herzog shows little interest in the film in helping us understand why the war occurred or who should be held responsible for it. Instead, he presents us with just the images themselves clothed in the quasi-science-fictional, apocalyptic garb of his occasional voice-over narration and subtitles: “A planet in our solar system,” “A Capital City,” “The War,” “After the Battle,” “Finds from Torture Chambers,” “Satan’s National Park,” “And a Smoke Arose Like a Smoke from a Furnace,” and “I am so tired from sighing; Lord, let it be night.” The result is an ironic apocalypse of a hell on earth that is visually sublime but politically intangible — “a requiem,” as he has called it, “for a planet that we ourselves have destroyed.”54 Like an extraterrestrial visitor to the post-apocalypse, Herzog is vulnerable here to the same critiques that followers of deep ecology have faced for years: that by identifying the perpetrators of the ecological crisis with an all-embracing “us,” we lose the political precision necessary for understanding how it came about, who has benefited from it, who has suffered most, and how to challenge the institutional actors responsible for it.

Yet Herzog’s artistic decisions can be defended on the grounds that we already knew enough about the war. Viewers at the time had already seen the videogame-like images that characterized American media coverage of the war, and they were likely to already have well-formed opinions about the justifications for the war. With its “stubborn refusal to contextualize itself,” as Nadia Bozak puts it, the film intended to present the images differently. Bozak writes that in contrast to the frenzy of cable television coverage of the war, Lessons of Darkness “slows down and even fossilizes the events of the war, turning fire-fighting machinery into dinosaurs, abandoned weaponry into ancient bones.”55 Such aestheticization had long been Herzog’s response to the politi-

54 Paul Cronin, ed., Herzog on Herzog (London: Faber and Faber, 2002), 249.
cal violence of the world. In a 1979 interview, he stated that “we live in a society that has no adequate images anymore” and that “if we do not find adequate images and an adequate language for our civilization with which to express them, we will die out like the dinosaurs.” Referring to the environmental issues of the time, he continued: “We have already recognized that problems like the energy shortage or the overpopulation of the world are great dangers for our society and for our kind of civilization, but I think that it has not been understood widely enough that we absolutely need new images.” If this was true in the 1970s, one would presume it no less true in the 1990s, and perhaps much more so in the second and third decades of the twenty-first century.

The newness of Herzog’s images can be disputed. They are, after all, a reiteration of well-known western tropes: apocalypse, humanity’s decline, and the futility of hope, all set to a soundtrack of Wagner, Mahler, Prokofiev, Verdi, Schubert, Grieg, and Arvo Pärt. My interest in these images is that the event they point to is not an event that has actually happened, but nor is it an event that can happen — to a subject that experiences events, that lives through them, that survives them. The Event can never be witnessed fully insofar as it undermines the very subjectivity, the very witnessing capacity, of those for whom it is an Event. It can only be ever gestured at, only witnessed through its before and its after, its ominous, rumbling premonitions and its decisive yet ambiguous aftermath, an aftermath that remains ever fictional, virtual, ever on the horizon, but never fully present.

Unlike Alain Badiou’s “Event,” the Herzogian Event is not historical. It is not a lightning streak that marks history with the shadow of its exposure — as with May ’68, or the Russian or French or American revolutions, or the messianic event that initiated the history of Christendom (alongside its Pauline recognition, from which the historical event of “Jesus of Nazareth”

56 Werner Herzog, Roger Ebert, and Gene Walsh, Images at the Horizon: A Workshop with Werner Herzog (Chicago: Facets Multimedia, 1979), 21.
57 Badiou, Being and Event.
can hardly be separated). Rather, the Event is one before which humanity pales into insignificance, even if our creative capacity to reach out to that Event is worth celebrating (as Herzog does). The Event is closer to an anti-Event, a form of anti-matter to the matter of human events (or Events). And Herzog, sublime ironist that he is, takes this Derridean absence of Eventness to be part of the Evental structure.

Introducing his translation of *Feu la cendre* (*Cinders*), Jacques Derrida’s poetic meditation on time, loss, language, and trauma, Ned Lukacher asks, “At what temperature do words burst into flame? Is language itself what remains of a burning?”58 Derrida’s reference point is the Holocaust, but it is also the entry into language, which resonates with Jacques Lacan’s notion of a gap between the Real and the Symbolic. With its implied reference to the cultural memory of Pompeii — Western civilization’s archetypal reference point for volcanically cataclysmic trauma — Herzog’s *La Souffrière* dwells on the signature of the Event. Like a nuclear explosion that leaves its radioactive shadow splayed across everything, the traumatic Event leaves everything askew, haunted by a spectre and ringing with inaudible or incomprehensible sounds. The vacated city, the empty landscape, the city frozen in time, with its illegible ciphers, the Event is an Event we can never return to because it has not yet happened, but which we can nevertheless perpetually circle around. Something at its core eludes us like a black hole that sucks its own reality away from our efforts to find it.

That Event today goes by the name of the Anthropocene, if only because that name projects forward to a time when the present will have become covered over, one layer sandwiched between others in a past that is only accessible through its cinders. A time when time as we know it (or don’t, rather) will have overcome the us who know it, along with the time in which it was known.

It eludes us because it is no longer there: once we have recognized it, it is gone. That, after all, is the nature of dwelling in a universe of perpetual becoming that is also a perpetual perish- ing.

Glimpses of the Event have been around forever; we like to call them “sublime.” In modern times, science has brought many to us. Geology in its emergence portended a vastness that threatened common conceptions of humanity’s centrality to all things. In recent years, there has emerged a veritable industry of such posthuman Events, found in books like Alan Weisman’s *The World Without Us* and media productions like National Geographic’s *Aftermath: Population Zero* and The History Channel’s *Life After People* (both partly inspired by Weisman’s volume).59 Many of these make use of real places, such as Chernobyl’s Zone

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of Alienation (the roughly 1000-square-mile zone evacuated after the 1986 nuclear accident, to which I will return in Part 3), to depict this rendering of human absence. In this sense, there are real places that have become emblems, reminders, of this Event of our extinction.

There is, in all of this, a dialectic between Events and Events. What better name, one might wonder, for this dialectic than Eyjafjallajökull? As an Icelandic tourist site put it in 2010, under the redundantly emphatic heading “No reason for travelers to worry”:

There are no reasons for travelers to worry about their trip to Iceland. This is a small volcano. Yet immensely beautiful and uniquely situated in stunning surroundings. The lava waterfalls tumbling down hundreds of meters are a lifetime memory for all that can behold it! […] It is difficult to predict how long the volcanic eruption will last. It could end tomorrow but it could also last for days, weeks or even months. All the more reason to COME NOW and see nature at its finest!”

Come. See. Nature at its finest. Unlike Herzog’s Soufrière, Eyjafjallajökull blew…

Humanity’s extinction, like the end of the world and the end of the self, is the primal extinction that defines us (to the extent that there is an “us”) in our finitude and our ultimate emptiness. This posthuman gesture is toward a beyond that is familiar to the tradition of apophatic mysticism, which has carved out a less than comfortable home within Buddhist, Christian, and other mystical traditions (and to be explored more in Part Two).

In the words ascribed to the bodhisattva Avalokiteshvara by the Buddhist text known across East Asia as the “Heart Sutra,” we are exhorted to go altogether beyond: Gate gate pāragate pārasamgate bodhi svāhā! “Gone, gone, gone beyond, gone altogether beyond. Oh what an awakening, all hail!”

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60 This translation of the famous mantra from the Heart Sutra, the most renowned of Buddhist sutras (teachings) in much of the East Asian world, is
yond humanism, beyond anthropocentrism, and even beyond the possibility of a world that is knowable to us or to anyone who identifies with our “us.”

This is its impossibility, and thus its Reality. As Tweedlededee remarked to Alice in response to her protestations that she was real: “You won’t make yourself a bit realer by crying.” Perhaps he meant: you, humanity, will only make yourselves a *bit* realer by crying. But a bit realer is not quite Reality itself, which is, and will remain, forever inaccessible. Always beyond.

But then so is humanity itself. Ever beyond our reach. Which is Reality.

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