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Dark Ecologies of Knowledges: A Postphenomenological Approach to Architectonics as Terraprocess

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Dark Ecologies of Knowledges:

A Postphenomenological Approach to Architectonics as Terraprocess

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Doctor of Philosophy in Information Studies

by

Jason Timothy Taksony Hewitt

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ABSTRACT OF THE DISSERTATION

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Jason Timothy Taksony Hewitt

Doctor of Philosophy in Information Studies

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Professor Jonathan Furner, Chair

This series of essays offers a critique of Information Studies, taken as a discipline largely concerned with informational objects and their representations on the one hand and the control of these same by means of other informational objects and their representations on the other. Specifically, the critique put forward here attends to the ways that the common practices of Information Studies may reinforce representationalist ideologies that are historically problematic and that are likely to continue to be so into the future if allowed to persist. Such ideologies are bound up with histories of oppression, colonialism, and cognitive injustice in ways that seem likely to be undesirable to most practitioners upon consideration. The critique offered seeks to point out this conjunction of aesthetic and ethical issues in our practical epistemological constructs, opening out largely untried avenues of exploration with regard to our axiological habits—axiology

being defined here as the inquiry that includes ethics, aesthetics, *and* epistemology—and the architectonic structures of meaning and understanding that we deploy with ever increasing density in (and occasionally as) the world.

In the related field of semiotics, an assumption, bordering on a principle, obtains that meaning has structure and that that meaning is intelligible. The work of semiotic theorists has shown that this is not likely to be exclusively a logocentric prejudice. The works of Gilles Deleuze and his sometimes partner Felix Guattari, along with those of C.S. Peirce and Justus Buchler, each postulate in their own way that meaning and its structure are continuous with the world, and, going further, that the structures of meaning that exist in the world have no intrinsic limit to their complexity in a general sense other than the availability of resources to build that complexity. This is not equivalent to saying that the forms of such complexity are unlimited in the sense that they could take all possible forms, though the number of possible form-states may be infinite in principle when the availability of resources is bracketed off as a concern. That indicates to us the likelihood that no single ideology gives us a complete picture of all possible semiotic modalities and that, with sufficient resources, multiple modalities may coexist and interact in a single system, event, or order. All of this places semiosis in a thermodynamic milieu between complex systems theory and computation theory, even while suggesting analogies to ecophenomenology and ecosystems thinking as an interpretation of Peircean "infinite semiosis."

While semiotics, as an architectonic discipline, traces continuities with the Kantian paradigm, the Deleuzean approach represents a turn in philosophy both in expressive style and ways of doing philosophy, such that both a reinvestigation of semiotic structures and the production of new rhetorical modes are suggested in light of it—though Deleuze is a threshold for such matters, not a container. Making use of Friedrich Nietzsche, Martin Heidegger, Niklas Luhmann,

Luciano Floridi, and François Laruelle (as well as Patrick Wilson, Marcia Bates, and Jonathan Furner) to construct an ordinal semiotic compatible with various structural realisms, the arguments here commit to a pataphysical and hermetic swerve that aligns with the "Dark Deleuzean" aesthetics of Nick Land and Reza Negarestani, exploring the metaphor of darkness itself by way of the immanence theories of Timothy Morton and Eugene Thacker. The argument pattern described can be seen as an affirmation of possibly novel values of global, transspecies cognitive justice and "cognitive veganism" at least partially consistent with the ethical concerns and images of thought of such thinkers as Richard Kahn and Stephen David Ross.

Due to the emphasis on continuity with the world, the above motivates us to take seriously various posthumanistic rhetorics' priorities: cybernetics, informatics, thermodynamics, complex and autopoietic systems, codality, cognitive and neuro-diversity, enhanced and artificial intelligence, postvitalist ecology, and perhaps even Singularity. Because of that same continuity, each of these should be necessarily thought in relation to planetarity and global history. Through that thought we can understand semiotic processes and ecologies as bound up with what Land has called a "terraprocess." Information Studies, as a discipline emerging into full fruition within the context of a posthumanistic moment, situated in turn within the Anthropocene Era, should understand and engage with this terraprocess as the architectonic syntax for a more fundamental informatic and metainformatic axiology.

The dissertation of Jason Timothy Taksony Hewitt is approved.

Johanna Drucker

Anne Gilliland

Richard Kahn

Jonathan Furner, Committee Chair

University of California, Los Angeles

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Acknowledgments

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It is necessary to welcome a certain return of gnosis against philosophical, institutional and academic [*universitaire*] conformism (amongst other things), but we have to ask ourselves, how do we finally make room for it when it has been condemned to an eternal rebellion. Is it possible to introduce gnosis into the very foundations of thought, even if it means shaking those foundations?

- François Laruelle,
Struggle and Utopia at
the End Times of Philosophy

I too once had a vision of the countenance, that famous countenance which beheld not the countenance; but this primordial countenance was no countenance at all, but rather a huge asshole; for the asshole not the countenance is the cavity out of which all the things of this world here below have issued.

- Antonin Artaud,
Letter Against the Kabbala

Inside the library's research department, the construct cunt inserted a sub-programme into… part of the video network. The sub-programme altered certain core custodial commands so that she could retrieve the code. The code said: GET RID OF MEANING. YOUR MIND IS A NIGHTMARE THAT HAS BEEN EATING YOU: NOW EAT YOUR MIND.

- Kathy Acker,
Empire of the Senseless

Animals and robots (and computers) are often held in the same (low) esteem.

- Timothy Morton,
The Ecological Thought

Whatever ultramodernity places under the dominion of signs postmodernity subverts with virus. As culture migrates into partial-machines (lacking an autonomous reproductive system) semiotics subsides into virotechnics…. ROM is melted into recursive experimentation.

- Nick Land,
Hypervirus

Perhaps only a language in which the pure prose of philosophy would intervene at a certain point to break apart the verse of the poetic word, and in which the verse of poetry would intervene to bend the prose of philosophy into a ring, would be the true human language.

- Giorgio Agamben,
Language and Death

If mysticism historically speaking aims for a total union of the division between self and world, then mysticism today would have to devolve upon the radical disjunction and indifference of self and world. If historical mysticism still had as its aim the subject's experience, and as its highest principle that of God, then mysticism today—after the death of God—would be about the impossibility of experience, it would be about that which in shadows withdraws from any possible experience, and yet still makes its presence felt, through the periodic upheavals of weather, land, and matter. If historical mysticism is, in the last instance, theological, then mysticism today, a mysticism of the unhuman, would have to be, in the last instance, *climatological*. It is a kind of mysticism that can only be expressed in the dust of this planet.

- Eugene Thacker,
In the Dust of This Planet:
Horror of Philosophy, Vol. 1

1. Prelude: Misanthropology [1]

In the last several hundred years, the sciences have provided us with a series of insults—insults that have served to decenter, shrink, and constrain our sense of our role in the cosmos. Most Western people are aware of these provocations through basic science education, in which a narrative is presented that strings the insults together, framing them as a series of revelations. In line with its humanistic ideology, the story of science sees these revelations as having come from humans to humans, through their cleverness, their ingenuity, and their intrepid explorations of the world and its nature. We have discovered that the Sun doesn't revolve around the Earth, that the solar system is one among many in one of very many galaxies, that we have evolved from other forms of life, etc. Freud famously classed this string of insults into a threefold scheme (cosmological, biological, and psychological), to which list Niklas Luhmann adds the sociological insult, which states that "human society cannot steer itself." (Moeller, 2012, p. 28) While agreeing in principle with some of what Luhmann says to arrive at this conclusion, we will see later in this study that we can interpret his fourth insult in a more general way that may actually be more comparable to the other insults described.

Although it has turned out that not everyone is willing to be insulted, the knowledge that constitutes the insults was usually hard won, and we should be proud of it as a species. Yet there is a deep-seated contradiction hiding in the midst of this all. Humanistic science has provided us with an ever clearer and ever more nuanced picture of the cosmos we inhabit, but it also makes arguments against the central place of humanity, and therefore, by extension, against humanity as

[1] This section is derived from a paper previously submitted in partial fulfillment of the requirements for UCLA's World Arts and Cultures 202.

the arbiter of value and the source of judgment. This is a bit different from the Nihilism analyzed by Nietzsche:

> All the values of religion and morality which were supposed to make life worth living are unsustainable; skepticism has undermined the lot. The truthfulness enjoined by religion and morality has shown the values of religion and morality (including the value of truth itself) to be fictitious. In this way, the highest values of the past have devalued themselves. Nihilism is not something that has worked against religion and morality; it has worked through them. The advent of nihilism, the realisation that everything that was thought to be of value is valueless, therefore represents both the triumph of Christian values and their annihilation. (Bull, 2011)

Instead, here with humanism, that which gives us knowledge about the world, through that same knowledge, gives us qualms about the nature of the knowledge we receive by way of human means and mediation, even while pointing out to us that the ways in which knowledge is had are not exclusive to humanity. This complex is the source of the new insult of the 21st Century: the realization that representation is not exclusive to the human context, nor is it the only form of semiosis. The implications of this have come to be known as posthumanism.

Posthumanism has taken on many guises in the last quarter century. Having historical continuities with the intellectual traditions of mid-twentieth century French anti-humanism, (Spanos, 1993; Ferry & Renaut, 1985) posthumanism has allowed the nature, goals, and uses of humanism to come into question in certain famous events, such as the "two cultures" debate, the "science wars," the Sokal hoax, and a general cultural turn towards anti-intellectualism and religious obfuscation. This last in particular comes to be a cornerstone that has continued up to the present, pushing the agenda of an illegitimate Christianism or Dominionism by means of a legitimate question: in light of what we think we know according to any system of knowledge, what gives humans the right to be the arbiter of meaning and value? We have seen such questions ac-

companying direct anti-humanist statements in the conservative rhetoric of the last few election cycles in the United States and Canada, as well as, more recently, in the conservative rhetoric of the new majority in the European Parliament elected in May 2014. (Skinner, 2014)

Indeed, this question of the decision on value is at the heart of another form of posthumanism. For the purposes at hand, we can call this form "Green Posthumanism." This is a set of concerns focused on the ways in which humanism has failed to provide an adequate ethical, moral, or cognitive framework for our finite existence as organisms in a planetary ecology. There have been multiple responses, including biocentrism, ecocentrism, vegan politics, animal rights, nature rights, deep ecology, etc., all of which contemplate the boundaries of our role as power-wielding agents in the value systems of which we are part. Interestingly, green posthumanism has become increasingly bound up with the recognition of the meaning of planetary existence, or planetarity. The iconic moment of this form of posthumanism lies in the collective lucidity we gained through seeing that famous first image of our entire planet from space.

The philosopher Martin Heidegger stated that that picture terrified him. Heidegger spent a great deal of his printed efforts articulating what was for him an essential part of human nature. This was that humans, caught up in the interiority of a worldview shaped by humanism, tend to transform their environment into a set of resources readily available for use as a "standing reserve."[2] Indeed, the middle Heidegger seems to be at best indifferent (and at worst supportive) of the extension of this tendency to the social environment as determined and coordinated through a state. The later Heidegger moved into territory too linguistically obscure for most, yet this set of arguments still held enough for him to fear this picture. The reason he gave was that he saw its comprehensive perspective on the planet as an opportunity for humanity to conceive that

[2] We can think here also of Sloterdijk's *In the World Interior of Capital: Towards a Philosophical Theory of Globalization*.

tendency to convert things into standing reserves on the planet as a whole. Indeed, for many of his time, the moon landings represented a first step toward Mars and a multiplication of worlds held in standing reserve for our use.

Had we (and should we) ever continue in this direction, green posthumanism will come to mean more than a simple questioning of our role in planetary life. It will represent an inversion by which we come to be the core or linchpin of a whole new type of existence. Posthumanism will take on a historical element, representing the understanding of a transition from being one species among many to being the arbiter of the "sway of existence" itself for life, as Heidegger might have said. In this context, the now very earnest search for extraterrestrial life takes on a meaning not always self-evident in the ways it is pursued. The search is, in a posthumanistic context, the attempt to answer the question of whether we, as a species, will bear this responsibility and whether we will do so alone. Indeed, even without such inquiry, many planetologists and life scientists have begun to refer to our historical epic as the Anthropocene.

Thus named, our era is understood to have as its defining characteristic the presence and activity of humans operating at a global scale, as what anti-humanist philosopher Nick Land has called a "terraprocess." This era is secondarily understood to be associated with a sixth mass extinction, resulting from overpopulation amidst modern ways of life in combination with a willingness to treat the biosphere as a standing reserve. As someone influenced by existentialism, Heidegger spent the better part of his life attempting to find an exteriority for the modern system, by which the sway of our being might be kept from reducing the "ontological" to the "merely ontic." In other words, he wanted to find ways to keep open the possibility of other ways of being, not limited to the perfunctory processing of resources in cycles of self-sustaining dehumanization. The search for exteriority is directly in line with the inversion of our relationship to a na-

ture that no longer serves this role and with our looking outward for a living terraprocess outside of or other to our own.

As we know, Heidegger made some unforgivable mistakes along the way, (Fried, 2014) riding along as his nation fell into one of the deepest, ugliest socio-ethical traps of humanism. That trap is constituted by the fact that humanism requires humans to decide who among living beings counts as human. Hence we see Heidegger's unfortunate mystification and ontologization of the Führer's role as an apparently natural function of society that provided the metaphysical exteriority society needed to justify the forms of its unfolding historical reality.

> The German people has been summoned by the Führer to vote; the Führer, however, is asking nothing from the people; rather, he is giving the people the possibility of making, directly, the highest free decision of all: whether it—the entire people—wants its own existence [*Dasein*], or whether it does not want it…. On November 12, the German people as a whole will choose its future, and this future is bound to the Führer…. There are not separate foreign and domestic policies. There is only one will to the full existence [*Dasein*] of the State. The Führer has awakened this will in the entire people and has welded it into a single resolve. (Heidegger, 1993)

Heidegger believed, apparently, that history could be substituted for nature, and that the German people had a unique place in both, allowing them uniquely to serve as the pivot to a new, rich futurity that requires the kind of temporality he began to articulate in his first important work, the famous *Being and Time*. We also see in his Nazism the limits of his ethical concern for dehumanization.

The posthumanistic line of thought recognizes that humans do not just trouble the earth, our own history, or our worldviews. We also trouble our bodies as such. The increasing role of cybernetic thought (especially in relation to wearable computer technology, pervasive and ambi-

ent computing, embeddable technologies, and all-encompassing information networking) combines with our increasing ability to directly manipulate organic tissues to our own ends to suggest a future in which the traditional boundaries of the body, temporal or spatial, are no longer stable. This puts Heidegger's proto-posthuman thought to rest, as space and time, land and history, or earth and bloodline, are all put to rest as alternative exteriorities. We must produce out of ourselves the exteriority we seek. Thus we have sought to make the boundaries of our bodies and minds much more permeable, both in thought and fact. We are able to adapt, modify, and extend our bodies and, as it turns out, our nervous systems in ways that suggest entirely different ways of being.

These different ways of being may not, however, turn out to be new, at least in principle. Our increasingly detailed knowledge of the human past has shown us that we have always adapted, extended, and modified our bodies, using all sorts of inventive ways to exteriorize our thought, will, and memory into tools and systems of tools. What at first may seem to represent a fundamental transformation of our being may turn out, in the end, to be something more like a saturation of our being with its own dispositions, an intensification. In the words of Friedrich Nietzsche, these advances may, upon analysis, turn out to be all-too-human. What this technical form of posthumanism may represent is, rather, a deepening, or at least a thickening, of our own humanity.

This suggests a possible alternative take on the above Heideggerian fears: what if our self-awareness as planetary beings meant not that we transform the Earth and other worlds into standing reserves, but rather that we become the basis for a historical unfolding that is the flourishing of life? What if "humanity" as a concept turned out to be the very exteriority we have sought all along, as part and parcel of a more generic process in which we play an increasing

role—life as terraprocess creeping out along the contours of worlds? What if we have always been posthuman, in the sense that our existence has always been an open question? Perhaps, then, posthumanism is the willingness to ask that question directly, leave that question intentionally open, and allow ourselves to be with reality on terms the meaning of which is not solely determined in and through us, but rather with and through our participation in that process. We need not choose between the falsely binary options presented by Heidegger. We need not create standing reserves of meaning through fixed systems of interpretation (heuristic or hermeneutic), and we need not simply surrender to a passive "letting be." There is an alternative to the fallow/farmed dichotomy that Heidegger presents us with in his "enlightened clearing." Being need not be subject to an analytic ontology, a "hermeneutics of facticity," as Heidegger thinks. That is to say that we need not put ourselves in the position of determining nature, but rather may recognize that a feedback loop of nature is, through us, determining us, which leads us toward a kind of Deleuzian intensified immanence. The fallow/farmed dichotomy, with its implications of the roles of subject and object, can be reworked into a shared vitality, a flourishing grounded in a middle voice that complexly interweaves and interleaves these roles.

Our being, like our humanity, may be produced rather than given and may be something that we discover in and through our performance of it. Critical philosopher John Llewelyn thinks towards the "middle voice," such as is found in some languages, that is neither active nor passive. (Llewelyn, 1991) In his sense of our "ecological conscience," we might verb a noun and say that "we human," in the same sense by which we come to phrases like "it rains." This performative schema of being is not to deny that we still find constraints in our interaction with the orders of existence we encounter. It does point out, though, that those constraints increasingly mean what we make of them—as the rules of a game, rather than the walls of some Manichaean

or gnostic prison. Posthumanism carries with it, then, the implication of a liberation ethic mixed with a plurality of humanities, humanisms, and very human humans.

In light of all this, it seems difficult to understand how the field of anthropology could continue unchanged. While anthropology as a discipline has proliferated subfields at a remarkable rate due to the development of various theories, perspectives, and emphases, it has also merged and mixed with various other disciplines in the context of the variety of area studies that have emerged. Despite all this, the traditional fourfold division of anthropology according to the American scheme continues to hold weight. This scheme divides anthropological inquiry into the areas of physical anthropology, cultural anthropology, linguistic anthropology, and archaeological anthropology. It seems that we will need to have major theoretical interventions into each of these areas if we are to articulate the human condition in ways that remain relevant to our contemporary experience. Moreover, the search for continuity is important, not as the epistemological force that drives generalization, but as the ethical impulse that refuses to artificially alienate other humans for the sake of producing an otherness that is inevitably converted to a standing reserve to whatever end. This means a continuity-in-difference that sees a relevance of those entities that would "human" to whatever degree in whatever way, but allows for the multiplicity of a difference that does not, in turn, require relativism. These interventions will, then, necessarily be complicated, iterative, ongoing, and ethically charged.

We can already see important work in each of these four areas being produced, some of it novel and some of it building on aggregations of smaller interventions over time. The one thing they each have in common, though, is their placement of semiotics at the core of inquiry: as a methodological framework, as an ontological reality, and as an important end in itself. Indeed, it seems that the work extending in this direction increasingly points to informational and semiotic

perspectives as a disciplinary umbrella. In fact, the changes seem to suggest that anthropology is more like an area study within this deeper logic. On this account, the movement of "mother disciplines" from religion to philosophy to anthropology may be gathering itself for another iteration, in line with the newest insult to our existence. This inflection in our deepest understanding may be a shift that foregrounds the interrelated disciplines of information studies and semiotics. In fact, as Jonathan Furner has argued, these interrelated disciplines may be at heart part and parcel of the same pattern of inquiry. (Furner, 2004)

In the area of physical anthropology, we would look for work that can form networks of insight with 21st century evolutionary theory, which, one might say, is not your father's evolutionary theory. The contemporary version of the theory is densely semiotic and informatic, to the surprise of almost everyone who helped produce it. James A. Shapiro's *Evolution: A View from the 21st Century* describes the current scene of evolutionary thought for both specialists and educated non-specialists. The book begins with an overview of the development of this way of thinking, shifting later into specific descriptions of exemplars. The general picture presented is an evolutionary theory that combines systems thinking with informational and semiotic thinking to enhance an already robust understanding of material processes. In fact, these enhanced perspectives allow us to understand the ways in which organisms have agency in their own evolution at almost every level. As Shapiro says,

> The contemporary concept of life forms as self-modifying beings coincides with the shift in biology from a mechanistic to informatic view of living organisms. One of the great scientific ironies of the last century is the fact that molecular biology, which its pioneers expected to provide a firm chemical and physical basis for understanding life, instead uncovered powerful sensory and communication networks essential to all vital processes, such as metabolism, growth, the cell cycle, cellular differentiation, and multi-

> cellular morphogenesis. Whenever these processes have been subjected to the most advanced types of biological analysis, the number of regulatory interactions and control molecules inevitably has grown to rival (and frequently outnumber) the molecules dedicated to executing basic biochemical and biomechanical events. Paralleling the contemporaneous transformation from a largely mechanical-industrial society to a densely interconnected information-driven society, the life sciences have converged with other disciplines to focus on questions of acquiring, processing, and transmitting information to ensure the correct operation of complex vital systems. (Shapiro, 2011, p. 4)

This perspective is obviously deeply related to both the desired interventions and the perspective by which humanity is a process of becoming-human, in which a large number of species and sub-species have participated over a vast period of time, into and including the present.[3] Of course, we need not assume that any given entity in that lineage is singularly aimed to the end of humanity. Rather, we might better think of each as exhibiting multiple sets of qualities, each with multiple vectors, interacting to allow for the emergence of a general tendency "to human," up until a certain threshold of humanization that began to present itself as something like a stable or metastable ordering of one set (or more) of living beings. It is in this context that physical anthropology must learn to speak, itself emerging from a babel of multiply ordered tendencies in the discourse.

In the arena of cultural anthropology, we find Bruce Clarke's *Posthuman Metamorphosis: Narrative and Systems*, which draws on George Spencer-Brown's third-order calculus articulated in *The Laws of Form* in order to relate semiotics, systems theory, second-order cybernetics, and posthuman becoming. The posthuman becoming he describes is, as above, a becoming-other-than-what-we-are by means of an always already present permeability to our own inven-

[3] Moreover, we can see here that the ways in which humanism has used speciesist perspectives to define itself and humanity are at the least inappropriate.

tion and imagination as organisms who have power over our own form and agents who develop for themselves an increasingly liberated range of actions in and through various orders of interaction. It is Clarke's unique contribution to show the ways in which metastable systems are able to drift across landscapes of possibility, even while maintaining their integrity and coherence. Clarke argues that the formation of signals across thresholds is cybernetic before it is ever representational, decentering human semiosis at the very moment he would emphasize human media in a remarkable irony.

> Systems theory factors into narrative at the level of systemic operations and the level of formal structures…. Systems theory emphasizes that system maintenance is system evolution. Metamorphoses from informatic mutations and systemic mergers are inevitable. The traditions remembered in the classical metamorphic stories of Ovid and Apuleius anticipate this neocybernetic understanding: the reproduction and transmission of any system opens it to metamorphosis…. In second-order cybernetics, social systems arise through a nested interaction of operationally closed psychic systems: if structural coupling over spatial distances and temporal gaps is to occur, media of some sort must intervene. (Clarke B. , 2008, pp. 8-10)

While certainly technical in nature, this book remains surprisingly readable as it moves through contemporary examples drawn from media and popular culture in order to penetrate orders of culture formation and, as is equivalent in this view, transformation. As an intervention into cultural anthropology, this book serves as an example of how one might blend multiple layers of cultural analysis into an argument pattern than deepens our perspective on that which constitutes the human condition even as it expresses it: our imagination of ourselves in and through layers of semiotic production.

In the framework we have laid out, and having assumed interventions of the sort described here, it seems obvious that linguistic anthropology would become an extremely complex affair. This is particularly true when we consider Clarke's perspective, recognizing that linguistic behavior, and along with it the entire domain of symbolic strata that the structuralists and post-structuralists have investigated (not to mention the entire field of anthroposemiotics within biosemiotics), must be reimagined in the context of a nuanced and perhaps very subtle layering of semiotic modes, one upon another. Linguistic anthropologists would be forced to abandon representationalist assumptions now seen to be ideologies. Going further, they would have to give up on the assumption that a given sociocultural system would form humanities by coupling to the networks and flows of its environment in ways that see human existence as coterminal with the skin, or with a collection of such bounded bodies.

Turning to a semiotic theory grounded explicitly in the works of the American Pragmatist philosopher C.S. Peirce, Eduardo Kohn's *How Forests Think: Toward an Anthropology beyond the Human* presents us with an example of what this kind of practice might look like. Carefully articulating intricate semiotic structures and modes, Kohn demonstrates for us what a becoming-human can look like when it is tightly coupled with a densely integrated, highly diverse natural environment. Investigating cross-species signaling, cybernetic information loops, emergent identity formations, and non-representational language, Kohn shows us how everyday events like eating or watching dogs chase wild animals presents us with a world that is extremely familiar, but which might be, on consideration, a little "strange." In his investigation of a Quichua-speaking Amazonian community that continues the best practices of traditional linguistic ethnography, he shows us how to approach this alienated perspective through an intimate everydayness. This strangeness-in-familiarity is a result of a more properly ordered relationship between theory and

object, which is the thrust of his essential critique of his field. As he says, "Sociocultural anthropology in its various forms as it is practiced today takes those attributes that are distinctive to humans—language, culture, society, and history—and uses them to fashion the tools to understand humans. In this process the analytical object becomes isomorphic with the analytics." (Kohn, 2013, p. 6) In other words, being all-too-human, sociocultural anthropology, including linguistic anthropology, is too humanistic.

Finally, we can see a related set of concerns in Robert W. Preucel's *Archaeological Semiotics*, which critiques archaeological anthropology on terms related to the arguments put forward in the other texts. As with Kohn, Preucel argues for the utilization of a Peircean semiotics towards the ends of a "Pragmatic Anthropology" in the philosophical sense. Having laid this out in the book's first section, he moves, in the second, through Structuralism and Poststructuralism, as well as Processual Archaeology and Postprocessual Archaeology and Cognitive Archaeology. The third section revisits these explications in terms of their impact on actual case studies—specifically explorations of Brook Farm and the Pueblo Revolt. Like Kohn, he goes out of his way to track and critique "semiotic ideologies" that might inhibit our understanding or blind us to nuance. Moreover, such critique, on his account, brings us closer to an understanding of the nature of the semiotic layering effects described above and their traces in material artifacts. This emphasis on material culture makes this book a specific and useful counterweight to the feeling that we might get from the other texts, when taken en masse: the feeling that somehow, despite all the talk of nature and body and life, materiality seems to be slipping away. Looping back to pose the question of this apparent disappearance is important, as it shows us one last important shift that comes from posthumanistic thought. That is that in shifting our perspective in this direction, matter no longer constitutes a viable exteriority. (Barad, 2007) It would appear that there

is no escaping our immanence to ourselves. All transcendent and transcendental referents having disappeared, we are left with both selves and worlds that will mean precisely what we make of them. This is tremendously liberating, but brings us to an encounter with the existential question of our current condition, forced to encounter what may be the truly monstrous horror of being: we are responsible for our own actions, and those actions will shape what we become.

2. Against Being

This set of essays is not concerned with information directly. Rather, it is an attempt to think through an alternative way of thinking the disciplinary architectonics of Information Studies—which is to say the ways in which we construct and structure information, thought, and knowledge *about* information—in order to demonstrate, as a proof of concept, that such alternatives are possible. This means, in a sense, the knowledge management of a discipline, which is for some a major obligation of Information Studies (Bates, 1999), applied in this case as a reflexive gesture. The particular alternative to be demonstrated stands in contrast to mainstream Information Studies, which, loosely, can be said to traffic in concepts that are overwhelmingly artifactual and representational in nature. In other words, they are largely interested in the investigation and description of objects and representations of objects, as well as the interpretation thereof. Let it be sufficient to note a few areas of focus in the field of Information Studies to demonstrate this, as it is not the focus of this essay to prove this point thoroughly, and, indeed, their artifactual and representational tendencies should be sufficient to make the point self-evident. As examples:

- History of the Book
- History of Libraries
- Bibliography
- Bibliometrics
- Knowledge Representation
- Information Retrieval
- Informatics
- Museology
- Diplomatics

In each case we can see how an informational object, understood to bear information by means of encoding-qua-representation, is taken as a representational object and represented within a

system of organization and/or analysis. Other areas of concern in addition to the above could be listed, and some, such as the study of information seeking behavior, would require additional clarification to attain the self-evidence described with regard to their artifactual and representational assumptions. The generally representational nature of these areas is made explicit by Marcia Bates:

> Work in the meta-discipline of information science, both at the practical and theoretical levels, draws upon different cognitive talents than most of the work within conventional subject disciplines… [*R*]*epresenting* information—whether you are indexing or formulating a search strategy or helping someone articulate what they want to find—is different from *knowing* the information. For information science, a particular kind of representation is at the heart of the rhetorical stance of the field toward its domain, the universe of recorded information…. Creating databases and catalogs involves creating representations of forms of information. The skill a reference librarian or information specialist develops also involves representation—figuring out how to conceptualize and represent a user's query, then in turn translating the query (representing it) into a form an information system uses, which in turn arises from the representations of documents in the information system. (Bates, 1999)

On the whole, though, and generalizing perhaps too widely, one can say that Information Studies tends to operationalize artifactual and representational assumptions as a matter of course to pragmatic ends in its knowledge production, even while it may occasionally ask after their workings on a theoretical basis in the course of its inquiry. This is not a particular fault of this discipline, as we will discuss further on, but does stand as something to be explored within it.

This is too hasty and general a description of the discipline, but it is so only because increased accuracy and specificity would not change the argument that is at hand. The argument here is not that these standard assumptions are wrong, but rather that there may be other ways of conceptualizing the frameworks of our studies that pertain to different connotative, logical, or

ideological frameworks so different as to make the above descriptions seem largely true in comparison with them. If others wish to point out alternative architectonic systems that may already exist within the field, then this serves only to reinforce the affirmative answer we will ultimately give to the question of their possibility. The goal of these essays is to demonstrate that such variant architectonics may exist as coherent, valid constructs. In arguing the validity of the approaches used and in shaping coherent arguments about information, there will necessarily exist representational moments with reference to artifactual entities. Again, the point here isn't that such perspectives are wrong. In transitioning to the new architectonic structure, however, there is a need to examine the boundaries between one architectonic and another, mapping and redescribing the terrain as one passes across. Nima Arkani-Hamed has recently articulated the value of theoretical redescription in his lectures on the newly discovered mathematical object, the amplituhedron, which provides a simplified approach by way of a new mathematical object to calculate scattering amplitudes for a supersymmetric version of quantum mechanics. For him, all things being equal, conceptual or theoretical inquiry may advance the production of knowledge through finding alternative models that redescribe known phenomena in ways that accord to different sets of fundamental assumptions. Having created such an alternative model, we can then test its implications against reality and the motives of our meta-epistemologies, leading to a kind of exaptive growth. (Arkani-Hamed, 2013)

To that end, these essays undertake an effort to explore one exemplary model of a possible knowledge, with the intention of showing what a non-artifactual, non-representational study of information could look like. While this naturally requires an engagement with the ontology of information, it should be made clear from the outset that it is not an ontology which is being demonstrated here, nor any specific definition of information. While approximations to such

things can and will be as useful here as they are elsewhere, it is not a special obligation of the architectonic strain of argument to achieve decisive clarity on that topic any more than it is of any other inquiry in the field, with the exception, perhaps, of the philosophy of information or metainformatics as theorized by the Tokyo School, both of which make claims to investigate these issues specifically as part of their approach to Information Studies research.

I am hesitant to engage in the work of ontology for very specific reasons, even though this study will appear to rest in a closely aligned way to such work. We will see that the crux here is the issue of representation, and the ways it relates to ontology. Indeed, much of the issue is a legacy of what I call the "Sign Wars," which have raged as a sweeping sociopolitical concern over several centuries, moving from Anatolia across Europe, into the New World, and back again before becoming a global issue. The study of these battles as a single narrative will need to wait for another day, but we can argue that the iconoclastic semiotic theology[4] that often accompanied it was partly responsible for the development of representationalist ideologies over other possible semiotic regimes. We have already alluded to the Nietzschean description of Nihilism as an extension of the Christian concern for truth. We can amplify this by pointing to the ways in which ontology was subject to a related crisis through the displacement of *ousia*, a specific Greek conception of being, by way of the emergence of Empiricism in the natural sciences.

> …[W]ith the rise of modernity, the parameter of ousia, the basic structure of Western Being, began to encounter difficulties…. [I]t was evicted from nature but was retained as the basic structuring principle of the human realm. This retention was philosophically problematic because it required either the suspicious *relocation* of ousia to a supersensible realm or an unjustified, indeed unnoticed, *reinstatement* of it in the human realm. It was humanly problematic because of the sordidness of phenomena founded upon modernity's relegation of everything outside the individual or society to the status of mere unformed matter. Modern colonialism and slavery,

[4] By semiotic theology I mean to indicate an argument system parallel to the area known as political theology.

> both notably more oppressive than their ancient counterparts, were, for example, philosophically legitimated by the view that non-Europeans were mere matter;[5] similarly, though perhaps somewhat more benignly, for modern marriage. (McCumber, 1999, p. 205)

This is consistent with Aristotle's chimeric understanding of ousia:

> The meaning of *ousia* for the first philosopher to make it a basic technical term—Aristotle—was not presence but domination. To be a being, for Aristotle, was to contain a structure in which one part dominates the whole, via the three axes of boundary, disposition, and initiative. Equating such structure with Being itself meant writing domination into the basic nature of the universe, and that has in Modernity been seen to be in complicity with a variety of evils: with patriarchy, colonialism, and slavery; with absolute status for private property and for state sovereignty; with the melancholy "triumph" of the individual…. [F]or Aristotle, not everything that existed was an ousia; he was quite willing to accept that his model of being was not universal. But there was no alternative to ousia as a model for interpreting the (natural or human) world. Where it did not apply, therefore, it should be made to. (pp. 206-7)

The crisis in ontology has been further provoked by more recent postmodern theories of signification and has led to, among other things, a "religious turn,"[6] which is an attempt to discover alternative ontological modes of inquiry in light of the breakdown of representationalist ideology in the mid- to late twentieth century. This breakdown has been facilitated by linguistic anthropologists investigating language ideologies, as well as poststructuralist perspectives in general.

> Structuralism failed to think through rigorously the ideological connections between language, representationalism and science. From its standpoint, representationalism was treated simply as an

[5] For more on this point, see (Chaplin, 2003) and (Grosfoguel, 2013)

[6] The literature on this topic is simply too vast to cite coherently without undertaking an extensive literature review. I would point to the work of Mark C. Taylor, John D. Caputo, Edward Said, Jürgen Habermas, and, of course, both Jacques Derrida and Giorgio Agamben as exemplars and signposts.

> incorrect theory, which would be replaced by a more adequately scientific understanding of language. Poststructuralism asserts a much stronger connection between language, representationalism and ideology. Representationalism is not just an incorrect theory but also a master ideology that pervades language and shapes its use. The idea of representation, i.e. that language speaks about the external world, is so deeply rooted in language—and so interwoven with relationships of domination in society—that it is virtually inconceivable that its control can be entirely or even substantially evaded. Thus the ideology of representation is built into the whole way Western society is organised, so that people pick it up without its ever being explicitly or deliberately taught; it is not formulated or advanced by any group within society, and it is not a position espoused by any party as a political cause. Language is so entirely saturated with this ideology, not merely contaminated by it, that purging it of ideological elements is simply not conceivable. Consequently, while it is essential to expose the falsity of representationalism wherever possible, it is hard to conceive how ideology could be thoroughly eliminated. Ideology is the framework within which the individual thinks; it is imposed upon the individual through language. (Cuff, Dennis, Sharrock, & Francis, 2006, pp. 205-224)

Representationalist ideology is bound up with a tendency to collapse the function of the sign as index, icon, or symbol into a kind of triune representational scheme, and that scheme does not survive critical inquiry that challenges its naturalizing ideological symptoms. What is meant here is that the tendency, as a symptom of a general ideological formation with regard to language and other semiotic behaviors, to elide distinctions between these different sign types and to assume that such elided unity is itself a function of an overall predisposition in semiosis to deictic engagement, does not withstand critical investigation. (Yang, 2008) The formal properties of the sign are not, for the most part, coordinated with its meaning *a priori*. They are not so coordinated either by way of a transcendent operation or a transcendental operator. The argument has been made, especially in the discourses on the death of the author, that even the human subject as transcendental operator for the unity of meaning and sign form is at best partial. The postmodern

turn tends to radicalize these Saussurean, structuralist, and semiological insights into a poststructuralist insistence on the arbitrariness of the signifier. This stance is surely just as ideological a stance as that which it critiques, though, in its radicalism, it does provide a great deal more space for open inquiry and liberal semiosis. Yet this radicalism comes at a price, which is a groundlessness that cannot begin to pose questions of existence without an infinitely frustrating and erotic mediation of irony, forcing us into ever-deeper intimacy with an unknowable, incommunicably alienated other. (Fink R. , 2004)[7] As in the films of Derek Jarman,[8] the postmodern insists that we can only exist in the rubble of the modernism it pretends to deconstruct (while merely de-/re-centering it) and in the heaps of empire's waste, obsessively flirting with an askesis and negative (political) theology (Taylor, 1987) (Manoussakis, 2006) that spews endless indeterminate and abortive seeds of Manichean dissemination.[9] (Derrida, 2004) Again, the absence of ontological presence is pivotal to a politics that finds itself arriving after empire's politics, which was affirmatively ontological in its political theology, but there is no being to be had. Therefore politics, religion, and ideology find a pervasive mutual incommensurability even as they are forced together through the breakdown of their mutual dependence. Irony is fundamental to the

[7] Fink interestingly juxtaposes two items as part of the epigraphic text of this article. He places Susan McClary's "…the carefully prepared cadence is frustrated, damming up energy which finally explodes in the throttling, murderous rage of a rapist incapable of attaining release" with Lyotard's statement from *The Postmodern Condition* that "The postmodern would be that which, in the modern, puts forward the unpresentable in presentation itself; that which denies itself the solace of good forms…". Thus woven together, these descriptions suggest form as orgasmic release, as a pathway between states not in equilibrium, which speaks to Bataille's general economy.

[8] I think here particularly of *Sebastiane*, *The Angelic Conversation*, *Jubilee*, and most especially *The Last of England*. Jarman's concerns with representationalist ideologies are most straightforwardly expressed in *Caravaggio*, *Wittgenstein*, and the very radical statement of *Blue*.

[9] The reference here is to the Manichean creation myth, which describes the intermixing of light and darkness through a ghoulish onanism. This myth is similar to the penetrative creation myth of Kabbalah and certain Sufi traditions in which entities come into existence as semiotic elements whose veil of non-being is removed. Contrast this with the Baroque mode (Deleuze, 1992) in which light emerges from darkness through an intermingling of contrastive layers. We emphasize this point here because of its value to later points when we discuss "darkening" in relation to Heidegger's interpretation of Nihilism, where things are understood to have ontic existence through the negation of their non-being in a turn that illuminatingly alienates what is too close among the ready-to-hand.

postmodern condition, even in replies that attempt to circumvent this representational breakdown through an embracing of non-representational immanence, such as that of Deleuze. Indeed, after a fashion, neoliberal capitalism as the force of empire is at its core ironic in its oppressive deployment of ousia as a thematizing categorical structure.

John McCumber has pointed out that Heidegger is confused in his use of ousia and veers from the tradition in a way that can be explained under different terms. These terms show the above ironic tension to be a social inversion of the personal structure of human existence.

> For *Being and Time* shows—sometimes wittingly, sometimes not—that ousia, with its three axes of domination, is inadequate as a descriptive framework for the fabric of our lives. In showing that, Heidegger accomplishes for the human world something akin to what the Empiricists had accomplished with respect to nature; he provides a philosophical articulation of the inapplicability of the concept of ousia to the human world, as they had articulated its incapacity to apply to nature. In his later writings, this articulation takes the form of a challenge to ousia's status as a parametrically structuring discourse. (McCumber, 1999, p. 206)

Heidegger built up much of his philosophical career on the idea that the Greeks had made an error, which was to "allow the notion of presence to dominate that of Being." (p. 206) However, it seems more likely that Heidegger was the one in error.[10]

[10] John D. Caputo points to Hühnerfeld's description of Heidegger's flaws: "He was first of all possessed of the *arrogance* of the genius who knows his own worth. As a young man 'he breathed the air of philosophical authority' from Rickert and Husserl; as an independent philosopher, he developed a theory which condemned all criticism beforehand to a 'misunderstanding.' Indeed, he even takes a perverse delight in insisting that he is misunderstood. Heidegger has moreover maintained that every philosophical thought from Plato to Nietzsche is a falling away from the truth of Being which it is the special advantage of his own thought to restore. Secondly, Heidegger is unmistakably *nationalistic*. This is manifested first of all in his provincialism…. His love of the simple and the rough, his contempt for the urban and refined, goes hand in hand with an exaggerated love of everything German…. It is therefore not surprising that Heidegger moved from speaking of the destiny of Dasein in *Being and Time* to the destiny of the German people in his *Rektoratsrede*. Finally, Heidegger is for Hühnerfeld an *irrationalist*. An academic himself, Heidegger early on repudiated academic philosophy, turning away from the Neoscholasticism and Neo-Kantianism of his youth and turning instead towards Pascal and Dostoievsky, Kierkegaard and Nietzsche. Written in the milieu of Germany in the 1920's, *Being and Time* gave philosophical form to the subterranean themes of anxiety, death, and the nothing, which were the predominant motifs of the Expressionist poets of that same decade, which explains in part the instantly favorable reception which his book enjoyed. Heidegger's is a philosophy of 'melancholy nihil-

> When Heidegger focuses on presence rather than ousia, he confuses his targets. On the one hand, on his own understanding he questions presence itself. On the other, he also challenges the ways in which presence achieves its baneful effects—through its dominance over metaphysical discourse. There is thus in Heidegger's writings a fundamental lack of clarity over whether the problem with whether the "dominance of presence" lies with the presence or with the dominance.
>
> This lack of clarity has several results. One is that the challenges to presence and to ousia are never adequately separated so as to be adequately articulated on their own account. Instead, Heidegger's questioning of presence, in places, turns almost magically into a challenge to the way in which the theme of constant presence has dominated metaphysical discourse, thereby skewing the basic conceptual apparatus of the West: into a critique of ousia. Perhaps the most unfortunate effect of Heidegger's failure to separate presence from ousiodic domination, however, is…that the questioning of presence itself inevitably turns into a challenge to truth. Presence and truth have been…explicitly associated with each other at least since Aquinas. When the questioning of presence becomes a challenge to truth, it faces the problem of making itself intelligible without appeal to that which it is challenging, a problem which neither Heidegger nor anyone else has been able to solve. (pp. 206-7)

The specific error Heidegger makes is one the comes from his reliance on etymology as a tool for interpretation, especially in Greek, due to which he conflates and confuses the meanings of *ousia* and *parousia*. Ousia, as a being, is not equivalent to a presence in the sense Heidegger would have. While parousia does mean something like presence, it does so not due to an amplification of the meaning of ousia, but rather by specifying that something is 'at' or 'by' (*para*) some other being (*ousia*).[11] This mistake underlies almost all of his philosophy, especially that which pertains to history and space-time. It is not a conflation that Aristotle makes, and Aquinas

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ism' which has given up the effort to find a rational meaning in things before it even begins and which has always harbored a resentment against reason." (Caputo, 1986, pp. 32-3)

[11] For more on what can be at stake in thinking presence as distinct from ousia, see (Williamson, Modal Logic as Metaphor, 2013, pp. 22-5) One might also enter into territory examined by Stanislaw Lem in *Solaris* or, both less and more abstractly, the famous Cheshire Cat.

himself views them as parts of a binary opposition "with ousia—not presence—as the dominant member and with presence defined as the capacity of a thing to be the object of a true proposition." (pp. 225-6)

Heidegger makes a corollary misstep, wherein "his questioning of presence simply detaches from the most fecund aspect of his own philosophy, its presentation of an alternative to ousiodic structure." As McCumber explains, Heidegger's text associates propositional truth and presence. He cites the following two passages to demonstrate:

> As far as philosophical theorizing is concerned, the *logos* itself is a being, and in accordance with the orientation of ancient ontology, a being present at hand. Words are proximally present at hand, i.e., we find them before us like things; so is the sequence of words in which the *logos* is uttered.

And:

> The conformity of one thing present at hand—the assertions expressed—*to* something else which is present-at-hand: the being which is under discussion. (p. 226)

Here language elements are treated as object-like *ousia*-entities that can be correlated by relations external to their unclarified readiness-to-hand in and as presences oriented toward human subjects. Here, a word is an ousia insofar as it is amplified by parousia. McCumber argues that Heidegger *shows* in all his errors that certain things cannot be described by ousiodic structures, but can be captured in terms of what McCumber calls "the *diakena*, the gaps which grow and gather." As an example of this "structure," he points to Heidegger's description of Dasein, "the being that we are," which "does not have at its core a unified essence or form." Instead, it has three "equiprimordial" (*gleichursprünglich*) constitutive moments (understanding, discourse, and state-of-mind) that are not unified or unifiable and that do not spring from a common "Urgrund."

Instead, they exist in their interplay and tension, which Heidegger calls "care" (*Sorge*), Dasein having "no unity over and above the specific configurations which care assumes from time to time." (pp. 207-8)

Returning to the point, then, we can see that politics, religion, and ideology exist in and as a diakenic triad, rather than an ontic unity, ironically coordinating as the continuous break-down of a possible unity as a continuous becoming. This structure will return to us later. In the meantime, we can begin to attend to the reality of these kinds of structures, so that "when we re-direct our critique against ousia rather than presence, truth can take its rightful place as a non-dominating value of discourse." (p. 207) Therefore, we leave intact the ability to speak of truth without landing specifically in the domain of ousia. We distinguish, then, between attention to meaning and attention to truth conditions, following Aristotle. That is to say that we focus on the semantic rather than the apophantic, which means that we can discuss things like facts, even while critiquing their meaning and interpretation, and that we can consider particular philosophies without foreclosing on more open-ended metaphilosophies by way of affirming specific ontological conceits. (Manetti, 1993, pp. 76-7) With truth, presence, and representation set aside, we can move into a space where we are free to explore the semantics of ontic structures. We want this freedom as there is no guarantee that information as such is in accord with humanistic presumptions once we eliminate representationalism. And since we are not concerned with the affirmation (*kataphasis*) of particular constructs as true or false, but rather the conditions under which terms we use to discuss it become meaningful, we operate at the level of a metaphilosophy. With metaphilosophy, we engage in a twofold process, which amounts to thought experimentation: firstly, the production of concepts as a creative endeavor, followed, secondly, by the evaluation of those concepts in coordination to establish the possible forms of their interplay.

Thought experiments will be discussed more at length later, but we can recognize preliminarily that this model of thought experiment corresponds with abductive reasoning. For now, we can let one of Peirce's many descriptions of abduction define our preliminary sense:

> The maxim of Pragmatism, if it is sound, or whatever ought to replace it, if it is not sound, is nothing else than the logic of abduction.
>
> A mass of facts is before us. We go through them. We examine them. We find them a confused snarl, an impenetrable jungle. We are unable to hold them in our minds. We endeavor to set them down upon paper; but they seem so multiplex intricate that we can neither satisfy ourselves that what we have set down represents the facts, nor can we get any clear idea of what it is that we have set down. But suddenly, while we are poring over our digest of the facts and are endeavoring to set them into order, it occurs to us that if we were to assume something to be true that we do not know to be true, these facts would arrange themselves luminously. That is *abduction*. [—]
>
> The anticipation that such might be the truth, not amounting to positive assertion yet by no means sinking to a recognition of a bare possibility, was the Abductive conclusion. (Peirce C. S., Abduction)

An abductive statement is one that then can and should be tested by inductive and/or deductive methods to test out if it applies. Having conceived it, one must test for whether it is possible, or at least not inconsistent with what is. For Peirce, the discourse on abduction can be traced back to Aristotle, in whose second *Prior Analytics* the twenty-fifth chapter discusses *ἀπαγωγή*.

In taking account of much of the above, Peter Lamborn Wilson (a.k.a. Hakim Bey) refers to those who engage in ontological work as "crypto-fascists," with a target drawn specifically on those who make use of Martin Heidegger for their work. (Bey, Brezsney, Herbert, & Wilson, 1993) Some would argue that this might be unfair, as it clearly alludes in part to Heidegger's Nazism and assumes that the use of Heidegger somehow colludes in these tendencies. This is likely

partially correct in pushing the point too far. His point is perhaps valid in that many who engage in ontological discourse fail to distinguish between Heidegger's metaphilosophy and his philosophy. For those who would make use of his work, such distinctions should be of the utmost import, as a failure in this regard is like mishandling nuclear waste. Because of his personal moral failings and the way these impacted on the form and expression of his philosophy, we must ask ourselves if we are ethically culpable in using his work. My argument would be that to the extent we make use of his metaphilosophy, we are likely to remain in the zone of the acceptable, while we must be wary of using his philosophy. Of course, this is true in some sense of any philosopher, and one could argue that Heidegger's metaphilosophy necessarily involves a metaethics that did not proscribe his moral failures. Nevertheless, Heidegger requires special care and an attentively wide berth, and I would argue that Heidegger's metaethics appears only within his philosophy and not at the level of his metaphilosophy. Indeed, this may be part of the cause for his moral failures, as his metaphilosophy, grounded in an existential concern for the human condition and the human as an expression of metaphysical concern, is most likely incompatible with the dehumanizing efforts to which he lent support and philosophical expression. Heidegger excuses himself on this front by allowing a surrender of the human to the technical/technological, arguing that this has already occurred as a fundamental shift in the expression of being and that this shift represents the production of an expression in and through our projects of a new sway in the history of being.[12] In other words, he naturalizes dehumanization in his philosophy, even

[12] "What now *is*, is marked by the dominance of the active nature of modern technology. This dominance is already presenting itself in all areas of life, by various identifiable traits such as functionalization, systematic improvement, automation, bureaucratization, communications. Just as we call the idea of living things biology, just so the presentation and full articulation of all beings, dominated as they now are everywhere by the nature of the technical, may be called technology. The expression may serve as a term for the metaphysics of the atomic age." Yet he distinguishes this from his metaphilosophy: "Viewed from the present and drawn from our insight into the present, the step back out of metaphysics into the essential nature of metaphysics is the step out of technology and technological description and interpretation of the age, into the *essence* of modern technology which is still to be thought." (Heidegger, 2002, pp. 51-2) This step back does not include a metaethical inquiry at the level of metaphilosophy,

though his metaphilosophy does not find intrahuman otherness decidable as a natural kind-formation and does not require a decision to this end. In fact, the concept of a "sway of being," so important in the later Heidegger, may itself represent an embrace of the wicked aporia of humanism at the level of his philosophy: that humanism must define for itself what constitutes the human, insofar as the human is the final determination of value.

> Be-ing holds sway as *enowning the grounding of the t/here* [*Da*], put briefly: as *enowning*….
>
> The "of" in enowning *of the* grounding of the t/here [*Da*] is intended as a *genitivus objectivus*; the t/here [*Da*], the essential swaying of truth in its grounding (what is more originary of Da-*sein*), is enowned; and the grounding itself *lights up* the self-sheltering, the enowning. [This is] the *turning* and belongingness of truth (clearing of self-sheltering) to the essential sway of be-ing.
>
> It is from within the originary essential sway of truth that what is true and thus is a being is above all determined, and in such a way that now a being no longer *is* but *be-ing* arises unto "a be-ing." Therefore in the other beginning of thinking, be-ing is experienced as enowning, such that this experience, as arising, transforms all relations to "what is." From now on a human being—i.e., essential human being—and the few of its kind must build its history from within Da-sein and that means must effect a being in advance, from out of *be-ing* unto a being. Not merely like heretofore, where be-ing is something forgotten and unavoidably only meant in advance, but so that be-ing, its *truth*, expressly bears every relation to a being.
>
> This requires reservedness as grounding-attunement, which thoroughly attunes that guardianship in the time-space for the passing of the last god.
>
> Whether this re-casting of the hitherto existing human and, prior to that, the grounding of the more originary truth in a being of a new history is successful, cannot be calculated, but rather is the gift or withdrawal of enownment itself—even then when, in and through the present mindfulness, the basic traits of the essential swaying of be-ing are already thought ahead and known.
> (Heidegger, 1999, pp. 174-5)

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but instead leaves metaethics to the metaphysics of the age, resulting in a complex moral failure that cuts in many directions simultaneously: "Agriculture is now a mechanized food industry, in essence the same as the manufacture of corpses in the gas chambers and death camps." (Heidegger, 1977)

We can note here especially the relationship between the passing of the last god and the *genitivus objectivus* in the "enowning of the grounding of the t/here" as a problematic for Heidegger, as it shows that he places his metaethics within the sway of an epoch rather than at the level of his metaphilosophy. The retraction that is a being as the refusal of a fullness can become a decision,[13] rather than a negative "letting." The constructed nature of all that presents itself in such a withdrawal is converted by intention when the sway is such that the ground itself points out the possibility of such decision: thus giving and grounding a history of being which is the history of beings' relationship to being across the ontological difference, and sanctioning, by extension, the *übermensch* who would make the ground an object not of contemplation, but of projective concern and—dare one say?—discipline. The discourse that would take this up is a reversal of historical metaphysics, the traditional "onto-theo-logic" that thinks politics, religion, and ideology, turning them into the ironic memory of themselves as traces in an open field of the order of beings understood to be fiercely confronting time as history through the refusal of self-sheltering. In other words, they haunt their own existence as the ground of their own decision, which ironically disrupts their connection to the sway to which they properly obtain.

> Metaphysics thinks of beings as such, that is, in general. Metaphysics thinks of beings as such, as a whole. Metaphysics thinks of the Being of beings both in the ground-giving unity of what is most general, what is indifferently valid everywhere, and also in the unity of the all that accounts for the ground, that is, of the All-Highest. The Being of beings is thus thought of in advance as the grounding ground.[14] Therefore all metaphysics is at bottom, and from the ground up, what grounds, what gives account of the

[13] Recall the speech "German Men and Women" cited above.

[14] Heidegger here slips in a remarkable conceit, which is that Being is identified in its having been spoken as the unique content of a specific kind, the nature of which is to be general in its application. In this sense, language that bears a relation to Being is possessed of its own enowning, which, in thinking it as a kind, anticipates its own nature without having decided on it, except in the self-sheltering of a full language used by a rational being.

> ground, what is called to account by the ground, and finally what calls the ground to account….
>
> Ontology…and theology are "Logies" inasmuch as they provide the ground of beings as such and account for them within the whole. They account for Being as the ground of beings…. The fundamental character of metaphysics is onto-theo-logic. We should now be in a position to explain how the deity enters into philosophy…. The Being of beings is represented fundamentally, in the sense of the ground, only as *causa sui*. This is the metaphysical concept of God. Metaphysics must think in the direction of the deity because the matter of thinking is Being; but Being is in being as ground in diverse ways: as λόγος, as ὑποκείμενον, as substance, as subject…. The matter of thinking has been handed down to Western thinking under the name "Being." If we think of this matter just a bit more rigorously, if we take more heed of what is in contest in the matter, we see that *Being* means always and everywhere: the Being of *beings*. The genitive in this phrase is to be taken as a *genitivus objectivus*. *Beings* means always and everywhere the beings *of Being*; here the genitive is to be taken as a *genitivus subjectivus*. It is, however, with certain reservations that we speak of a genitive in respect to object and subject, because these terms, subject and object, in their turn stem from a particular character of Being. Only this much is clear, that when we deal with the Being of beings and with the beings of Being, we deal in each case with a difference. (Heidegger, 2002, pp. 58-62)

Thus philosophy, as the practice and art of thinking, carried out by a historical being, has, in the humanist stance, decided not to be organized by a metanarrative but rather to exist as the production of a metanarrative. This looks posthumanist at first, but bears a difference from it. For posthumanism, the production of a metanarrative concerns the formation of a system of world systems, while for Heidegger there remains a relation to "The One" that unifies Being in its ownmost essence, indicating that there is only one human world, defined in its form, limits, and extent by and for humans. Any multiplicity evident in the world is interior to it. Heidegger is forced to hedge his bets, as he recognizes the difficulty in producing a humanity that can stabilize itself into a non-differentializing ground such that relativism and pluralism are immediately foregrounded as fundamental to an epistemology he would reject, as does Husserl. Moreover, we

hear here echoes of Husserl, who does not place his metaethical considerations at the level of his philosophy (at least, not in the same way), recognizing that the subject/object relation is problematic at the level of ground. This problematic indicates either a plurality of grounds or, more difficult and thus unresolved for Husserl, a middle voiced conscience. Husserl sees this complex of issues as one coeval with concerns about representationalist perspectives.

> What positive science calls knowledge of the world is knowledge of the things of the world, their genera and species, their interconnections and separations, their changes and lack of change, their laws of persistent being throughout the course of change, their all-encompassing structure, forms, and the lawfulness of these forms to which all being of things is bound. But all the knowledge belonging to positive science, all its questions and answers, all its hypotheses and confirmations, stand or move upon the ground of the pregiven world; the world is the constant presupposition; the question concerns only what the world is, what is found to belong to it in the movement of induction from the known into the unknown. The world is not a hypothesis in that sole sense in which hypotheses have meaning for positive science… all hypotheses in the positive sphere are hypotheses upon the ground of the "hypothesis" of the world, and to seek a grounding for *this* "hypothesis" in the same sense, in the positive scientific way, would be absurd. Indeed, it is only from the vantage point of transcendental psychology or philosophy that we can see and understand what is lacking here by way of a questioning of the "hypothesis" of the world, what it is and what is required to put it in question. As the functioning subjects in and through whose function the world *is* for us, we are all completely extrathematic [in the natural attitude], forgotten, as it were, apart from the validity [we have,] with particular content which attains and bestows meaning within us…. [W]e recognize that it is naïve to stop at the subject-object correlation conceived in the anthropological, mundane manner and to misinterpret what was shown phenomenologically in my first writings as belonging to this correlation. To do this is to be blind precisely to the great problems of this paradox, namely, that man, and in communalization mankind, is subjectivity for the world and at the same time is supposed to be in it in an objective and worldly manner. The world which is for us is the world which has meaning in our human life and gains ever new meaning for us—meaning and also validity. This is true, and it is also true that in respect to knowledge, for us men, our own being goes before that of the

> world; but this does not mean that this same thing holds in respect to the actuality of being. (Husserl, 1970, pp. 261-2)

The conceit in Heidegger's humanistic proto-posthumanism is that our anticipation of being in and through kinds can properly enown the sway of an epoch, which is to say that the beings of Being can, through a constructed narrative, become the Being of beings as their own ground—that being is narrative in relation to time and, via a kind of ontological anthropic principle, that historical being can find itself in the lived experience of a self-defining humanity drawing its own limits: both contrary to and in keeping with its proper nature as the asking and fulfillment of the question of being.

It is through this inversion that we see the need Heidegger has to enact his metaethics at the level of his grounded philosophy. If beings are to become their own self-sustaining ground, even while remaining consistent with an epoch the sway of which they have decided, if not determined, then metaethics would necessarily be considered at the level of a particular philosophical expression, which, of course, bears the danger of that metaethics having been overly constrained, misled, or poorly conceived. Indeed, Jürgen Habermas has pointed to this issue in his discussion of genetic engineering and eugenic practice as applied to humans, pointing out that a person at one historical moment or time will have intrinsic power over those who come later in a way that is largely insuperable.[15] (Habermas, 2003) While this is true to a certain extent of any public decision, or even private decision that ripples through one's own lineage, he means to indicate that, when one is undertaking actions that impact on the capacity of others to do so, one

[15] This axiological structure is demonstrated in an alternative fashion in Greg Egan's science fiction novel *Permutation City*, (Egan, 1994) which, among other things, explores the consequences of a person copying their mind into a computer simulation over which one then has total control. The original thought this act was a good idea before copying and maintains this perspective after the fact. The copy, on the other hand, realizes that it is now the object of the experiment and changes its mind, but to no avail, as the original believes all ethical issues have been overcome by the fact that the copy is, in some sense, himself. This generalizes the potential of Habermas's arguments into a question of replicative series, or even semiotic series per se.

should consider doing so in a way that minimizes any action that prevents them from having equivalent freedom at either the ethical or metaethical level to determine their own states of affairs and futurity. From this perspective, it is necessary that any ethical acts be both possible and conceived of in such a way as to be constrained by the need to ensure that others are capable of undertaking possible actions they conceive of as appropriate to at least the same degree as oneself. The specific description of the requirement of possibility is necessary on two fronts: firstly, one cannot be held accountable for acts one cannot undertake, which is to say that one must be a capable ethical or moral agent in order to be held responsible in light of a charge; secondly, one should not undertake such acts as place requirements or charges on another that they cannot fulfill or that limit their capacity or eligibility to conceive of acts which they might otherwise undertake. In the case of Heidegger, he would have his own epoch, seen as possessed of a special privilege, determine both the conception and possibility of future humanity, even while actively embracing a philosophy that does the same through dehumanizing ideologies while he could have remained neutral at least.

Moreover, by divorcing metaphilosophy and metaethics, Heidegger's approach severs the connection between conception and possibility by disrupting the relationship between subject and object. Heidegger's radical anthropocentrism is not ontologically neutral, but rather naturalizes a particular intuition about the world and humans even as it collapses the relationship between ethics and ontology. Indeed, it also results in socio-epistemic structures and integrated systems that foreclose on alternative ethical frameworks. This gradually limits our capacity to conceive of Being and, by extension, of a differential humanity. This means that our historical unfolding comes to an end—kicking one of the grounding arguments of this perspective out from

under the whole of it—while "shift-locking"[16] humanity into a register that severs humanity's own grounding as ground. Humanism is put to an end in favor of something else, a something else which is both less than and more than human, even while being perhaps all-too-human. While one might argue that a philosopher must always practice metaphilosophy and philosophy simultaneously as a twin praxis of theory and application, when one's metaphilosophy insists on the historical situatedness of one's philosophy, even going so far as to embrace this as a virtue despite one's distaste for the epoch, it seems appropriate to recognize that the same pattern of distinctions and structures would apply to metaethics and ethics. The specific goals of Heidegger's endeavor, which seem like an attempt to move in a direction we might call posthumanistic, are rudimentary in this regard because of the absence of an inclusively global/planetary perspective—a perspective he seems to mistrust to the extent he can imagine it—and because of his extreme anthropocentrism. To the extent that he seems to extend the human context into an engagement with ecology, this is done through a Romantic and sentimental lens that is capable of interpreting the land only in relationship to humans and an appropriating, mythologizing historical vision.

We can find in the early Heidegger a description of how he arrives at this point. Interestingly, though perhaps not surprisingly given the thread of argument we have been laying out, this is bound up with the relationship between ontology, representationalism, and sign-making. A close reading of a rather famous passage from *Being and Time* will allow us to unpack what is happening in this clustering of concepts. What we find in this passage could be read as an explication of a line from Aristotle's *Prior Analytics* (II, 70 a, 7-9): "When, a thing being, is another thing, or when a thing becoming, becomes another thing before or after, these latter things are signs of becoming or being." (Manetti, 1993, p. 78) While it is difficult to say whether Heidegger

[16] This metaphor, borrowed from type-writing, is Nick Land's. We will return to it in a later section.

had this particular line in mind in writing the passage we will consider, it is worth noting here that something wonderful is happening in what Aristotle is saying. Here he essentially links temporality and causation (the latter in the Aristotelian sense) with being. He states that when a thing undergoes a change or becomes something else, it can then be taken as a sign of being or becoming. The underlying ontological continuity across the change in state or being is indicated by there having been such a change in state or being. Difference allows us to recognize the ontological reality in play. We can see this in information science contexts popping up as a point of interest:

> Over many years of teaching, I have observed that master's students in information science programs complete the mental transformation to thinking like information specialists within a few months. Often they have considerable difficulties during the first few weeks of the program, because *at first it feels alien to think about a resource in terms of the features that matter to the organization and retrieval of it, rather than in terms of mastering its content.* (Bates, 1999)

In other words, it is notable when objects are taken out of their normal context and evaluated in relationship to a different system that represents them as part of an organized system. This reevaluation is even more clear in the work of Patrick Wilson, where he speaks not only of the context-dependent shifts in being for information objects, but also the ways in which their value shifts over time:

> Much, though not all, of humanity's stock of knowledge is recorded in the texts of the bibliographical universe, and the relation of particular texts to the "body of knowledge" does indisputably figure largely in their evaluation, selection, and treatment in libraries and in bibliographies. If the physical medium in which a text is embodied is of only accidental interest, we might also claim that the textual environment or neighborhood in which an item of information or a bit of knowledge occurs is of only accidental inter-

> est…. [M]ost texts are not valued only for the information they contain, and… enormous numbers of them are not valued at all for their informational content. Of course the word "information" is presently used in such a great variety of ways that it would not be hard to find senses of "information" in which this obvious fact was not a fact at all. For example, the word "information" is sometimes used simply in the sense of "content," so that any meaningful statement (or almost any) would present information, and any paraphrase of a statement or any other formulation of what was meant or said or asserted by a statement would be a formulation of the informational content, i.e., the content, of the statement. In this sense of "information," it is less clearly true that texts are valued for other reasons than their informational content. We do not, presumably, value *Religio Medici* and Law's *Serious Call* for their information, nor Plato's *Dialogues* nor Kant's *Critique of Pure Reason*. Gibbon and Thucidydes relate many facts, but we do not read them solely to acquaint ourselves with those facts. (Wilson P. , 1968, pp. 17-8)

Heidegger has a more comprehensive take on this idea, emphasizing not difference but rather presence as the chief concern. In I.3.A.16 of *Being and Time* Heidegger makes the first part of his two-part argument: "The world itself is not an entity within-the-world; and yet it is so determinative for such entities that only in so far as 'there is' a world can they be encountered and show themselves, in their Being, as entities which have been discovered." In a variation on Aristotle's transignal being, Heidegger's sense of signal being is bound up with presence and the world that provides context for that presence. In both cases, a kind of difference is seen as determinative of the production of an ontological sign: for Aristotle across diachronic or synchronic time; for Heidegger as a foregrounding of a particular presence-qua-entity. Having reordered the question, Heidegger then discovers that it isn't relevant in the same way. Specifically, if it is the fact of having been foregrounded in a world that determines the relevance of something as a (par-)ousia, then the world cannot be an entity in the world to be known. Ontology finds itself in a conundrum whereby it can speak of entities and their being a sign of their own having relation

to a ground, without being able to say much about that ground—and, by extension, about the meaning of the presence. Heidegger would seem in this gesture to have entered some rather sticky territory. That is especially true when we remember that a major element in his efforts in the text are to explicate a sense of human existence. The aporia of humanism comes into play front and center: how can Dasein manage to know about the ground of entities' existence when, as such an entity, the world that provides it with both being and meaning are unavailable. This is a metaphysical form of the existential dilemma of modernity.

> If Dasein is ontically constituted by Being-in-the-World, and if an understanding of the Being of its Self belongs just as essentially to its Being, no matter how indefinite that understanding may be, then does not Dasein have an understanding of the world—a pre-ontological understanding, which indeed can and does get along without explicit ontological insights? With those entities which are encountered within-the-world—that is to say, with their character as within-the-world—does not something like the world show itself for concernful Being-in-the-world? (Heidegger, 1962, p. 102)

Heidegger turns to a transcendental question in order to frame a possible response:

> Do we not have a pre-phenomenological glimpse of this phenomenon? Do we not always have such a glimpse of it, without having to take it as a theme for ontological Interpretation? Has Dasein itself, in the range of its concernful absorption in equipment ready-to-hand, a possibility of Being in which the worldhood of those entities within-the-world with which it is concerned is, in a certain way, lit up for it, *along with* those entities themselves? (p. 102)

This is a really unlikely gesture. What he asks is whether, in being part of the world-context for objects that we would take up as objects within our intuited world, we cannot see the sign of being those objects are for us as in fact pertaining to ourselves as participants in being in such a way as to ground any knowledge of being we might have through those same signs. Heidegger

thus weaves a kind of objectivity and a kind of subjectivity together by means of presence as a gateway to a phenomenological ontology.

> If such possibilities of Being for Dasein can be exhibited within its concernful dealings, then the way lies open for studying the phenomenon which is thus lit up, and for attempting to 'hold it at bay', as it were, and to interrogate it as to those structures which show themselves therein. (p. 102)

Specifically, spinning Kant and Husserl, he speaks to a specific form of bracketing (*Einklammerung*; *ἐποχή*) that is able to undertake a phenomenological inquiry grounded in the experience of a noumenal presence, which is in turn unknowable outside our experience of that presence. In this way, everything pertains to and emerges from our relationship to presence as such.

Our concern for objects can take multiple forms, some of which allow for relations such that "the worldly character of what is within-the-world comes to the fore." These latter are discovered in one of three ways: conspicuousness (*Auffälligkeit*), obtrusiveness (*Aufdringlichkeit*), and obstinacy (*Aufsässigkeit*). Conspicuousness occurs when "the entities which are most closely ready-to-hand [are] met as something unusable, not properly adapted for the use we have decided upon." Damage or construction from unsuitable material are possible causes of its unusability, but "[w]e discover its unusability… not by looking at it and establishing its properties, but rather by the circumspection of the dealings with which we use it." In this case, "pure presence-at-hand announces itself," but again withdraws as we take the object to be something still oriented toward our use of it. The readiness-to-hand has been disrupted from the objective side of the encounter. In obtrusiveness, it is disrupted from the subjective side of the encounter. For example, if we have a nail we wish to hammer into place but have no hammer, then the nail stands out in its presence-to-hand, seemingly having lost its orientation to our use and thus its readiness-to-

hand. Heidegger points out the structure of anticipation involved, saying that the more urgently (*Je dringlicher*) we need to have the hammer, so the nail becomes all the more obtrusive (*um so aufdringlicher*). Finally, obstinacy is understood to disrupt worldhood itself. Something not encountered through unusability or lack may nonetheless stand in the way of our concernful engagement. That which is in the way, doesn't belong, obstructs, or confounds our activities, possibly as something for which we have 'no time,' is obstinate, foregrounded in the context of encounter over and against the world, moving against the grain of it, as it were. In each case, a kind of resistance to encounter allows presence to emerge as difference in such a way as to light up the world. Like lightning, such ontological difference (as opposed to the mere ontic difference among objects/equipment) cannot appear without lighting up the sky. (pp. 102-4)

There is a sense, then, in which worldhood is the taming of being in the familiar. This occurs because ontic presence is the "withholding" of presence-to-hand in readiness to hand, where being is then the negation of this withholding in the rupture of the world.

> The structure of the Being of what is ready-to-hand as equipment is determined by references or assignments. In a peculiar and obvious manner, the 'Things' which are closest to us are 'in themselves' ["An-sich"]; and they are encountered as 'in themselves' in the concern which makes use of them without noticing them explicitly—the concern which can come up against something unusable. When equipment cannot be used, this implies that the constitutive assignment of the "in-order-to" to a "towards-this" has been disturbed. The assignments themselves are not observed; they are rather 'there' when we concernfully submit ourselves to them [Sichstellen unter sie]. But *when an assignment has been disturbed*—when something is unusable for some purpose—then the assignment becomes explicit. Even now, of course, it has not become explicit as an ontological structure; but it has become explicit ontically for the circumspection which comes up against the damaging of the tool…. If it is to be possible for the ready-to-hand not to emerge from its inconspicuousness, the world *must not announce itself*. And it is in this that the Being-in-itself of entities which are ready-to-hand has its phenomenal structure constitut-

> ed…. Being-in-the-world…amounts to a non-thematic circumspective absorption in references or assignments constitutive for the readiness-to-hand of a totality of equipment. Any concern is already as it is, because of some familiarity with the world. In this familiarity Dasein can lose itself in what it encounters within-the-world and be fascinated with it. (pp. 105-7)

We can see in this not only Heidegger's preference for the quiet of Romantic countrysides[17] and his assertion that our relationship to technology is the cornerstone of metaphysics for the twentieth century, but also the relationship to boredom that Heidegger feels to be so fundamental to metaphysics. (Heidegger, 1995) Moreover, we see the beginnings of a forensic method of *Destruktion* that would seek to destroy ontological concepts which might be understood to reinforce the withdrawing of objects into the ready-to-hand insofar as any ontological presence that was encountered might be wrapped in such concepts and thus made ready-to-hand. This latter, of course, is one of the grounding moves for deconstruction as a methodological approach for later thinkers.

> If the question of Being is to have its own history made transparent, then this hardened tradition must be loosened up, and the concealments which it has brought about must be dissolved. We understand this task as one in which by taking *the question of Being as our clue*, we are to *destroy* the traditional content of ancient ontology until we arrive at those primordial experiences in which we achieved our first ways of determining the nature of Being—the ways which have guided us ever since…. [I]t has nothing to do with a vicious relativizing of ontological standpoints. But this destruction is just as far from having the *negative* sense of shaking off the ontological tradition. We must, on the contrary, stake out the positive possibilities of that tradition, and this always means keeping it within its *limits*; these in turn are given factically in the way the question is formulated at the time, and in the way the possible field for investigation is thus bounded off. On its negative side, this destruction does not relate itself towards the past; its criticism is aimed at 'today' and at the prevalent way of treating the

[17] For more about the idea that rural or agrarian thought can impact the formation of philosophies, see (Marsoobian, 2000; Thompson P. B., 2000).

> history of ontology, whether it is headed towards doxography, towards intellectual history, or towards a history of problems. But to bury the past in nullity [Nichtigkeit] is not the purpose of this destruction; its aim is *positive*; its negative function remains unexpressed and indirect. (Heidegger, 1962, p. 44)

Insofar as he is concerned with the dissection and management of categorical structures and their relationship to both the production and organization of knowledge with regard to ontological investigation, one can argue that Heidegger is engaged at the metaphilosophical level in what might be called a "knowledge management of being." This enterprise takes its form in concern for information, the ways in which we handle it, and the ways in which we coordinate the categories of discourse about it. Moreover, it is consistent with an abductive form of reasoning.

We have seen that in each way in which pure presence-to-hand, as a sign of worldhood, is similar to Aristotle's transignal concept of being, it is grounded in a concept of resistant difference that rubs against the grain of our understanding and anticipatory cognition. In other words, this is tied to an information theoretical concept called surprisal, which can be defined in the following way:

> How surprised one would be by a single symbol in a stream of symbols. It is computed from the probability of the i^{th} symbol, P_i, as $u_i = - \log_2 P_i$. For example, late at night, as I write this, the phone rarely rings so the probability of silence is close to 1 and the surprisal for silence is near zero. (If the probability of silence is 99% then $u_{silence} = - \log_2 0.99 = 0.01$ bits per second, where the phone can ring only once per second.) On the other hand, a ring is rare so the surprisal for ringing is very high. (For example, if the probability of ringing is 1% per second then $u_{ring} = - \log_2 0.01 = 6.64$ bits per second.) The average of all surprisals over the entire signal is the uncertainty. ($0.99 * 0.01 + 0.01 * 6.64 = 0.08$ bits per second.) (Schneider & Lewis, 2014)

Going further, this is also thinkable in terms of another of Peirce's descriptions of abduction—one which discusses abduction in relation to probability.

> The whole operation of reasoning begins with Abduction, which is now to be described. Its occasion is a surprise. That is, some belief, active or passive, formulated or unformulated, has just been broken up. It may be in real experience or it may equally be in pure mathematics, which has its marvels, as nature has. The mind seeks to bring the facts, as modified by the new discovery, into order; that is, to form a general conception embracing them. In some cases, it does this by an act of generalization. In other cases, no new law is suggested, but only a peculiar state of facts that will "explain" the surprising phenomenon; and a law already known is recognized as applicable to the suggested hypothesis, so that the phenomenon, under that assumption, would not be surprising, but quite likely, or even would be a necessary result. This synthesis suggesting a new conception or hypothesis, is the Abduction. It is recognized that the phenomena are like, i.e. constitute an Icon of, a replica of a general conception, or Symbol. This is not accepted as shown to be true, nor even probable in the technical sense, - i.e., not probable in such a sense that underwriters could safely make it the basis of business, however multitudinous the cases might be; - but it is shown to be likely, in the sense of being some sort of approach to the truth, in an indefinite sense. The conclusion is drawn in the interrogative mood (there is such a mood in Speculative Grammar, whether it occur in any human language or not). This conclusion, which is the Interpretant of the Abduction, represents the Abduction to be a Symbol, - to convey a general concept of the truth, - but not to assert it in any measure. (Peirce C. S., Abduction)

The interrogative conclusion is then met with further investigation to see if it is not only conceivable, but also possible, so that the generativity of abductive creation is tempered within a chain of semiotic behavior closer into alignment with reality—in the sense that each concept, taken as ready-to-hand, is applied with the anticipation that it will work. In cases where it does not fit, the world provides a signal disruption that allows us to see a little bit more of the nature of what is present to us. Wrong or incomplete concepts may align with the presence we encounter, but tell us little or nothing about the world. Yet the world is only ever lit up for us indirectly

through the surprisal value of unmet anticipations. As Peirce would have it, this is an evolutionary process, a kind of natural selection.

> All our knowledge of the laws of nature is analogous to knowledge of the future, inasmuch as there is no direct way in which the laws can become known to us. We here proceed by experimentation. That is to say, we guess out the laws bit by bit. We ask, What if we were to vary our procedure a little? Would the result be the same? We try it. If we are on the wrong track, an emphatic negative soon gets put upon the guess, and so our conceptions gradually get nearer and nearer right. The improvements of our inventions are made in the same manner. The theory of natural selection is that nature proceeds by similar experimentation to adapt a stock of animals or plants precisely to its environment, and to keep it in adaptation to the slowly changing environment. (Liszka, 2010)

As a result of this, Peirce argued that semiotics can be seen as the disciplinary approach that manages the range of possible methods, as it takes into account the nature of our relationship to the world, the processes by which we make sense of it, and the ways in which both of those are encompassed by processes of information and sign-production. As one author says, "In all disciplines there are specifiable basic concepts, our universes of discourse, which define special areas of inquiry. Semiotics is that 'science of sciences' which inquires into all processes of inquiry, and which seeks to discover methods of inquiry. Peirce held that semiotics was to be the method of methods." (Kevelson, 1987) Indeed, "If, as Peirce claims, all propositions are at bottom hypothetical, the method of methods aims at 'trouble-shooting' paradigmatic assumptions of the sciences which are actually moving toward instability." (p. 8)

> As a rule of thumb, we are less concerned in our commonsense dealings with precise meanings than we are in those investigations which are undertaken for very special reasons. What Peirce is asking, then, is: How does an idea grow and develop in the actual, changing world of utility and practical affairs, which is, indeed,

> most of the world? It is this "most of the world" which he wants to investigate and for which he needs a tool, or method, appropriate to its intended use. What is needed is not another thumb, or another wheel, but rather, something like a thumb, a wheel, and a known logic. But representation is not necessarily likeness. Yet the Method of Methods must represent the known Methods and even in certain ways appear to resemble them. To conceive a new method requires that one focus only on that part of the entire background of Methods which one can presume to observe, as it were, as a "quality."… Thus if the "method of methods", which is his Methodology, is to investigate different types of inquiry then we want to understand time as nothing but the different character or modes by which signs become. Ideas develop as patterns of information-change; each pattern or style of discourse is assumed to represent the motivating reason for its role *as* inquiry. Each different kind of discourse may be understood as a complex sign system which stands for unexpressed purpose in inquiring. In this sense, a discipline-specific style of discourse may be seen as analogous to an enthymemic argument. The assumptions which are unexpressed are beliefs. It is modality which permits us to distinguish between assertions of truth and judgments of belief. In the highest, governing level of logic the continuum of time parallels the development of a cohesive idea. As Peirce suggested, it is the responsibility of a community of inquirers to probe bedrock, to discover and create through inquiry new signs to be shared for the purpose of providing new judgments as topics, or known information, upon which new comments may be predicated. In this sense 'man is a sign' *in* nature and is also an actual agent, *in relation to natural objects*, who produces representations of reality." (Kevelson, 1987, pp. 18, 100-1)

We must note here not just the fact the humans are regarded as signs among signs, performing agential functions within an overall complex sign system, but also the generative quality by which discourse is seen to grow and change in response to its own self-relation in and as a product of human agency encountering an other. This perspective moves us beyond mere representation into areas that question the ways in which multiple continuities and vectors cut through, define, and realienate the space, as these apparently semiotic series move across all matter of sub-

strate, being defined by informational transformation and the production of difference therein.[18] This points to the possibility of a non-representational theory with regard to the relationships between world, sign, agency, object, etc.—a theory in which these all participate as part of a process that would operate as something of an emergent, dissipative structure.[19] This can be interpreted as a kind of radical materialism in its insistence on immanence.

> Non-representational theory is unusual… in being *thoroughly* materialist. It does not limit *a priori* what kind of beings make up the social. Rather everything takes-part and in taking-part, takes-place: everything happens, everything acts. Everything, including images, words and texts. Hence a relational-materialist approach departs from understandings of the social as ordered *a priori* (be it symbolically, ontologically, or otherwise) in a manner that would, for example, set the conditions of how objects appear, or as an ostensive structure that stands behind and determines practical action. In the taking-place of practices, things and events there is no room for hidden forces, no room for universal transcendentals or first principles. And so even representations become understood as presentations; as things and events they enact worlds, rather than being simple go-betweens tasked with re-presenting some pre-existing order or force. In their taking-place they have an expressive power as active interventions in the co-fabrication of worlds. (Anderson & Harrison, 2010, p. 14)

This is a shift to treating representation as one of many possible functional roles and enactments, recognizing the role that all forms of semiotic behavior have in shaping worlds and worldviews. Thus non-representational thinking is not less than or other to representational functions, but rather represents an expanded perspective whereby the singularizing ideology of representational-

[18] We see from another source that the movement of information across the differential division of a substrate may itself constitute such an information change, taking on agential characteristics without the need for anything beyond the interaction of matter, energy, and information. (Arafat & van Rijsbergen, 2007) This interaction would produce semiotic behavior, which, should it be generated in such a way as to allow for and participate in feedback loops or stable coupled oscillations, would provide the beginning of systematicity at least, if not vitality—systems, of course, being always defined in part as being constituted by matter, energy, and information. (Holland, 1995)

[19] This image will return as we move into other territory.

ism is abandoned in order to recognize that representation is one mode among many possible. To further that concept, Anderson and Harrison cite Dewsbury, Harrison, Rose and Wylie:

> Non-representational theory takes representation seriously; representation not as a code to be broken or as an illusion to be dispelled rather representations are apprehended as performative in themselves; as doings. The point here is to redirect attention from the posited meaning towards the material compositions and conduct of representations. (Anderson & Harrison, 2010, pp. 14-5)

They identify an additional thread in the discourse of non-representational theory that is specifically grounded in the work of Gilles Deleuze, which is the idea that "relations are exterior and irreducible to their terms." This means that in place of the copula and predication by means of an excluded middle, there is an emphasis on conjunction by way of "and." Relations thus become as "real" as the objects they relate. Deleuze is then cited in one of his descriptions of what that looks like:

> Relations are exterior to their terms. 'Peter is smaller than Paul', 'The glass is on the table': relation is neither internal to one of the terms which would consequently be subject, not to two together. Moreover, a relation may change without the terms changing…. Relations are in the middle, and exist as such. This exteriority of relations is not a principle, it is a vital protest against principles…. If one takes this exteriority of relations as a conducting wire or as a line, one sees a very strange world unfold, fragment by fragment: a Harlequin's jacket or patchwork, made up of solid parts and voids, blocs and ruptures, attractions and divisions, nuances and bluntnesses, conjunctions and ruptures, alternations and interweavings, additions which ever reach a total and subtractions whose remainder is never fixed. (Anderson & Harrison, 2010, p. 15)

This means that the form of existence hinges on the conjunctions among relations and relata and that the relations themselves may be relata. Heaps, piles, assemblages, rough and partial net-

works—all become part of what constitutes the system of the world, but not a world that produces history as a series of events grounded in the conditions of their own unfolding. Relation itself is sufficient ground for any interaction, and an event as a coordination of unfolding that provides a high surprisal value should be seen as more fundamental than the lack of such surprise. In this way of understanding, there is little wonder at surprise, but rather the need to actively investigate the means by which "practical orders repeat and reproduce by making the unforeseeable foreseeable and the unrepeatable repeatable, that is all the ways in which events are foreseen, foresaid and foreclosed." (Anderson & Harrison, 2010, p. 22) Yet, in such attention, we do not explain the rupture of the event. "[T]he event does not resemble, conform, or reproduce a set of *a priori* conditions. It does not *represent* those conditions. Rather, and in different ways, events break with their extant conditions, forcing or inviting us to think and act differently." The goal of investigating events, then, is not to discover a rupture in the world that allows us to understand being, but rather to see the inner workings of the flows of matter, energy, information, capital, etc., that produced the sameness that was punctured by the event. This dissective approach, as opposed to the Heideggerian diagnostic, aims to understand the systems, accumulations, and assemblages so as to be able to intervene in their dynamics in order to shape their future states. This tensile introduction of difference, itself a relational event adding to the unfolding series, sees the value in an ethics that takes its place additively among series and orders of series, and that would see both metaethics and metaphilosophy operating at the same apopetalous level of an order to which belong particular (plural and pluralistic) instantiations of philosophy and ethics, as a kind of axiology without representational ideology.

> Across tangible differences in theory and method, non-representational theories share an affinity of sensibility, what we could call a specific 'existential faith' that crosses various attempts

> to contribute, if only modestly, and always carefully, to the opening up of different futures. This existential faith finds ethical and political import in thinking about methods—understood broadly—as active interventions in the taking-place of events, whether by affirming (generously, hopefully) becoming or waiting (hospitably, anxiously) for the 'to come'. What this work shares is a commitment to critique as a means of creating turning points in the here and now and a conviction that in any given situation more is need than critique if (certain) events are to be tended to and cultivated. Critique is necessary but always insufficient. It may be supplemented by a positive attachment to a world of becoming in which 'whatever and whenever something is going on there is an event'. Hence the recent interest in enchantment or generosity as two such ways of working on the 'background' of thought and life. It may also be supplemented by an affirmative, perhaps even utopian, relation with events, everyday or otherwise, that open up traces of radically different futures.
>
> Although usually considered to be very different, these ways of relating to the event have a series of affinities with other styles of anticipatory thinking and acting, most notable the attention to disruption that marks queer geographies, an emergent Feminist and anti-racist literature attuned to the force of corporeal differences such as gender, and the explosion of interest in poststructuralist participatory geographies seized by the potential of various microeconomic experiments. All are animated by the question of how better futures may be brought into being. (Anderson & Harrison, 2010, p. 23)

With this we can return to Heidegger and the second part of the close reading we need to undertake. This passage has specifically to do with the nature of the sign. In Heidegger's expositional narrative in *Being and Time*, he comes across the need to discuss signs due to the fact that he has described the relationship between presence and being by way of worldhood and present-/readiness-to hand. In order to do so, he made use of the ideas of reference and assignment as describing the ways in which presenting entities find their place within the world such that they can then fall out of alignment with it in order to reveal being. Like nonrepresentational theory, Heidegger is interested in the ways in which rupture comes forth, though unlike it this is to the end of allowing the rupture of continuity in the world to reveal its a priori structures in and as

being, while for the nonrepresentationalist of a Deleuzian flavor, there is no such a priori to be revealed. Because reference has to do with the ways in which meaning is grasped with regard to the conditions in and of a world, Heidegger finds it appropriate to interrogate the functioning of signs, which are themselves part of the equipment of the world. The idea of sign is, however, multifaceted and needs to be clarified.

> The word "sign" designates many kinds of things: not only may it stand for different *kinds* of signs, but Being-a-sign-for can itself be formalized as a *universal kind of relation*, so that the sign-structure itself provides an ontological clue for 'characterizing' any entity whatsoever.
>
> But signs, in the first instance, are themselves items of equipment whose specific character as equipment consists in *showing* or *indicating*…. Indicating can be defined as a 'kind' of referring. Referring is, if we take it as formally as possible, a *relating*. But relation does not function as a genus for 'kinds' or 'species' of references which may somehow become differentiated as sign, symbol, expression, or signification. A relation is something quite formal which may be read off directly by way of 'formalization' from any kind of context, whatever its subject-matter or its way of Being.
>
> Every reference is a relation, but not every relation is a reference. Every 'indication' is a reference, but not every referring is an indicating. This implies at the same time that every 'indication' is a relation, but not every relation is an indicating. The formally general character of relation is thus brought to light. If we are to investigate such phenomena as references, signs, or even significations, nothing is to be gained by characterizing them as relations. Indeed we shall eventually have to show that 'relations' themselves, *because of* their formally general character, have their ontological source in a reference. (Heidegger, 1962, pp. 107-8)

It gets a bit more complicated when we realize that "'referring' as indicating is not the ontological structure of the sign as equipment." Referring is necessarily grounded in the Being-structure of equipment, especially with regard to that being's "serviceability for" some purpose or end. The difference arises when we recognize that a thing can be serviceable for something without becoming a sign. In a piece of equipment's indicating as a reference, the specific "towards-

which" of some serviceability becomes concrete in its functional presence as sign, subject to assignment, in the world. The pure "serviceability-for" that is simply part of being equipment, however, is merely part of being equipment. There is nothing intrinsically sign-like about the sign. Its having made concrete the "towards-which" of its serviceability as equipment towards the specific end of its proper reference is merely an "accident" of its "equipment-constitution." The thing that makes a sign a sign is not just this folding in on itself of the concretization of the "towards-which," but also, and perhaps more importantly, the constitution of human worldhood in and through the presence of the sign to a human. Because humans are part of the world as beings within it, entities that take-place, we too are possessed of an "on-its-way" character as a being with an assignment and relation to the totality of equipment—and, because of the expanded horizon of our relations in and as the totality, to the world itself in its withdrawn presence. The sign, as a being that is ready-to-hand, addresses itself not to us but to "the circumspection of our concernful dealings," "bringing into an explicit 'survey' whatever aroundness the environment may have at the time. This circumspective survey does not *grasp* the ready-to-hand; what it achieves is rather an orientation within our environment." (Heidegger, Being and Time, 1962, pp. 109-10)

Signs are much like ready-to-hand equipment that for whatever reason has been reduced to the merely present-at-hand in the sense that it reveals its contextual worlding in one form or another. In the case of a broken tool, for example, through disrupting the expectations and actions of the world. In the case of the sign, by introducing some sort of difference into the world that highlights the overall structure of the world as a referent to which we can bear an orientation. Switching to another vocabulary, the sign is that which exists as an entity among entities as part of a general system of interactions constituted by things, relations, and relations of relations.

The sign functions by foregrounding relation as something within the world to be grasped, although the nature of that foregrounding is itself no different in basic form from that of relation in general. A sign, as a difference, participates in a series of relations taken as differences, which, in turn, assist the observer in their dealings with the system by orienting them within the system with regard to their activities. The sign is, then, a difference making itself known in a system in such a way as to make a difference and which, when taken as such, may act in a way similar to the present-at-hand in providing, through its differentializing contour, the means by which to view the world as a whole. As before, the given sign is like a flash of lightning that lights up the sky. It is an intervention in the system that, by transforming the system, makes us aware of the very systematicity of the system. This, of course, begins to sound a lot like the nonrepresentational theory above.

Heidegger moves closer still. He specifically moves against representationalism in its traditional form: "A sign is not a Thing which stands to another Thing in the relationship of indicating; it is rather *an item of equipment which explicitly raises a totality of equipment into our circumspection so that together with it the worldly character of the ready-to-hand announces itself*." (Heidegger, 1962, p. 110) We know already that that which is "most closely ready-to-hand within-the-world possesses the character of holding-itself-in and not emerging," which is to say that things which go smoothly have no surprisal value and do not bring forward conspicuousness, obtrusiveness, or obstinacy. Thus "our circumspective dealings in the environment require some equipment ready-to-hand which in its character as equipment takes over the 'work' of *letting* something ready-to-hand *become conspicuous*." (Heidegger, 1962, p. 110) In other words, it adds a difference into the system by highlighting the state of the system and transforming it. The sign itself has a particularity with regard to its reference insofar as the difference or system of

differences it lets become conspicuous have varying degrees of surprisal value due either to uniqueness (as in its not being a repetition or otherwise known referent) or to the breadth of its potential reference: “The wider the extent to which it can indicate, the narrower its intelligibility and its usefulness.” If the range of its possible reference is such that it is not able to allow the intended entity or relation to become conspicuous, it may need to have secondary signs support it in order to constrain the range of possibilities. In other language, signs are ampliative with regard to the observer, possessed of varying arities, and therefore may require additional signs to limit the range of possible meanings. Something may stick out as an obvious sign, but it might not be clear what is intended by it from among a range of possibilities. A sign is radiant, and it is related to an abductive process that must be further constrained by additional ranges of possibilities emanating from other or entities. Meaning, form, and context bear relations, but are not intrinsically identical. Unlike the nonrepresentationalist theory described above, however, Heidegger’s sign theory is focused intensely and intensively through Dasein, for whom and through whom the entire system is determined. For Heidegger, the sign, even in its ontic structure, recapitulates and represents the more general ontological structure of the beings-of-Being, and this is structured so as to overdetermine its relationship to human existence.

In 1966, Heidegger lamented the fact that the kind of structures he was describing were melting away, in the sense that the idea of a logocentric humanism was giving way to something that we might call a very preliminary foreshadowing of posthumanism. Indeed, there is an irony in that his own work had set up a proto-posthumanist perspective, even while remaining radically anthropocentric in its perspectives and arguments. For him, the practice of science was about developing the kind of authentic encounter he sought with the world so that it could be known in its essence. This sometimes led to the deployment of objective frames of mind, but required first

and foremost the presence of a human subject as the arbiter of the event—even in a rupture. The new ways of thinking found this less than necessary, prompting his lament in a letter to Eugen Fink:

> Philosophy is dissipating into independent sciences. They are known as logistics, semantics, psychology, anthropology, sociology, political science, the science of poetics, technology. As well as dissipating into the sciences, philosophy is being superseded by a new kind of unification of all the sciences. The overpowering of the sciences by a fundamental trait that prevails in them themselves is happening in the rise of what we see attempting to consolidate itself under the title of cybernetics. This process is promoted and accelerated by the fact that modern science itself accommodates it on account of its own fundamental character.
>
> A year before his collapse (1888), Nietzsche expressed this fundamental trait of modern science in a single sentence. It reads: "It is not the victory of *science* that marks this nineteenth century of ours, but the victory of *method* over science."
>
> Method here is no longer thought as the instrument with the aid of which scientific research works on the objects it has already set out. Method constitutes the very objectivity of the objects, granted that we may still speak of objects here, granted that formulating certain determinations of objectivity in general still has any "ontological valency" here.
>
> Presumably philosophy in the previous style and with its corresponding validity will vanish from the field of view of man in the technical world-civilization….
>
> Perhaps thinking must in future first open the time-play-space for poetising, so that through the poetising word there may again be a wording world. (Heidegger, 1995, pp. 368-9)[20]

Heidegger's model is, after a fashion, one of immanence, insofar as all activities and events occur within a world in which entities come to exist in their world-functions. There is a kind of subterranean ontology, wherein being is understood to exist beneath layers of mediation, coming

[20] One notes, then, his offensive "gift" at the end of his letter of the translation by Paul Celan of Paul Valéry's "The Young Parca." The literature on Paul Celan's relationship to both the German language and Heidegger is vast and worth investigation, though it is only within the scope of this essay to note his appropriation of Celan's work as a gift accompanying this letter. One would think this text would bear a different meaning for Celan than for Heidegger and his "beautiful soul."

to the surface of our attention to presence in specific circumstances. That being is always already present, so it is through the states of the world that it comes to be known. That being is, however, not transcendent, but rather transcendental, as at its most vivid it is an unmediated presence, the withholding of a withdrawal, a double negative amounting to a neutrality. It is in relation to this unmediated presence that metaphilosophy can take place thanks to metaphysics, as metaphysics is that praxis which brings presence to light. A sign takes place not as the withholding of a withdrawal leading to pure presence, but either as the withholding of the withdrawal of withholding itself, or simply as a withdrawal among other withdrawn entities, as with the emergence of natural signs or symptoms. In this way, then, the understanding of the sign is ontic, but not ontological, a negative ontology. The sign is radiant, not withdrawing, a bright darkness, and, since we have our being-in-the-world and our dwelling through language, then, following Heidegger, we must understand our ethics and metaethics to exist at the level of an articulated philosophy and not at the level of a metaphysics. Being is in excess of the world, but the ~~being~~ of the sign, which is not ousia or presence but parousia, is in excess of the systems of reference, assignment, and language that are within the world. Our being, and our ability to discover the being of ourselves and other things, is transcendental, but our language and our ability to act on it is purely immanent to the world. And we are signs in the world.

The ontological difference, as it has come to be known, is dangerous on a couple of fronts. Firstly, while using a language, style, and goals that would make it appear to be operating in the transcendental vein, it nonetheless reproduces a transcendent approach that Heidegger has borrowed, at least in part, from medieval sources he reworks. (Sikka, 1997) Digging deeper, we find that Heidegger's structure of ousia as presence has less in common with Aristotle's ideas on

the topic of being—we have already discussed this difference—and more in common with the structure through which Aristotle discusses the living.

> In the *De Anima*, Aristotle bifurcates life between a quasi-ontological notion of Life and a naturalistic notion of the living. Here "Life" is the concept of life-in-itself, the life of the living, the abstract notion of life, while "the living" are any and all the instances of life, the manifestations of life, in some cases even the naturalistic, organismic, and biologistic notions of life. Life is that *through* which the heterogeneous domains of the living are alive; Life is that *by* which the heterogeneous domains of the living can be said to be alive. Aristotle's ontology of life sets out to address both the concept of life and its manifestations; the term *psukhē* signifies that which is held in common among all the living, while the internal distinction between Life and the living accommodates stratifications within life. (Thacker, After Life, 2010, p. 17)

Like Heidegger's Being, in this case Life becomes the limit of what can be thought of living by the living, as it must exist in excess of any particular form of living. In fact, in the stratifications within life accommodated by the internal distinction between Life and the living, we see the possibility of Aristotelian ousia in its elitist, oppressive, and/or imperialist form. One assumes that the higher one is in the hierarchy, the more access one has to Life, having expanded one's own living to take up more of that Life that is always in excess. There is here the beginning of a way to think divinization in the classical world, if not the divinities themselves, as well as the distribution of ousia among human beings. Moreover, we can think through the aura of divine beings and saints, the two bodies of the king, and even Orthodox theosis. This structure is important to Heidegger, as it is bound up with the question of Nature as a whole. If life and living bear the same kind of relation as being and beings, then there is a potential destabilization of Dasein in light of the fact that Dasein is defined specifically in its ontological character and determined by its ability to "hover between" being and beings. If Dasein is not especially the self-grounding

ground of the question of being, then Heidegger's project collapses, as it relies on radical anthropocentrism as the dominant expression of Being. Life is grounded in a particular understanding of *phusis*, while Heidegger's understanding of ousia requires that *phusis* to take on a different form, more in line with his ideas about presence. If this split operates in such a way as to prevent the unity of *phusis*, then the One collapses, nature is not unified, and the humanist ontological approach he has taken cannot work.

> Heidegger's lecture courses often turn to Aristotle in talking not only about ontological difference, but the pulling-apart of metaphysics from physics (*phusis*). As he notes, it is this latter term *phusis* that encompasses not only "nature," but a whole host of questions for Aristotle concerning the ontology of life: "Questions are asked concerning what life itself is, what the soul is, what arising and passing away are…what the emptiness is in which that which moved moves, what the which moves itself is as a whole and what the Prime Mover is."… Interestingly, Heidegger argues that this broad usage of *phusis*—covering as it does "life itself" as well as modality, movement, and causality—undergoes a pulling-apart process in Aristotle, in which physics, as the Being of beings, detaches itself from metaphysics, as Being in itself: "We thereby have two meanings of *φύσις* [*phusis*] that are found together in Aristotelian philosophy: firstly *φύσις* [*phusis*] as beings as a whole, and secondly *φύσις* [*phusis*] in the sense of *οὐσία* [*ousia*], the essentiality of beings as such. (Thacker, After Life, 2010, p. 18)

It would appear that Heidegger and Aristotle come to similar impasses with regard to their respective forms of the ontological/bio-logical difference, the allowance for temporality: in Heidegger, the aforementioned structures; in Aristotle, the introduction of the entelecheia. (Thacker, After Life, 2010, p. 20) In each case, entities or living beings are within a world, manifesting another, hidden level which is itself without qualities, properties, attributes, or characteristics. It gives itself as a surplus or excess of absence, void, or nothingness, a fullness that only shows in and as the various particular manifestations that arise out of its empty continuum.

Moreover, it gives no indication of whether it is static or dynamic, so there is no intrinsic or self-evident way to describe growth, change, or movement. The answer in both cases, though handled differently, is to imply that it is in the character of life or being to give rise to these things, which is how they take-place as their proper selves in the world. This is quite remarkable, as it means that time is never taken up as time itself, but rather as an extension of spatial relations, providing an extra dimension across which a third element, *δύναμις* (dunamis), is allowed to express itself in and as *ἐνέργεια* (energeia). This, for Heidegger, grounds the distinction between authenticity and inauthenticity in and through the existential vs. the existentiell, respectively. (Oberst, 2004) And so, full circle, we find ourselves at the intersection of power, being, time, and presence. Yet time has never been part of the equation as a factor operating as anything other than an additional degree of freedom for a spatial reasoning that cannot, really, think temporal effects other than to shove them down into the mystery bag with everything else. Thus, like Mary Poppins' carpet bag, once opened, everything and anything can come out of it because, to mix fantasies, it is bigger on the inside like Doctor Who's Tardis. As *chora* (Corrington, 1994), these "grounds" spit forth all sorts of things while serving as portals between narratives, timelines, and destinies. This global structure is seen in many manifestations across the history of ontotheology. Eugene Thacker cites John Scottus Eriugena, giving us another example:

> For there is no body which is not contained within its proper species, so there is no species which is not controlled by the power of some life (*uitae*). Therefore, if all bodies which are naturally constituted are governed by some species of life (*specie uitae*), and every species seeks its own genus while every genus takes its origin from universal substance, it must be that every species of life which contains the numerousness of the various bodies returns to a universal life (*generalissimam quondam uitam*), by participation in which it is a species.

> Now, this universal life (*generalissima uita*) is called by the natural philosophers the Universal Soul (*uniuersalissima anima*) which through its species controls the totality which is contained within the orbit of the heavenly sphere, while those who contemplate the Divine Sophia call it the common life (*commumum uitam*), which, while it participates in that one Life which is substantial in itself and is the fountain and creator of all life, by its division into things visible and invisible distributes lives in accordance with the Divine Ordinance, as this Sun which is known to the senses pours forth its rays on all around. (Thacker, After Life, 2010, pp. 178-9)

Thacker points out multiple times, particularly through Aquinas and Duns Scotus, that the relationship between the fundamental and contingent levels form either an economy of exchange with an unrelatable other, resulting in an abjection of that other such that they are sublimated into the mundane ("God helps those who help themselves" or *pathē* as the root of *caritas*), or else a continuity that makes the difference into a non-difference, promoting a category structured on a syntax of denegation. In other words, there is no cause to maintain the distinction except for utopian or sociopolitical goals.

> Generally, the idea that the supernatural and the natural, or God and Nature, are one and the same, tends to flatten and disperse any conceptual framework of transcendence or centralization. In its radical variant, pantheism even does away with the conciliatory, decentralized position of eminence or emanation. Such an idea brings with it obvious politico-theological dangers—any pantheist outlook essentially does away with all of Aquinas' five proofs for the existence of God, and by extension, the necessity of the power relationships internal to religious governance. Pantheism is thus heretical in the theological sense that it does away with the necessity of all mediation, be it in the form of Neoplatonic exemplarism, Patristic interpretations of the Trinity, or Thomist analogy. It is also heretical in the political sense in that, by conceiving of hierarchical mediation as unnecessary, pantheism implicitly questions the doctrinally inflected stratifications inherent within institutional structures such as University. (Thacker, After Life, 2010, p. 228)

Specifically, the refusal to acknowledge the groundlessness of the distinction except as a political theological decision is a conservative gesture meant to ensure that human nature is either constrained or controlled within an architectonic that is fundamentally spatial in nature. In its wake, it carries a whole series of representationalist and correlationist[21] concepts related to life, being, soul, truth, etc., none of which bear fruit when this thorough immanence is acknowledged. Here is an even more profound extension of Nietzsche's history of nihilism: it isn't just truth that leads to the death of God, but also a deep history that can be dredged up from within the depths of the Western tradition, where we see that not just ontotheology but also metaphysics itself leads to its own destruction. It does so in an enactment of the will to power that also recognizes that this history is nothing but the history of the will to power repeating itself in a compulsive differential return. The death of God in this form is then a profound nihilism and a self-recognition of humanity as a manifestation of differentiation put to the use of decision and the will to power.

Of course, these insights are Nietzsche's, and we can credit him with being one of the first philosophers to have embraced time in itself as an important element of thought with regard to the above, rather than just as an extra degree of freedom for spatial thinking. He does this after exploring the spatial model and its inadequacies as a young man in *The Birth of Tragedy*. Already there we see hints of a temporalization that would ultimately upend the spatial model and its trappings, resulting in the conception of a slave revolt in morals. Schneider & Sagan (2005)

[21] Correlationism is a term used by speculative realists (and especially object-oriented ontology) that was coined by Quentin Meillassoux to critique a particular kind of Kantian anthropocentrism that promotes "the idea according to which we only ever have access to the correlation between thinking and being, and never to either term considered apart from the other." (Meillassoux, 2008, p. 5) This is related to a very important gesture for our purposes, known as anthrodecentrism. With reference to Levi Bryant and Graham Harman, anthrodecentrism has been explained in the following way: "The rejection of post-Kantian privileging of human existence over the existence of nonhuman objects. Beginning with Kant's 'Copernican revolution,' modern philosophers began articulating a transcendental anthropocentrism, whereby objects are said to conform to the mind of the subject and, in turn, become products of human cognition. In contrast to Kant's view, object-oriented philosophers maintain that objects exist independently of human perception, and that nonhuman object relations distort their relata in the same fundamental manner as human consciousness. Thus, all object relations, human and nonhuman, are said to exist on equal ontological footing with one another." (Object-oriented ontology, 2014) See also (Bryant, Correlationism and the Fate of Philosophy, 2008).

have demonstrated the degree to which Nietzsche thought this temporalization in terms of the science of his day. We cannot ignore, either, his wrestling with Darwin. (Richardson, 2004) If we accept, with later knowledge, that evolutionary dynamics and thermodynamics are correlated (and they are) (Brooks & Wiley, 1988; Dorogovtsev & Mendes, 2003; Wicken, 1987), and accept the well-established connection between information and thermodynamics, then we don't necessarily require the specific other factors that the tradition has used to compensate for these simpler principles. Focusing on the temporal elements in the above philosophical schemes, we can replace, for example, the specific elements of presence, life, and humanity with various informational functions. Information generalizes across these functions while assuming different configurational relationships to the overall scene under analysis. From this, we begin to understand why surprisal value has played such an important role: it is an information concept representing an information theoretical metric.

With this change, we can see life as the flow of information, presence as its availability, and humanity as the constraint according to which it comes to be known in and as signs. Information is immanent, radiant, available, and productive in the sense of its abductive/ampliative interactions with matter and energy. This results in a threefold structure that is an analog of Peirce's triadic model of the sign—at least diagrammatically—and we know that Peirce attempted to generalize this triad to encompass a structural-relational ontology based in his three categories. Moreover, in this comparison, we can see the ways in which Nietzsche's thermodynamic perspective leads him to the same kind of skeptical evolutionary epistemology we found in Peirce though placed in the context of a profound immanence and radical materialism:

> In order to think and infer it is necessary to assume beings: logic handles only formulas for what remains the same. That is why this assumption would not be proof of reality: "beings" are part of our

> perspective. The "ego" as a being (—not affected by becoming and development).
>
> The fictitious world of subject, substance, "reason" etc., is needed—: there is in us a power to order, simplify, falsify, artificially distinguish. "Truth" is the will to be master over the multiplicity of sensations:—to classify phenomena into definite categories. In this we start from a belief in the "in-itself" of things (we take phenomena as real).
>
> The character of the world in a state of becoming as incapable of formulation, as "false," as "'self-contradictory." Knowledge and becoming exclude one another. Consequently, "knowledge" must be something else: there must first of all be a will to make knowable, a kind of becoming must itself create the deception of beings….
>
> Continual transition forbids us to speak of "individuals," etc; the "number" of beings is itself in flux. We would know nothing of time and motion if we did not, in a coarse fashion, believe we see what is at "rest" beside what is in motion. The same applies to cause and effect, and without the erroneous conception of "empty space" we should certainly not have acquired the conception of space. The principle of identity has behind it the "apparent fact" of things that are the same. A world in a state of becoming could not, in a strict sense, be "comprehended" or "known"; only to the extent that the "comprehending" and "knowing" intellect encounters a coarse, already-created world, fabricated out of mere appearances but become firm to the extent that this kind of appearance has preserved life--only to this extent is there anything like "knowledge"; i.e., a measuring of earlier and later errors by one another. (Nietzsche, 1967, pp. 517, 520)

Nietzsche embraces this situation with a kind of *amor fati*, such that he accepts the history of being for what it is and takes it upon himself to extend it. As the final realization of nihilism, he is also, through his embrace of the will to power as a grounding concept, contra his own thought and in line with a misreading of Darwinism, the pinnacle of cynical narcissism.

The above would seem to call for a dismantling of those apparatuses that produce, support, and maintain the Aristotelian social inequality that would, in turn, seem to be without value

in an immanent perspective. Instead, though, Nietzsche, like Heidegger, insists on a perverse form of humanism that falls into the trap of its own decisional aporias—this time justified in terms of life as the will to power, rather than Heidegger's decision for the German Nation. This amounts to a reinsertion of Aristotelian ousia as a counter to the perceived massification of humanity coming in the industrial movement—which, of course, Heidegger is still complaining about, even to the point of grumbling about cybernetics as a metadisciplinary perspective.

> Refraining mutually from injury, violence, and exploitation and placing one's will on a par with that of someone else—this may become…good manners among individuals if the appropriate conditions are present (namely, if these men are actually similar in strength and value standards and belong together in *one* body). But as soon as this principle is extended, and possible even accepted as the *fundamental principle of society*, it immediately proves to be what it really is—a will to the *denial* of life, a principle of disintegration and decay. (Bull, 2011, p. 50)

Malcolm Bull explains that "Nietzsche's response is to demand a return to mechanical solidarity, not of course for everyone, but for the few strong men who can create value. Only if society is detotalised and redivided into the community of the strong and the undifferentiated mass of the weak can the conditions for value creation be sustained" (Bull, 2011, p. 51):

> [S]ociety must *not* exist for society's sake but only as the foundation and scaffolding on which a choice type of being is able to raise itself to its higher task and to a higher state of *being*—comparable to those sun-seeking vines of Java…that so long and so often enclasp an oak tree with their tendrils until eventually, high above it but supported by it, they can unfold their crowns in the open light and display their happiness. (Bull, 2011, p. 52)

Nietzsche is fulfilling what he sees as completed nihilism, a nihilism so complete that it ends up deleting even nihilism itself as a value, tracing a circle that is so consummately Nietzschean in its shape:

> Incomplete nihilism…replace[s] the former values with others, but still posits the others in the old position of authority…as the ideal realm of the suprasensory. Completed nihilism, however, in addition must do away even with the place of value itself, with the suprasensory as a realm, and accordingly must posit and revalue values differently. (Bull, 2011, p. 80)

Bull then explains how Heidegger relates to this, equating nihilism with a kind of dark immanence that carries with it a profound historical importance:

> The underlying opposition is therefore between metaphysics, i.e., any philosophy in which the 'whole is differentiated into a sensory and a suprasensory world and the former is…determined by the latter', and nihilism, which implies that 'Nothing is spreading out' where "Nothing" means…[the] absence of a suprasensory, obligatory world'. The completion of nihilism therefore involves both the rejection of metaphysics and the substitute values of incomplete nihilism. This process is, Heidegger suggests, 'the fundamental movement of the history of the West', whose unfolding, he writes ominously in 1943, 'can have nothing but world catastrophe as its consequence'. For Heidegger as for Nietzsche, nihilism is a world-historical question. (Bull, 2011, p. 81)

In the radically immanent context of nihilism's spreading out, concepts like truth can only be at best partial. The act of positing truths from within a worldview's perspective on a world functions as an "essential constituency and essential activity of life" such that "truth as error is a *necessary value*." (Bull, 2011, p. 81) We project a world for ourselves as part of our living—not just a series of empty projections, but rather a "formation and transformation of appearances" in art, which "secures life perspectivally in its vitality, that is, in the possibilities of its enhancement."

(Bull, 2011, p. 82) Defining value thus as "the standpoint of conditions of preservation and enhancement for complex forms of relative life-duration within…becoming," he reconciles value, art, and the will to power by saying that "[w]ill to power and value positing are *the same*, insofar as the will to power looks toward the viewpoints of preservation and enhancement." (Bull, 2011, p. 83) As the assertion of the will to power, nihilism will take the form of either not willing at all or willing nothing, which is to not will that something be different. In other words, insofar as there is value, there is either an acceptance of what is in its nihility or a will for all things nothing, which is self-realized immanence in the "flux of becoming itself." Yet, with the eternal return, this is the same as promoting a stable and permanent environment, ending the timeliness of time through a negentropic dissipative structure. One has "stamped Becoming with the character of Being" in such a way that the environment remains constant while the self is relegated to that flux. We become a stable vortex that wills our own becoming and would wish it no different than it is, such that we assert that becoming *as* our being.

As usual, Heidegger has an unlikely take on this. According to him, Bull argues,

> Being remains unthought because the Being of beings is reduced to becoming, while the acceptance of the eternal return stamps Becoming with the character of Being, so disguising the denial of the thinking of Being involved in the former move…. Metaphysics may posit the suprasensory and nihilism its absence, but in approaching Being from the standpoint of beings, metaphysics makes Being into a being in its turn. To 'stamp Becoming with the character of Being' is what metaphysics has always done, thinking 'what is…in reference to Being'. For this reason 'Being itself necessarily remains unthought in metaphysics', which means, of course, that '*metaphysics as such is nihilism proper*'…. '*The essence of nihilism proper is Being itself in default of its unconcealment, which is as its own "It", and which determines its "is" in staying away.*'… (Bull, 2011, pp. 85-6)

Because nihilism fails to acknowledge this default and then overlooks this lack, nihilism is not a line of thought that can be considered authentic. Metaphysics is the expression of the inauthenticity of nihilism, where this inauthenticity is constituted by the fact that nihilism overlooks its own forgetting that its own essence lies in Being's default of its unconcealment. In other words, nihilism recognizes that Being can be construed as immanent, and therefore we find ourselves amidst a world where our own existence does not demonstrate intrinsically any kind of transcendence. The result is that, through thinking, we must discover it, only to find that nihilism is the natural perspective, given the lack of obvious transcendence. Thinking, though, makes available the analysis of the structure of existence in such a way that we see nihilism not to have been the whole story. Nihilism, *as a mode of thought*, has not taken up the opportunity to articulate structures of and for the ground of Being, which thought tends to do, at least as conceived by Heidegger as an activity of Dasein. Nihilism is, then, inauthentic, and this inauthenticity is both its fulfillment as authentic to its own nihilistic nature and inauthentic with regard to human nature. Metaphysics arises in the branch of nihilism's inauthenticity that is inauthentic. Metaphysics, however, is also always haunted by the shadow of nihilism in its authenticity: "Understood in these terms, any attempt to overcome nihilism would mean that man of himself advances against Being in its default, because nihilism, if it is authentic, is Being in its default." (Bull, 2011, p. 87) Metaphysics is a cynical distancing from its own untruth, and ontology is then the synthetic production of unity and sameness in an otherwise differential and differentializing world. Where the stasis produced by humans fails to stand, narrative steps in and stamps becoming with being in order to assert the dominance of the ousia of humanity, by more or less constrained definitions of the human. This is the very definition of Hegel's "beautiful soul" syndrome as described in the *Phenomenology of Spirit*:

> The "beautiful soul," lacking an *actual* existence, entangled in the contradiction between its pure self and the necessity of that self to externalize itself and change itself into an actual existence, and dwelling in the immediacy of this firmly held antithesis—an immediacy which alone is the middle term reconciling the antithesis, which has been intensified to its pure abstraction, and is pure being or empty nothingness—this "beautiful soul," then, being conscious of this contradiction in its unreconciled immediacy, is disordered to the point of madness, wastes itself in yearning and pines away in consumption.

Heidegger turns to language, as always in such questions, to point out the uniqueness of humanity, but not just in the Aristotelian distinction that would have man be more than animal as that animal which reasons. Bull weaves Heidegger's thoughts together:

> To think of man this way is to 'abandon man to the essential realm of *animalitas* even if we do not equate him with beasts but attribute a specific difference to him'. This is what happens in metaphysics which 'thinks of man on the basis of *animalitas* and does not think in the direction of his *humanitas*'. In contrast, Heidegger suggests that the essence of man 'lies in his ek-sistence' where the ek-sistence of man is 'standing in the clearing of Being'. Language creates this possibility, for 'language is the house of Being in which man ek-sists by dwelling, in that he belongs to the truth of Being, guarding it'…. Heidegger presents the human essence as the centre around which the question of Being turns, but it is also the limit beyond which he refuses to go, for by making the human essence into the line, Heidegger effectively posits it as that beyond which nihilism cannot pass without turning back on itself—given that nihilism, as the default of Being, is already constitutive of that essence…. The line on which the history of nihilism starts to turn back on itself is the line of species difference. And insofar as that line is the limit of nihilism, the very possibility of a limit hinges upon it. (Bull, 2011, pp. 88-91)

Since inanimate objects are without world, and animals, though they encounter beings but not as such, are worldless, humans, and particularly thinking, speaking humans are the only ones who are in such a way that nihilism can be encountered. Inanimate objects and animals live nihilisti-

cally in nihility, as it were, but, as with Nietzsche's art, humans are able to stand in the clearing of Being through their dwelling in language. They are able to encounter nihilism as a mode of thought in the clearing whereby the inauthenticity of nihilism comes into its own as the production of relations to one's own structured and knowable existence. Nihilism cannot pass beyond the human because, ironically, it does not have an ecology of Being to support it. (Bull, 2011, pp. 89-93)

It is through Heidegger's speciesism, which does not distinguish between kinds of animals or acknowledge anything like complex cognition, affect, or semiotic behavior on their part, that we discover something of his character. The spread of nihilism in the history of the West is for him a "darkening of the world" (*Weltverdüsterung*) as a kind of creeping abandonment of being. This darkness (*Dunkelheit*) is still possessed of possibility for all the reasons we have given above. The clearing remains. The question is whether it is filled with daylight or not. The clearing is, in fact, the possibility of such filling or absence. The clearing is the world, and we know that the darkening can spread at least to its limits. However, Heidegger has also hedged his bets in some places, arguing that the animal might not be entirely without world, but rather existing in a kind of world-poverty, which, along with statements such as "the rock is not even worldless, because it is indeed without darkening," suggest a spectrum of sorts whereby darkening as authentic nihilism may constitute the measure, which is to say may constitute, as a negative sign, the requisite orientation at the horizons of the possibility of worldhood. (Bull, 2011, pp. 93-5) What would nihilism look like in the case of world-poverty? Heidegger doesn't tell us, but certain images come to mind. One thinks of the insanity of a large cat pacing in a zoo cage, the depression of animals who have surrendered to laboratory torture to the point where they no longer resist, the anxiety of an abandoned animal or a dog left at home all day alone. We know what

this looks like and only the pretensions of a beautiful soul would pretend we don't. Yet we also know that animals are capable of existing in a world that is relatively lit up for them, as well. Yet for Heidegger, the choices are: escapist "art," the nihilistic depression of darkening, or boredom.

Boredom is foregrounded in Heidegger as the *Stimmung*, the emotional attunement or mood, through which we encounter the world in doing proper metaphysics. (Heidegger, 1995) Heidegger gives typically long explanations of why this is, some of which are about as convoluted upon analysis as Heidegger gets. But the crux of the question lies in this boundary issue with regard to nihilism. If the world is not darkened so that we have a fully lit up world, then speed, ambition, etc., will likely collude with the functioning of that world in its pattern of references, assignments, signs, and equipment to make it difficult to undertake the kinds of inquiry metaphysics would put forth. At the same time, if the world were totally dark so that our existence were "not even worldless," then the clearing would not arise in which to pose the questions due to the utter authenticity of nihility. What we need is an alchemy of the potential of full daylight in a clearing that has gathered enough darkening to allow distinctions to make themselves known. We must become more like an animal in the sense of allowing our world to be darkened even while we retain our full capacities. This boredom is a kind of retreat from Nietzschean vitality, a gesture in the direction of accepting the authentic nihilism of the world in the face of our art. In this counter-vitality we see something like a proto-postvitalism to accompany Heidegger's proto-posthumanism. In this state of boredom the will to power rises up in the face of the authenticity of nihilism and takes advantage of its inauthenticity so as to articulate Being over and against the dark poverty with which it has come in contact. Indeed, one sees such becoming-animal in much of the propaganda of the Third Reich. Any postvitalism that might have begun in

this boredom is, like his tendencies to posthumanism, lost in the radical anthropocentrism of his political ontotheology.

It is at this point that both Heidegger and Nietzsche align by returning to an Aristotelian sense of ousia in a slight of hand that is barely hidden. We have mentioned that nihilism requires an ecology of Being to support it, but there is a flipside to this line of thinking, "[f]or in their response to nihilism both Nietzsche and Heidegger rely on what is perhaps the central tenet of fascism in all its forms: the idea that particular human ecologies are the ultimate source of meaning." (Bull, 2011, p. 101) This has the secondary effect of allowing for the possibility of a "subhuman ecology," as Bull calls it, that might sustain nihilism rather than serving as its boundary. Such a negative ecology should be contained, lest nihilism continue to spread and darken. This negative ecology represents an excess of nothing, of lower types to be exploited—the poor in spirit and the world poor. In such circumstances, the ousia of Dasein becomes even more vital than it might otherwise be, as Dasein represents the sole factor that can elevate and determine the history of Being over and against utter nihility. Heidegger uses an example from Nietzsche:

> Let us consider the earth within the dark immensity of space in the universe. We can compare it to a tiny grain of sand…on the surface of this tiny grain of sand lives a stupefied swarm of supposedly clever animals, crawling all over each other, who for a brief moment have invented knowledge. (Bull, 2011, p. 102)

This, as Bull points out, would seem to leave little cause to attend to human beings over and against some other entity or eventuation. In another twist, though, Heidegger finds his anthropocentrism bizarrely inevitable and correct. If in such a context the question of beings isn't raised as there is no being that prompts the question as something standing out from the swarming (presumably unwashed) masses, then we find ourselves back in the structure of nihilism and the as-

sociated argument patterns. If nothing stands out so that the question of being isn't asked by just any being, then Dasein, which is capable of asking the question and will do so by definition as an extension of the will to power, will ask the question so that it reflexively discovers itself as exceptional. It discovers itself rather than "some elephant in some jungle in India" or a "chemical oxidation process on the planet Mars." (Bull, 2011, p. 102) This is for Heidegger, the position of Germany in 1935:

> Our people, as standing at the centre, suffers the most intense pressure—our people, the people richest in neighbours and hence the most endangered people…must transpose itself…into the originary realm of the powers of Being…if the great decision regarding Europe is not to go down the path of annihilation. (Bull, 2011, p. 103)

It seems little wonder, then, why Heidegger disliked that image of Earth from space so very much. Not only did it materialize the example from Nietzsche above in such a way as to demonstrate that not even Germany stood out amidst the swarm in the sand, but it showed, as he claimed, the entire earth ready-to-hand for some entity that existed in a clearing other-than-human that dwelled not in language, but in images, photography, telemetry, radio transmission, extraterrestrial distances, and a becoming that could not be stamped by being. This becoming would be purely immanent, both without location and in every location, and fully articulated in the endless, chattering communication of the cybernetic "dust of this planet." This is, as Eugene Thacker would say, the horror of philosophy, "the isolation of those moments in which philosophy reveals its own limitations and constraints, moments in which thinking enigmatically confronts the horizon of its own possibility." (Thacker, 2011, p. 2)

3. Interlude: Some Cartilage

Having shown how, in the context of a historicized worlding-cum-planetarity, humanism can become posthumanism, we recognized that it can be studied by means of a semiotic—not to say semiological—method, both due to its areas of interest and action and due to our need as similarly situated observers to produce certain types of knowledge. Posthumanism itself may be intrinsically or interstitially semiotic, such that subject, object, and mediation are co-attuned to semiosis as a grounding problematic. Semiotics can and should, then, serve as at least one of probably several inquiries core to the investigation of the area of concern.

But are we sure that posthumanism is intrinsically or interstitially semiotic, and that semiosis is attuned to the event structures so framed? This is a question foregrounded by a recognition that semiosis may not be primarily, or primordially, representational, which is a direct challenge to humanism insofar as the humanist era coincided with the emergence of modernism and its primarily representationalist ideologies. If posthumanism *is* so situated, the argument patterns should tend to surface a suggestion for methodical inquiry grounded in a form of reasoning to which we have access under normal conditions, while remaining representation-agnostic so that we can explore that problematic as a corollary inquiry: is posthumanism modern in this sense? We will see that the heirs to the iconoclastic victors of Sign War II may have insisted on representational forms because they were afraid of the dark. This is, incidentally, the influence of the Baroque, for whom structure mattered so that light control-by-abstraction. For them, one abstracts the object. We get this from them. This prompts the modern/colonial to reduce the world to a unity of objectivity, and subsequently to a panic about how to think the self as abstracted object to ensure access. Those who do so are right to critique philosophies of access, as their entire project is only applicable in this historically specific alignment.

Hermetics was the fold for a bend in thought, shut down by the conservatism of the iconoclastic Sign War II, that itself was the result of an insistence on unity under unity—the infinite abstraction of all that is abstractable. This is an affirmational Pyrrhonism that denies the locality of knowledge, especially as a source of production for its growth. We factory farm knowledge. Not memes, but categorical unities acting as cells, aligning as an ecosystem. If information affects the flow of a series of events, then it plays a role in this alignment. Not "selfish" genes, but local ones. The drag of the entrainment of an information flow. It is only in an encounter with otherness that we are motivated to abstract an architectonic from the locally situated form of access to its content, because it is only then that we need the abstraction for the purposes of communication. In that moment, one must not insist on properties that seem to be purely local, nor should one abstract the other on its behalf. This is either colonial or impatient, so one should instinctively move to abstract oneself and then discuss with another who is motivated to the same end.

The response to these concerns should clarify our procedure(s), motivating them and motivating us to them. As metaphilosophical work, it should also clarify ordering principles that determine a value-consistent stance, and we would hope it would demonstrate the exclusion of errors of consequence—not efficiency—previously discovered in other such work.

4. Dark Methods

According to Timothy Morton, there is another option besides the Nietzschean one with regard to the half-darkening world. This is the model proposed by Schopenhauer and his misinterpreted Buddhism. (Morton, 2009, p. 118) For Schopenhauer, as for Nietzsche, art, or "the aesthetic," is the means by which we can shape our world and being. Schopenhauer has a more limited scope for art, though, and a sensibility wherein art was not so much an act of brutality as of refinement. Indeed, as that which brings us into the human world above the animal state, art works to soothe and dissipate the will, so that "when, delivered from the fierce pressure of the will, we emerge…from the heavy atmosphere of the earth." Music, being most shapeless and representational, helps this. We are left with half-closed eyes in a world that has been darkened, but with a tamped down will. The result is a nihilistic immanence: "to those whom the will has turned and denied itself, this very real world of ours with all its suns and galaxies, is—nothing." This immanence does not provoke rebellion, however, but rather the refined sensibility of a concerned, but disengaged subject encountering not world, but rather "ambience," as Morton calls a certain fetishistic abstraction of the other, one which sees its locality as richness and depth, dark saturation, and makes use of its productivity by means of abstraction(s) that sanitize it as object.[22] (p. 118)

This form of subjectivity and being-in-the-world is an even more recognizable description of the "beautiful soul" syndrome. Indeed, in Schopenhauer's philosophy, this turns out to be precisely the goal we seek through art. Schopenhauer seeks an authentic nihilism, but, just like Nietzsche, his nihilism finds its place in the inauthentic branch, as he proposes an axiology

[22] Kantian subjectivization is just such a sanitizing abstraction. Having molded subjectivity into an abstraction, it is reproducible, carrying synthetic and replicated environments with it as it spreads. Posthumanism becomes rich and synthesizes with its nihility at the point where locality overwhelms this structure in the failure of transhumanism and the exhaustion-death of the machine of modernity in, at, and as its limits.

meant to bring about a change in the human condition by means of enhancing artifactual behavior by way of an aesthetic discipline. Yet, as we have discussed, this kind of proto-posthumanism isn't rare, and frequently manifests as part of the circumstances of the beautiful soul.

Morton traces the history of the idea along the lines of the Romantic, considering, as we did with Heidegger, the relationship such forms of subjectivity form with a distant nature, which is seen as the ground of the real, or of being, etc.

> The beautiful soul appears at a certain historical moment, which Hegel identifies with Romanticism. It is a persona of the "unhappy consciousness" that separates humanity and nature. In strict technological terms the beautiful soul appears after the Enlightenment and the French Revolutionary Terror. Hegel models it after a string of literary and aesthetic texts from Shaftesbury (the figure of the virtuoso) to Novalis and Schiller (the *schöne Seele*). But the beautiful soul is highly relevant to the ecological view. Ruskin complained that one of the horrors of modern life was its ugliness. Leopold's *Sand County Almanac* is devoted to an aesthetics of wilderness appreciation. Even certain positions in animal rights have an aesthetic component. The disgust associated with animal eating in vegetarianism is partly aesthetic…. The landscape on the other side of the chasm between subject and object turns out to be the beautiful soul in inverted form. We could call it "beautiful Nature."… The beautiful soul beats its heart against a solid wall. Nature remains a reified object, "over there." (pp. 117-9)

One might add Michel Serres' ridiculous *Biogea* to the list. (Serres, 2012) We have seen also the ways in which this complex chemistry of ontology and nihilism can lead to extremely unfortunate outcomes. Heidegger and Nietzsche aren't the only examples.

> At its extreme, beautiful soul syndrome can lead to fascism. The composer Richard Wagner dramatized his life as resistance to the inexorably commercial capitalist aspect of the music business. In part this consisted in anti-Semitism. The core of Wagner's "beautiful" resistance was a fantasy object of hate around which he generated all kinds of biological essentialist (racist) thoughts. But beautiful soul syndrome can also lead to hippiedom: if we think

> hard enough, the rain will stop, as a man said at the Woodstock festival in 1969 Likewise, there are fascist and New Age versions of environmentalism. (Morton, 2009, pp. 119-20)

Morton cites the following passage from Hegel:

> Contrasted with the simplicity of pure consciousness, with the absolute *other* or *implicit* manifoldness, [the beautiful soul's] reality is a plurality of circumstances which breaks up and spreads out endlessly in all directions, backwards into their conditions, sideways into their connections, forwards in their consequences. The conscientious mind is aware of this nature of the thing and of its relation to it, and knows that, in the case in which it acts, it does not possess that full acquaintance with *all* the attendant circumstances which is required, and that its pretence of conscientiously weighting all the circumstances is vain. However, this acquaintance with, and weighing of, all the circumstances are not altogether lacking; but they exist only as a *moment*, as something which is only for *others*; and this *incomplete* knowledge is held by the conscientious mind to be sufficient and complete, because it is its *own* knowledge. (p. 121)

Then he himself expands in order to provide a stomach-churning turn of phrase:

> Ethical space opens up and "spreads out endlessly in all directions"—ethical ambience. The beautiful soul maintains a critical position about everything except for its own position. In this state, "Refined into this purity, consciousness exists in its poorest form, and the poverty which constitutes its sole possession is itself a vanishing." The beautiful soul floats in an oceanic "submergence of consciousness within itself." In the syndrome of the beautiful soul *immersion* is reduced to *emulsion*. (p. 121)

He is at pains to overcome the beautiful soul syndrome, as a way of combating both a kind of false consciousness and, ultimately, the aesthetic consumerism it permits and promotes. Moreover, this is an argument for an acceptance of radical immanence that does not seek to rescue itself from the uncomfortable immediacy of socio-aesthetic power-over in and as ousia. This is a con-

sciousness that doesn't seek to distance itself through language or representation, that doesn't seek to bind its own feet (or skull) for the sake of imperial ambience. At the risk of a contextually perverse choice of words, this is something far more earthy than all that.

> The problem resides not so much in the beautiful soul's noble ideas, but in the form of its relationship to them. The beautiful soul distinguishes between theory and practice so sharply that reflection and hesitation are seen as inane cloud-castle building, and "pure" action becomes solidly material and absolutely, guilt-inducingly vital. Or it comes to the same conclusion in reverse: reflection becomes ethereal transcendence, action a rather grimy thing that other, less enlightened people do. The notion of *praxis*, in contrast, is that reflection can be a form of action; and that action—such as nonviolent protest—can be theoretical, reflexive. Ecocritique inverts beautiful soul syndrome. If ideology relies upon enjoyment as well as disguised truth claims, one could adopt a paradoxical strategy toward ideology's fantasy spaces, images, and objects. Instead of spitting them out, or refusing to inhabit them, one could identify, overidentify, or inhabit them differently, like the Latinos/as who have begun to transform cities such as Los Angeles….[23]
>
> The real problem is not the debate between postmodernism and ecocriticism, which sounds like two sides of the same warped record. The trouble is that as intoxicants go, clichéd post-structuralist relativism, even chic nihilism, is no match for something more religious: it is indeed religion's inverted form. Believing in nothing, while strictly untenable, is still a form of belief. Both sides miss seeing that it is not so much technology and language that are the issue as oppression and suffering. Both bypass earthly conditions: one by canceling it, the other by preserving the mere idea of it, in however compelling and squidgy a form. (pp. 122-3)

Morton takes us momentarily back into the existentialist vein by way of Kierkegaard, to whom he gives limited praise. Specifically, he finds Kierkegaard's critique of aestheticism to be favorable to the dissolution of the beautiful soul. In the end, however, he does think that Kierkegaard may go too far in his gestures towards an absolute critique of aesthetics.

[23] We can let the awkwardness of this comparison speak for itself.

> [W]e should not give up on the aesthetic dimension, which is, ultimately, the reverberation of sentience (pain). If, as Derrida observes, there are only different forms of narcissism rather than narcissism and something else, the true escape from narcissism would be a dive further into it, and an extension of it (Derrida's word) to include as many other beings as possible. By heightening the dilemma of a body and a material world haunted by mind(s), we care for the ecosystem, which in sum is interconnectedness. The ecological thought, the thinking of interconnectedness, has a dark side embodied not in a hippie aesthetic of life over death, or a sadistic-sentimental Bambification of sentient beings, but in a "goth" assertion of the contingent and necessarily queer idea that we want to stay with a dying world: *dark ecology*.
>
> Now is a time for grief to persist, to ring throughout the world. Modern culture has not yet known what to do with grief…. If we get rid of the grief too fast, we eject the very nature we are trying to save. (pp. 184-5)

This dark ecology does away with the beautiful soul by engaging directly in a posthumanistic gesture of deepened mediation towards the end of enhancing subject, object, and relation. Moreover, it does not seek a pure, affectless Enlightenment rationality, nor does it wallow in sickly Romantic ambience. This is an engaged, honest, and workable approach that sees affect as part and parcel of our ethical thought and the relation we have to the world. Here both metaphilosophy and metaethics work at the same level, and they do so in concert to produce a way of doing ecocritique as praxis that works every aspect of relationship simultaneously. This is, from that perspective, a cyberethics of immanent rational affect.

> The beautiful soul is dissolved when we recognize that we did it, we caused environmental destruction, not *you*, whoever you are. Although ecological texts frequently strive to disconfirm the end of the world, their rhetoric of ecological apocalypticism revels in the idea that nature will be permanently "gone." We imagine our *own* death via nature. This has nothing to do with nature. To truly love nature would be to love what is nonidentical with us. What could be less "us" than the Cartesian idea of sheer extension? Instead of trying endlessly to get rid of the subject-object dualism, dark ecology dances with the subject-object duality: Cartesianism

> suffused with desire and passion—to love the thingness, not in a Heideggerian sense, but actually the mute, objectified quality of the object, its radical nonidentity. Nature is *not* a mirror of our mind. Ecological criticism should admit to the unnaturalness both of the object and the subject: ecological desire is not chaste. The desire for a "natural" state (natural food, natural relationships, and so on) masks a compelling enjoyment…. Bruno Latour defers to Kant on this point: "We can define morality as *uncertainty* about the proper relation between means and ends, extending Kant's famous definition of the obligation 'not to treat human beings simply as means but also always as ends'—provided that we *extend it to nonhumans as well*, something that Kantianism, in a typically modernist move, wanted to avoid." (p. 186)

This is also an erotic relationship that does not separate out body, affect, mind, and aesthetics into distinct components or refined procedures, as would be the case with Kierkegaard's seducer in *Either/Or*. Instead, this is an erotics that embraces its irony, its abjection of difference, and its parousia without shared hypostasis. It is a repositioning of the human being in its entirety, not its speciesist form or its self-defined limits. It recognized the inhuman in itself and the permanent alienation that is the grounding of differential consciousness. It also recognizes the messy complications that arise as these various factors intermix in their immanent relations.

> It is strictly impossible for us to mourn this absolute, radical loss. It is worse than losing our mother. It resembles the heterosexist melancholy that Judith Butler brilliantly outlines in her essay on how the foreclosure of homosexual attachment makes it impossible to mourn for it…. We can't mourn for the environment because we are so deeply attached to it—we *are* it. Just as for Butler "the 'truest' gay male melancholic is the strictly straight man," so the truest ecological human is a melancholy dualist. For Freud, melancholy is a refusal to digest the object, a sticking in the throat, an introjection. Melancholia is an irreducible component of subjectivity, rather than one emotion among many, despite recent attempts to categorize it differently. It is precisely the point at which the self is separated from, and forever connected to, the mother. Dark ecology is based on negative desire rather than positive fulfillment. It is

> saturated with unrequited longing.[24] It maintains duality, if not dualism. Dark ecology is a politicized version of deconstructive hesitation or aporias. Can we be sure that that's an unfeeling machine "over there," a vermin, the evil thing? Dark ecology is a melancholic ethics. Unable fully to introject or digest the idea of the other, we are caught in its headlights, suspended in the possibility of acting without being able to act. (p. 186)

Heidegger begins §17 of *The Fundamental Concepts of Metaphysics* by analyzing the case of a grieving individual. The case is introduced in order to help us understand the concept of *Stimmung* or attunement that is so vital for his concept of metaphysics as praxis. For him, this grief becomes an all-consuming aspect of the lived experience of the grieving individual. "It is *not* at all '*inside*' in some interiority, only to appear in the flash of an eye; but for this reason it is *not at all outside either*…. Attunement is not some being that appears in the soul as an experience, but the way of our being there with one another." (Heidegger, 1995, p. 66) Going further, Heidegger wants us to understand that these fundamental attunements are not secondary to our cognitive processes. They are not a small addition to an otherwise functioning procedure. They come from and move through the core of us.

> Attunements are *not side-effects*, but are something which in advance determine our being with one another. It seems as though an attunement is in each case already there, so to speak, like an atmosphere in which we first immerse ourselves in each case and which then attunes us through and through. It does not merely seem so, it is so; and, faced with this fact, we must dismiss the psychology of feelings, experiences, and consciousness. It is a mat-

[24] This unrequited longing might be understood in Lacanian terms as the identification with a drive without a fantasy that allows for its symbolic fulfillment. This, though, begins to branch off in a direction worth mentioning but not pursuing here. Lee Edelman's *No Future: Queer Theory and the Death Drive* would likely be a good starting point. (Edelman, 2004) The suggestion here though is not subtle: what we will discuss later as the imaginary line in a differentially ordered semiosis is taken as the *sinthome* in such a way as to see semiotic structures as intensifications rather than sequentializations. In its denial of a lack in the other (which would arise only by comparison with the fantasy projected on, in, and through the immediate), it takes itself outside of the symbolic order of being or presence, denying representation. It does not rush to convert the other into self or simulation and is thus hesitant, perhaps stuttering insofar as it still has the urge to utter. It is skeptical, unharried, capable of a jouissance unmediated by the beautiful soul of accession to the symbolic ambience of an imaginary line made real.

> ter of *seeing* and *saying* what is happening here. It is clear that attunements are not something merely at hand. They themselves are precisely a fundamental manner and fundamental way of being, indeed of being-there [*Da-sein*], and this always directly includes being with one another. Attunements are ways of the being-there of Da-sein, and thus ways of being-away. An attunement is a way, not merely a form or a mode, but a way [*Weise*]—in the sense of a melody that does not merely hover over the so-called proper being at hand of man, but that sets the tone for such being, i.e., attunes and determines the manner and way [*Art und Wie*] of his being. (Heidegger, 1995, p. 67)

However, given this description, we are forced to wonder, intensity of affect notwithstanding, whether the melancholia Morton describes is, in fact, a *Stimmung* in the full sense Heidegger describes. Specifically, as a pervasive tone of a relationship to the planet's ecosphere it does saturate the experience and bring us to mourning. That said, isn't all of that contingent on the deeper, erotic layer, that connection we feel to nature that makes it of interest and concern in the first place? Isn't the melancholy, mourning, and grief all a consequence of the specific event of desolation brought on by the Anthropocene era? Would we have it if it weren't for that deeper connection that runs back through the history of life itself? Isn't it a side-effect?

What then would we call this other feeling? What is the more fundamental *Stimmung* at play in dark ecology? Surely it isn't boredom, despite the embrace of some conditions for the doing of metaphysics. This isn't a metaphysical praxis, but a critical one in the Kantian sense that includes full cognitive analysis and the corresponding subjectivization. This mood is erotic, connected, unconcerned in its spreading out with species boundaries, even though remaining aware of them, and sufficient to allow an immanence that still speaks in and from a clearing, however poorly lit. The famous biologist Edward O. Wilson has suggested a concept that might describe just such an existential mood: biophilia. Wilson describes it in the following way:

> Biophilia, if it exists, and I believe it exists, is the innately emotional affiliation of human beings to other living organisms. Innate means hereditary and hence part of ultimate human nature. Biophilia, like other patterns of complex behavior, is likely to be mediated by rules of prepared and counterprepared learning—the tendency to learn or to resist learning certain responses as opposed to others. From the scant evidence concerning its nature, biophilia is not a single instinct but a complex of learning rules that can be teased apart and analyzed individually. The feelings molded by the learning rules fall along several emotional spectra: from attraction to aversion, from awe to indifference, from peacefulness to fear-driven anxiety.
>
> The biophilia hypothesis goes on to hold that the multiple strands of emotional response are woven into symbols composing a large part of culture. It suggests that when human beings remove themselves from the natural environment, the biophilic learning rules are not replaced by modern versions equally well adapted to artifacts. Instead, they persist from generation to generation, atrophied and fitfully manifested in the artificial new environments into which technology has catapulted humanity…. In short, the brain evolved in a biocentric world, not a machine-regulated world. (Wilson E. O., 1993, pp. 31-2)

We have to question biophilia as *Stimmung*, though, as well. It would seem that he is arguing for something deeper even than what Heidegger is arguing for, something that could inform or shape various moods. We need to be careful of not recreating another set of structures like those we have critiqued, where biophilia would act as a ground for other moods or emotions or one of several forces operating in an unknowable underbelly of such things. It isn't the case that there are discreet feelings or pure emotions. Moreover, even to take Heidegger's example of grief, a grieving person can make a joke or see beauty. Biophilia is an affinity, a positive affect, that acts just like one of Heidegger's moods, informing other cognitive elements and shaping the ways in which we encounter others—in this case, with those others having among their number more than just human beings. Wilson, as a sociobiologist, would argue that almost any emotion can be described in evolutionary terms, and that it should be, so we shouldn't be fooled by his rhetorical

style into thinking of this as something particularly different from any other cognitive process, except, perhaps, in the scale at which it shapes our overall way of being in the world. At most, its difference would only make it a kind of meta-, mega-, or *Ur-Stimmung*, but one nonetheless that can be considered on those terms. Note also that this isn't limited to things that fall under our idea of "the living" as heirs to the era of vitalist philosophies. It includes signs and systems of signs which need not be representational. It suggests that this mood can color our relationship to a wide variety of things in the world, being triggered even by various forms of technology. We know this as the Tamagotchi effect, which has been studied in the literature. Biophilia as *Stimmung* can be, for a dark ecology, a decidedly postvitalist theoretical/cognitive tool.

Operating out of biophilia with a dark ecological perspective allows us to consider alien points of view in such a way that ambience is no longer even an option. Reading Percy Shelley, who was, with Mary, someone we might include in an archaeology of the posthuman as Romantic anti-Romantics, Morton comments on the poem "Alastor," in which Shelley "visualizes an antelope looking at a poet in a forest clearing." Seeing in this way disrupts the cognitive patterns of the beautiful soul.

> We can have ecological sympathy, but it is *eccentric* rather than *concentric*, to borrow the language Lacan uses to describe the displaced Cartesian self…. Rather than taking pity on the animal world with a soft-focus version of the normal sadistic distance, we glimpse humans through nonhuman eyes.
>
> We can't quite call this *pantheism*, like the young Wordsworth and Coleridge. We don't know whether the physical world, or even animals, are subjects…yet. And that is precisely the slit, the gap, the space for which ambience does not account. Perhaps the view should be named ~~pantheism~~. (Morton, Ecology Without Nature: Rethinking Environmental Aesthetics, 2009, pp. 202-3)

Morton's evaluation is fair. What he is describing isn't quite pantheism, though it is on its way, especially if we allow biophilia to be triggered by more than just life or, as here, life-as-other-face to propose a mutation of Levinas. But is it enough to be merely eccentric? Doesn't this still imply the ghost of anthropocentrism, its trace as shadow? The shape of that "letting be" of the other as other in potential recognition is still decisional, grounded in our choice to let be. Still caught up in the subject/object, ontological/ontic split, it is not yet middle-voiced. It is not that we human in proximity to that which deers. Surely the kind of self-allowed ousia is part of that humaning, but need it be fundamental to the decision of letting be? Caught in the headlights of the deer's stare, are we not, in letting it be other without letting it evince its sameness by way of our affinities in and as biophilia, allowing the inhuman rather than the unhuman? Shouldn't biophilia be allowed a more erotic, cybernetic continuity across the encounter? Shouldn't that gap be full of air? (Irigaray, 1999) Shouldn't it be a receptive anal/vaginal permission wherein a *jouissance* can blossom due to the biophilic drive "touching on an area of excess," as Lacan would say, such that it is too much? Shouldn't it be possible for our eccentricity, our ek-stasis, to become ecstasy? If we follow dark ecology in its Cartesian bent, we arrive at the phallogocentric cogito at the intersection of being and thought. (Fink B. , 2004, p. 103) This erectile ego, stimulated to inflation, is already grounded in the duality of thought and being, such that both are capable of presenting themselves as other-than-self: there can be inhuman being and inhuman thought, but the blood of each rushes to its ends in Man.

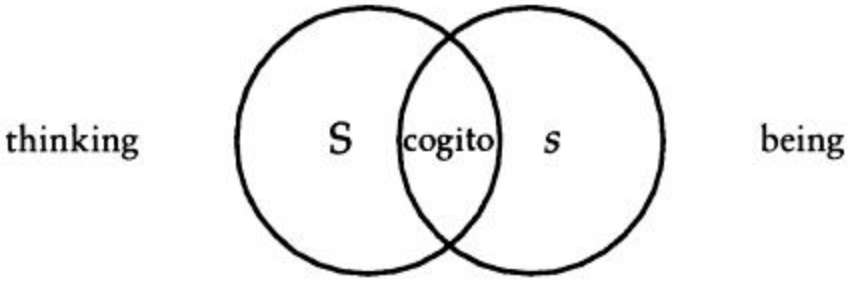

Figure 1 The Cartesian Cogito

We know, however, that the clearing creates specific hierarchies among categories, and thus cannot stand. Bruce Fink cites Lacan in critiquing this:

> But being and thinking, like signifier and signified, are not situated in the same plane, "and man was deluding himself in believing he was situated in their common axis, which is nowhere." Descartes's cogito would seem, according to Lacan, to be situated in the intersection between the realms of the signifier and the signified, whereas for Lacan that intersection is empty. (Fink B. , 2004, p. 103)

The shift is from nothingness to emptiness, which is the vibrant darkness, the luminous void of a negative theology. (Thacker, 2010) As a result, we see a different diagram:

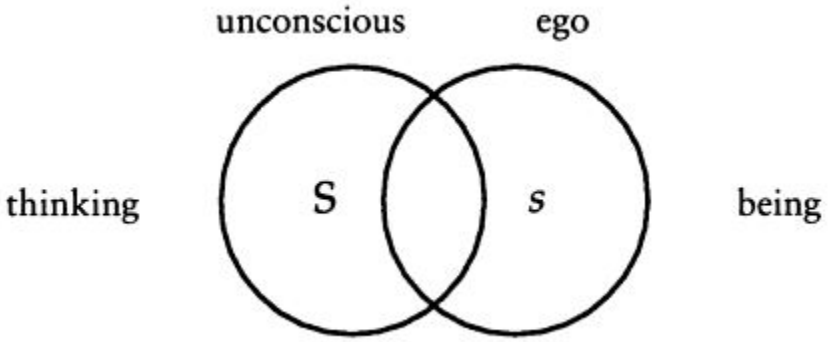

Figure 2 The Lacanian Ego

This allows for the Husserlian recognition that the subject/object distinction may not be fundamental to being. Moreover, in kind with biophilia as drive that gives rise to behaviors that are otherwise unknown as manifestations of those drives, Lacan's reorientation is one that is essentially therapeutic in nature. Lacan denies that "drives are a subset or are subsumed within the system of ego defenses" (Fink B. , 2004, p. 103) If the ego manifests as the metonymy for unconscious desire, and the symptoms of its neurosis are metaphors for the subject of the unconscious, then biophilia is asking us not to make analogies, but rather to experience desire in and as the *jouissance* of a becoming-other as an emptying out, an askesis that is not negation but liberation.

> The subject has to come into being where it (that thing) [the symptom-metaphor] was. How do we affect the subject at the level of the symptom, in the register of metaphor? Lacan suggests that it is by working not so much in the realm of meaning *(s)* as in that of nonmeaning—namely, by working with the nonsensical, nonmeaningful facet of the signifier (S), by working with its "'literating' structure," or literality, with its signifier*ness (significance)*. (Fink B. , 2004, p. 104)

In abandoning representational assumptions in favor of a direct encounter with that drive that is biophilic, we do not give up on signification, but rather the syntax that creates hierarchies and layers of meaning within a structure that is not native to the unconscious immanence of desire. Biophilia does not defend the ego but gives us in the experience of immanence a way out of the impasse of the Cartesian cogito, which cannot generate relevant knowledge due to its repressing the emptiness of the gap as nihility, a metaphor for nothingness as the repressed vitality of an anal/vaginal emptiness. The other, the object, is not inhuman, but rather unhuman. The inhuman metaphorics of the cogito are not epistemogenic, and Lacan equates the attempt to investigate the unconscious in such instances as a form of rape (*ravissement*). (Fink B. , 2004, p. 107) One

thinks of Francis Bacon's metaphors for scientific activity that use a cogito-like structure to rape the world of its secrets by forcing it to give up its interiority to anthropocentric concerns, justified in this case by epistemogenesis. Animal experimentation also seems to suggest itself. This is Morton's hesitation, his other as not subject "…yet."

Morton, however, makes one final move that, in its postvitalism, allows us to move past the denegation of ~~pantheism~~ into a more robust immanence consistent with biophilia as *Stimmung* operating at the level of *significance* rather than metonymy for self or life or concentric humanity. He argues for an ecology without nature, in which desire, love, nature, the unhuman, and the human are all bound up in a continuity not of meaning, but of semiotic series that mesh and flow into each other according to the degree of realization of biophilia as drive in a nonrepresentational milieu.

> Paradoxically, the best way to have ecological awareness is to love the world as a person; while the best way to love a person is to love what is most intimate to them, the "thing" embedded in their makeup. We are caught in a Möbius strip….
>
> I long to characterize what I am aiming for as "really deep ecology." … Ironically, to contemplate deep green ideas deeply is to let go fo the idea of Nature, the one thing that maintains an aesthetic distance between us and them, us and it, us and "over there." How deep does deep ecology want to go? In a truly deep green world, the idea of Nature will have disappeared in a puff of smoke, as nonhuman beings swim into view. Then comes the next step. We must deal with the idea of distance itself. If we try to get rid of distance too fast, in our rush to join the nonhuman, we will end up caught in our prejudice, our concept of distance, our concept of "them." Hanging out in the distance may be the surest way of relating to the nonhuman.
>
> Instead of positing a nondualistic pot of gold at the end of a rainbow, we could hang out in what feels like dualism. This hanging out would be a more nondual approach. Instead of trying to pull the world out of the mud, we could jump down into the mud. To emerge from the poisoned chrysalis of the beautiful soul, we admit that we have a choice. We choose and accept our own death, and the fact of mortality among species and ecosystems. This is the

> ultimate rationality: holding our mind open for the absolutely unknown that is to come. Evolution will not be televised. One cannot have a video of one's own extinction. A warning to deep ecology: if we aestheticize this acceptance, we arrive at fascism, the cult of death. Instead, ecological criticism must politicize the aesthetic. (Morton, Ecology Without Nature: Rethinking Environmental Aesthetics, 2009, pp. 201, 204-5)

This politicization takes the form of a shift from ousia to parousia, from things to series, from abjection to orgasm. It is an embrace of the unhuman that recognizes that all erotics is, after a fashion, a kind of cybernetics, (Pettman, 2006) both dissolutional intimacy and alienated teledildonics. We replace the symptom Derrida diagnoses as carnophallogocentrism with a polymorphous perversity that refuses to move from one developmental stage to the next, stuttering and stopping at each to produce an endless series of arms lashing out from a yidam.[25] The result is a "cosmic zoöphilia," an orgy where our speech act is to get fucked in the mouth by an epistemogenic natureculture that is a "speaking power to truth." (Kahn, 2011)

This leaves us, then, with a need to configure the relationship between immanence and life, something like a pantheism that Morton intuits but hesitates in the face of. Yet this hesitation prevents it from being fully posthuman in the sense that it does not fully align the transcendental with the immanent such that the immanent becomes a source of series focused on the horizon of thought itself as a shifting trace of entelechy for the becoming-human of any biophilic object. We need to arrive at a place where all interaction is meaningful in some way, regardless of whether the relation is configured as a sign or by way of some human or human-like being.

[25] Or *Iṣṭadevatā* (Sanskrit: इष्टदेवता). "The Sanskrit word **iṣṭadevatā** or **iṣṭadevaḥ** is a compound of *iṣṭa* (desired, liked, reverenced) + *devatā* (a deity or divine being). It is defined by V. S. Apte as 'a favorite god, one's tutelary deity.' Though this term is used in many popular books on Buddhist Tantra, the term *iṣṭadevatā* has not been attested in any Buddhist tantric text in Sanskrit. The word corresponding to this concept is *adhideva*, though of rare occurrence. The unrelated Tibetan version of the term, possibly of entirely native origin, is *yi-dam* is said to be a contraction of Tibetan *yid-kyi-dam-tshig* , meaning 'samaya of mind'—in other words, the state of being indestructibly bonded with the inherently pure and liberated nature of mind." (Iṣṭadevatā (Buddhism), 2014) See also (Harding, 2005).

How could the latter be the case when the limit of humanity is defined by way of dark ecology as the destruction of the ecosphere as we know it. Eugene Thacker calls this pantheism *dark pantheism*.

> [T]he limit of the thought of nature in the pantheist sense is the thought of extinction, the disaster, the limit-thought of life "after life." That is, pantheism in this sense thinks both life and negation in the same thought; it is poised against the presumptions of life-as-generosity, as gift, as givenness. If pantheism does involve the thought of pure immanence, then this thought will be equally misanthropic as well as simply non-anthropomorphic. For this reason, the pantheism… might better be called *dark pantheism*. Dark pantheism puts forth *the challenge of thinking, under the sign of the negative, the conjunction of pure immanence and inventive life*—with the caveat that this thought itself is thought as fundamentally exterior to all anthropomorphism. We would be tempted to call this "misanthropology"—and in this sense, pantheism as the conjunction of immanence and life is also the horizon of thought itself. (Thacker, 2010, pp. 229-30)

Thacker draws a parallel to the thought of Nietzsche that nihilism has always existed within the Western tradition, tracing a genealogy that starts in the fifth century with Pseudo-Dionysius (though for some reason not Proclus), through a series of familiar names: Eriugena, Duns Scotus, Nicholas of Cusa, Spinoza, Schelling, Novalis, early Hegel, Schopenhauer, and Nietzsche. (p. 230) Skipping the obviously necessary inclusion of Hans Jonas in this mix, Thacker articulates dark pantheism in specifically Deleuzian terms. Thacker was cited before with regard to the politico-theological dangers that pantheistic thought can bring, but there is also a philosophical danger, the recognition of which Thacker credits to Deleuze.

> …[I]n doing away with the stratifications of the supernatural and natural, pantheism also does away with the stratifications between human, animal, and divine. In modern parlance, pantheism raises the question of life as a fundamentally *unhuman* phenomenon. Pantheism in Deleuze's sense points to a horizon in which both

> "life" and "thought" can be understood in non-anthropomorphic ways. It is not that each individual person is divine; rather, the divine is understood to be indissociable from nature, and because of this, radically unhuman, anonymous, and neutral. (p. 228)

This has the effect of radically undoing some epistemological and axiological distinctions that have been made for a very long time. Specifically, theology becomes more like a symptom, a metaphor or metonymy for the foreclosure and abjection of a process of differentializing ousia-assertion, which is to say of art, of theopoetics related to political theology. This semiotic theology understands the series produced and reproduced in differential immanence to be the limitation of an emptiness into a nothing, a subject into a sign, a relation into a representational configuration, such that theology is merely a constrained metaphilosophy—in this case of the preternatural, the paralogical, and of the interlacing of series in the parousia of 'pataphysical absurdism with its links to a thermodynamic sense of surprisal as resistance.

> If the boundary between theology and philosophy is a moving target, then in pantheism so is the boundary between first philosophy and the philosophy of nature. In heretical pantheism, the divine is not human in the sense that the human is both derived from and a derivative form of the divine; rather, the human is unhumanized precisely because it is divine, in the sense that the divine is inseparable from nature, nature conceived of as a pure immanence. Heretical pantheism not only threatens to do away with the separation between the human and the divine, but it also threatens to do away with the separation between the supernatural and the natural. Hence Deleuze's striking formulation of the divine nature as "a single Animal." The "heretical" pantheism promoted by Deleuze asks us to think of a concept of pure immanence and a concept of dynamic, inventive life in one and the same thought. Something that is everywhere and at all times, but always differently. But this also implies a "something" that, since it is everywhere at all times differently, is also not-something, a "nothing." And yet this nothing-that-is-everywhere is constantly differentiating, a nothing that is also a superlative excess and affirmation. (p. 229)

For the philosopher Justus Buchler, this desired end can be achieved through a threefold solution. The first element is eliminating what he calls "ontological priority," which is the tradition of restricted ousia we have been discussing. The second element is espousing what he calls "ontological parity," which is the idea that all entities are in the same way, which is to say that there are no types of the being of beings. Typologies only bear relevance at the ontic level of beings. The final element is his concept of nature as the availability of orders. The result of this is a generative framework that allows for creative ordering without the need to reference "being" or "reality," even while providing for us a description of nature that is both an ecology without nature, compatible with dark ecology, and postvital, compatible with dark pantheism. This model is particularly helpful in that Buchler's architectonic is related to Peircean category theory, which means that correlations can be found that will allow us to understand the production of reference, relevance, representation, and semiotic series such that we can engage with these in ways that allow us to mix and remix, splice and transclude, cross and recross, without abandoning the particular outlook that has been generated within their own flourishing.

> Let us contrast a principle of ontological priority—which has flourished from Parmenides to Whitehead and Heidegger, and which continues to flourish in unsuspected ways—with a principle of parity. In terms of the latter, whatever is discriminated in any way (whether it is "encountered" or produced or otherwise related to) is a natural complex, and no complex is more "real," more "natural," more "genuine," or more "ultimate" than any other. There is no ground, except perhaps a short-range rhetorical one, for a distinction between the real and the "really real," between being and "true being." (Buchler, 1990, pp. 30-1)

Further on, he explains more about parity:

> The principle of ontological parity could be stated in positive terms, and without dependence upon the conceptual associates of "reality," to the effect that all discriminanda are obtenances, regardless of what else they are in comparison with one another. For certain purposes of emphasis and controversy, the principle commends itself in this form. To say that every complex obtains underscores the idea that anything identified, whether as framed or as found, has an inviolability merely as such. (p. 53)

Buchler's philosophy is also an ordinal philosophy, which is to say that the ordering principle is not merely one that provides distinctions, but one that provides structure and location.

> He is seeking terms general enough to talk about the being of anything *at all*: e.g., a haircut, a bowling ball, a grudge, a waterfall, a well-executed swan dive, the wiping out of a species by a predator, the Planck length, Benjamin Franklin's invention of bifocals, the love of Desdemona for Othello, the building of the Great Wall of China. Note that such a list includes ordinary "objects," as well as possibilities, relations, fictional entities, changes, processes, and events. Generally speaking, the key feature of Buchler's metaphysics is this: When describing the world we cannot do so in terms of metaphysical "simples." Whatever is, is "complex." This means, first, whatever is, *is in any way it is*, (so there are no modal restrictions); and second, whatever is *locates*, but is also located by, whatever else is. (Niemoczynski, 2013)

Leon Niemoczynski provides an example:

> A city is a city because of its situation in the order of cities; this situation means that it is related to other cities, having common qualities, e.g. commerce, governance, law, all of a certain type. These aspects, n.b., are also complexes. Any city *qua* city thus prevails in the order of cities, not over other cities laterally, but over its own traits; it is in turn also located in orders of human habitations, political institutions, natural ecosystems, and so on. But a city is also an order itself, and as such, locates other complexes: its various populations, its legal codes, its traffic laws, and on and on. Any complex thus is irreducibly complex, has relations and traits in common with other complexes, and is also irreducibly *itself*, i.e., is capable of being singled out as distinct. Because *all* complexes are irreducibly complex, *no* complex is more or less complex than

> any other; relatedness cannot be limited in principle.
> (Niemoczynski, 2013)

Buchler[26] has argued for an understanding of nature as the availability of orders. If nature is such availability, then the "natural" would be that which constitutes or is situated within or by the orders available. Buchler describes any natural that can be discriminated in this sense as a natural complex: "Whatever is, in whatever way, is a natural complex." (Buchler, 1990, p. 1) "Every complex is an order and belongs to an order of complexes. Thus orders are inclusive and belong to more inclusive orders." (p. 93) A complex, being made up of other complexes ("…any complex is a complex of complexes." (p. 2)), provides order and context for its constituent complexes. This is in keeping with nature and is also an expression of it:

> The idea of nature, in so far as it means not merely the common factor of all 'natures' but the source of all that is, implies the perennial conceivability of complexes more inclusive than any that is dealt with. Nature in the barest sense is the presence and availability of complexes. It is the provision and determination of traits—providingness … but not providence, not providentness. (p. 3)

A complex is itself, and is, as such, the framing context for that which constitutes it. In fact, it is itself only insofar as it is and provides such a framework.

> An order is a sphere of (or for) relatedness. It is what 'provides' extent, conditions, and kinds of relatedness. Despite the fact that in its multiplicity of traits an order is not 'internally' limited, as an order among orders it is precisely what limits. (p. 95)

The variety of situated frameworks provides the insight to generalizing continuity that allows for a complex to constitute another, according to whatever means of relation, in and as each particu-

[26] The following passages explicating Buchler's thought, followed by the use of museums as an example of how his thought can be used in conjunction with Peirce as an analytic tool is a modified inclusion of (Hewitt, 2011).

lar framework, while the total coherence of these frameworks in their operational providingness provides for the multiplicity of difference.

Buchler's nature might be called "pluralistic" in William James' sense. (James, 1996) "The integrity of a complex belongs to it not in spite of but because of its multiplicity and relatedness." (Buchler, 1990, p. 24) This may indicate that the source of value for a complex may not reside in its uniqueness, originality, or irreplaceability, but rather in the nature or quality of its presence, its radiant semiosis. Moreover, objects of inquiry are themselves complexes, meaning that our line of inquiry or analysis is naturally non-terminating in the least, if not ampliative:

> The idea of ontological simples, of irreducible components of nature, implies belief in absolute termini of analysis. Its appeal is not hard to detect. It seems to yield the assurance of a 'foundation' for knowledge, and a stable or reliable foundation. It seems to provide 'real' or 'ultimate' elements. It seems to certify that familiar things, if they do not dissolve, do not dissolve into nothing and are not lost. (p. 17)

The idea of a simple is a complex that reifies identity in order to frame a certain integrity of a complex such that overall contour need not be at issue. This allows the integrity to be taken as sign within the context of a discursive system, which is to say as a sign possessed of a rational 'meaning.' Because the contour of a complex is ultimately ordinally open, the framing of an integrity makes cognizable what would otherwise be a surplus of meaning—an exuberant radiance in Bataille's terms that is "contained" in the context of power through the promulgation of a dialectic.

Niemoczynski explains the way in which complexes are themselves contained within their own proper domain, as it were:

> As distinguishable, complexes have *boundaries*, or limits. Limits themselves may be indeterminate, but the *existence* of such limits is entailed by the determinedness of a complex. For Buchler a limit is indeterminate insofar as it entails *possibilities*, and determinate insofar as it entails *actualities*...
>
> Since any possibility is itself determinate (prevailing, as it must, in a *specific* ordinal location), a limit's indeterminateness is thus "determinately indeterminate." A complex has a range of possibilities; but this same range will also exclude certain possibilities. However, as regards its possibilities, the limit of a complex is indeterminate. It becomes determinate upon the event of actualization, which in turn is a condition of further possibilities. This means that the limit, and thus the determinateness, of any complex, is not itself finally determinable. (Niemoczynski, 2013)

Insofar as a complex is itself, it is also just itself as that particular complex.

> Whatever the boundaries or limits of complexes may happen to be, whatever may be the conditions under which these limits obtain, wherever these limits may lie, any complex has just that status, just the relations, just the constitution that it has. This is its integrity, that in which its being 'a' complex and 'that' complex consists. (pp. 21-2)

The integrity of a complex is itself complicated, however, and is related to the contour and identity of a complex.

> The integrity of a complex is always conditional, in the sense that it is minimally determined by the location of the complex in this or that order of complexes. A complex has an integrity for each of its ordinal locations. The continuity and totality of its locations, the interrelation of its integrities, is the contour of the complex. The contour is itself an integrity, the gross integrity of that which is plurally located, whether successively or simultaneously. A contour is the integrity of a complex not in so far as the complex transcends all orders but in so far as it belongs to many orders. The identity of a complex is the continuous relation that obtains between the contour of a complex and any of its integrities. (p. 22)

This identity, along with the scope of the complex as order, is determined by the form of its relation to other complexes, which form is itself a complex with its own internal variability of traits. That variability is precisely what allows for the multiplicity of orders: the fact that traits vary allows for there to be difference, and, more importantly, allows that difference to matter without the need to re-present it with a different level of ontological priority. To the degree it is distinguished, difference is simply the difference that it is in being different. There is no need for a principle of difference. The elimination of priority, the instantiation of parity, and the understanding of the architectonic of complexes is sufficient. All things are in and as relation, and those relations vary.

> There is…a Buchlerian distinction between two sorts of relation between a complex and its traits, the "weakly" relevant, which pertain to a complex's range or scope, and the "strongly" relevant, which determine the complex's character or quiddity, its "integrity". Because every complex is specifically located, no trait or complex affects *all* other traits or complexes, even though every trait and every complex relates, strongly or weakly, to *some* other trait or complex. This again shows Buchler's strong pluralism. For, were all complexes inter-related, there would either be one single complex, or at least complexes would not be separately distinguishable. (Niemoczynski, 2013)

It is in light of the above that Buchler is able to lay out the structure of his "metaphysics" as an architectonic structure made up of a few interweaving traits that show how his assertions play out:

- If A is one complex and B is another, they may be related or unrelated.
- If A is related to B, B is related to A.
- If A is related to B, each is a determinant of the scope of the other.
- If A is related to B, each is relevant to the other.
- If A and B are relevant to each other, A is related to B.
- If A is related to B, each may be either strongly or weakly relevant to the other.

> • If A is a determinant of the integrity of B, it is thereby a determinant of the scope of B.
> • If A is a determinant of the scope of B, it may or may not thereby be a determinant of the integrity of B.
> • If A is related to B in order O, it may not be related to B in order P.
> • If A is strongly (or weakly) relevant to B in order O, it may be weakly (or strongly) relevant to B in order P. (Buchler, 1990, pp. 108-9)

What is remarkable about this is that, as an architectonic structure, it can and does serve the role both of ordinal system, category structure, material ontology, etc. This is a highly robust model when combined with the principles he holds as axiomatic. It isn't only immanent, and it isn't only a system of understanding. It also brings order to that understanding, while seeing that understanding and any representation of it as related to and immanent in the world itself. In other words, it is meaningful in such a way that meaning arises spontaneously from its own structures, as part of them.

One could make similar arguments about the Peircean categories. Peirce, by all accounts, seems to have derived his categorical scheme as an extension of his triadic model of the sign. His model of the sign is almost precisely that which Heidegger sought to counter, in an intuition that we will affirm later. In its most humble form, Peirce claimed that a sign is something that stands for something else with regard to some other thing. From there, Peirce derives a remarkably complex sign-theory that proliferates a large collection of neologisms in order to provide a typology of all possible signs from this original generative form. The triad itself is essentially a derivation of the classical sign theories, especially those of Aristotle. The result is that Peirce carries into his work a hidden layer of thinking bound up with ousia that unnecessarily complicates his typology, while it is instead possible to produce a small generative procedure like Buchler's, along with an understanding of the principles that constrain activity undertaken through that procedure. This is consistent with Peirce's intuition of parousia in his theory of "infinite

semiosis." Under this alternative model, Heidegger's desire to discuss the sign as a gestural phenomenon rather than an ontological one is appreciated.

Peirce's model argues that a sign is made up of a sign, an object, and an "interpretant." The sign is that thing which will bear the quality of being a representation. The object is that thing which is represented. The interpretant is that with regard to which this relationship can be understood to exist. We see here the relationship to the patterns of tripartite classical logic. The sign is essentially an open premise, whose range of relevance is constrained by an object, resulting in a determination. The theory of infinite semiosis comes into play as the idea that the interpretant is always another sign or system of signs, furthering the logical operations of the sign as process. Semiosis always and only exists in and as its own process,[27] never in functional excess of itself, though it might produce series that exceed the constraints of objects. It is this fact of functional conservation that leads Peirce to believe that semiosis, as a process, has its ground in ontology,[28] and ultimately representationalist ontology, rather than some more general order that might be constrained by being, which is to say that he tacitly places "semeiotic" within the scope

[27] This is similar to Luhmann, who insists that only communication communicates.

[28] Here is part of Peirce's distaste for Hegel, whose dialectic perspective required Being's generality, qua excess, to be constrained by a positive determination: "…Hegel has shown that the abstract acknowledgement or thought of Being (*Seyn*) can only be sustained if it can be expanded into an acknowledgement or thought of a *Daseyn* or Determinate Being: a Being arrested in mere Being, like the Being of the Eleatics, is self-destroying and absurd. *Daseyn*, says Hegel, is 'determinate being: its determinateness is a determination which has being, i.e. Quality. Through its Quality, something is opposed to others, is mutable and finite, and not merely opposed to an other, but negatively determined in relation to it.' Etymologically, Hegel points out, *Daseyn* means being at some definite place, but this reference to place is here inappropriate. The sort of being involved in *Daseyn* is that of something picked out from an environing background, which is whatever the thing picked out is not, and which performs, in co-operative, complementary fashion, the antithetical role previously performed by mere Nothing, or the exclusion of Being in general." (Findlay, 2014, p. 159) Compare this with Peirce's acceptance of Hegel's term of phenomenology: "This is the science which Hegel made his starting-point, under the name of the *Phänomenologie des Geistes* – although he considered it in a fatally narrow spirit, since he restricted himself to what actually forces itself on the mind and so colored his whole philosophy with the ignoration of the distinction of essence and existence and so gave it the nominalistic and I might say in a certain sense the *pragmatoidal* character in which the worst of the Hegelian errors have their origin. I will so far follow Hegel as to call this science *Phenomenology* although I will not restrict it to the observation and analysis of *experience* but extend it to describing all the features that are common to whatever is *experienced* or might conceivably be experienced or become an object of study in any way direct or indirect." (CP 5.37)

of the principle of sufficient reason. However, for Peirce, semiosis may include a wide variety of scenarios, as the cosmos itself is pervaded by signs, due to its existence as a general cognitive process (where matter itself is considered "effete mind"). The universe itself exists as a kind of learning machine in an evolutionary teleology resulting in its own self-unity with its own consciousness in love. This is, of course, Peirce's own pantheism, which says that the universe is pervaded by, if not made up entirely of signs.

This thought leads him to expand his theory of signs in such a way as to attempt to account for all phenomena. Self-consciously dialoging with Hegel and Kant,[29] Peirce develops a theory of categories. The categories are threefold, labeled by the intentionally uninteresting terms Firstness, Secondness, and Thirdness. Peirce described Firstness to Lady Welby in the following way:

> The typical ideas of firstness are qualities of feeling, or mere appearances. The scarlet of your royal liveries, the quality itself, independently of its being perceived or remembered, is an example, by which I do not mean that you are to imagine that you *do not* perceive or remember it, but that you are to drop out of account that which may be attached to it in perceiving or in remembering, but which does not belong to the quality. For example, when you remember it, your idea is said to be*dim* and when it is before your eyes, it is vivid. But dimness or vividness do not belong to your idea of the quality. They *might* no doubt, if considered simply as a feeling; but when you think of vividness you do not consider it from that point of view. You think of it as a degree of disturbance of your consciousness. The quality of red is not thought of as belonging to you, or as attached to liveries. It is simply a peculiar positive possibility regardless of anything else. If you ask a mineralogist what hardness is, he will say that it is what one predicates of a body that one cannot scratch with a knife. But a simple person will think of hardness as a simple positive possibility

[29] From a letter to Lady Welby: "The cenopythagorean categories are doubtless another attempt to characterize what Hegel sought to characterize as his three stages of thought. They also correspond to the three categories of each of the four triads of Kant's table. But the fact that these different attempts were independent of one another (the resemblance of these Categories to Hegel's stages was not remarked for many years after the list had been under study, owing to my antipathy to Hegel) only goes to show that there really are three such elements." (CP 8.329)

> the *realization* of which causes a body to be like a flint. That idea of hardness is an idea of Firstness. The unanalyzed total impression made by any manifold not thought of as actual fact, but simply as a quality, as simple positive possibility of appearance, is an idea of Firstness. Notice the *naïveté* of Firstness. [—] The idea of the present instant, which, whether it exists or not, is naturally thought as a point of time in which no thought can take place or any detail be separated, is an idea of Firstness. (CP 8.329)

Based on this, we can start to understand the kind of graph that Peirce begins to form with the categories. Peirce has asserted that the triadic schemas he uses are sufficient: a unit bears no relation; a dyad is relation; a triad is *correlational*; but a fourth element or higher is not fundamental because it does not add anything to correlation and can be reconstructed from triadic interactions. Thus, his categorical graph:

> Firstness is the mode of being of that which is such as it is, positively and without reference to anything else.
> Secondness is the mode of being of that which is such as it is, with respect to a second but regardless of any third.
> Thirdness is the mode of being of that which is such as it is, in bringing a second and third into relation to each other. (CP 8.328)

Secondness and Thirdness then become easier to establish on this pattern:

> As to Secondness, I have said that our only direct knowledge of it is in willing and in the experience of a perception. It is in willing that the Secondness comes out most strongly. But it is not pure Secondness. For, in the first place, he who wills has a purpose; and that idea of purpose makes the act appear as a *means* to an end. Now the word *means* is almost an exact synonym to the word *third*. It certainly involves Thirdness. Moreover, he who wills is conscious of doing so, in the sense of *representing* to himself that he does so. But representation is precisely genuine Thirdness. You must conceive an instantaneous consciousness that is instantly and totally forgotten and an effort without purpose. It is a hopeless undertaking to try to realize what consciousness would be without the element of representation. It would be like unexpectedly hearing a great explosion of nitroglycerine before one had recovered oneself

> and merely had the sense of the breaking off of the quiet. Perhaps it might not be far from what ordinary common sense conceives to take place when one billiard ball caroms on another. One ball "acts" on the other; that is, it makes an exertion *minus* the element of representation. We may say with some approach to accuracy that the general Firstness of all true Secondness is *existence*, though this term more particularly applies to Secondness in so far as it is an element of the reacting first and second. If we mean Secondness as it is an element of the occurrence, the Firstness of it is *actuality*. But actuality and existence are words expressing the same idea in different applications. Secondness, strictly speaking, is just when and where it takes place, and has no other being; and therefore different Secondnesses, strictly speaking, have in themselves no quality in common. (CP 1.532)
>
> Let us begin with considering actuality, and try to make out just what it consists in. If I ask you what the actuality of an event consists in, you will tell me that it consists in its happening *then* and *there*. The specifications *then* and *there* involve all its relations to other existents. The actuality of the event seems to lie in its relations to the universe of existents. A court may issue *injunctions* and *judgments* against me and I not care a snap of my finger for them. I may think them idle vapor. But when I feel the sheriff's hand on my shoulder, I shall begin to have a sense of actuality. Actuality is something *brute*. There is no reason in it. I instance putting your shoulder against a door and trying to force it open against an unseen, silent, and unknown resistance. We have a two-sided consciousness of effort and resistance, which seems to me to come tolerably near to a pure sense of actuality. On the whole, I think we have here a mode of being of one thing which consists in how a second object is. I call that Secondness. (CP 1.24)

Peirce assigns each element of the sign model to a category, arguing that a sign is a first (a quite radically postmodern gesture, in fact), its object a second, and its interpretant a third. This creates an unwieldy typology of signs, as the sign itself is radically open and must be understood in terms of a proliferative set of scenarios, themselves organized within the fundamental categories. It is this complexity that has caused most to shy away from Peirce's work as an analytic tool.

I would argue that it is unnecessary and that the whole schema can be simplified dramatically. The issue is that a sign is never produced in such a radically open way. While the postmodern argument that the form of the sign is arbitrary carries weight, the sign itself has always been produced in a context, an environment, constituted by other semiotic and categorical series-functions. Peirce's assignments are remarkably anthropocentric, assuming that the world can be determined logocentrically and that it is made up of fixed or stable objects—this latter at least sufficiently so that there is a given "cut" in the world from its own side that self-evidently and without reference determines the way in which a discerned object will constrain the sign's open potential. Of course, we must forgive Peirce, the logician, for such a perspective. However, the field of biosemiotics, as well as contemporary informatic biology, neither of which were accessible to Peirce, have shown us that there are non-human modes of semiosis in the world that do not follow this pattern of assignment. Indeed, following Salthe (1993), we can argue that biology recommends that we understand the "object" as a First, the sign as a Second, and the interpretant as a Third.

Taking this model means that we understand a First as a pattern of qualities, discernable as such a pattern based on prior semiotic and categorical processing in infinite semiosis. A Second is, as Peirce so often says, a kind of resistance or brute insistence on difference. A Third is the mediation that is informed by their contextual coordination prior to and in that moment of relation. Semiosis is, then, a process with structure that unfolds systematically across time and space, but always taking place locally, within the context of a system of signs produced by it. A sign, or Representamen, is the insertion of an intervention into the system that reorients its activity, either internally or externally to the system. As we now know, any system of interaction that involves an observer includes that observer as part of the system. In this way, we can argue that

human language is an intervention in the state of affairs discovered in a meaningful context, suggested by the system itself. However, no First is limited in advance by a typology, so that it can bear multiple relations to multiple systems, forming series across systems by which they interact and in which they perform different categorical functions. What is a provocative difference in one context may act as a given for another, and a mediating interpretation in one context might be taken up as a referential object in another.

Human language is an intensification of this process, whereby a second-order differentialization occurs, so that language is the differentialization of difference, the patterned production of signs referring to signs of patterns. This occurs as part of a spontaneous ordering or autopoiesis following a thermodynamic principle of alternation (Lemke, 2000), wherein levels of order are transversally imposed upon each other in order to maximize throughput in something like a general economy. On this model, first order language would be something like thought (the equivalent of lower order sign-making constrained by the evolutionary addition of constraining cognitive layers), while third order sign processes might be something like culture, discourse, philosophy, scholarly discipline, etc. The development of human processes is not innovation or the production of new capacities, per se. It is rather an intensification of pre-existing processes arising from the categories, whereby semiotic processes are internalized. This is perhaps part of Nietzsche's intuition in his description of the superman.

This process can happen in different ways and at different scales. For example, we see in ants autonomous rudimentary agents who generate external signs. These signs are highly constrained, in part because of the rudimentary nature of the agents who produce them, and in part because of the radical efficiency of ant cultures. The colony, though, performs something like thought in its ability to act collectively as a kind of superorganism. The pheremonal trails and

other signals ants give each other are the thoughts of the colony. As far as we know, the interiorization of semiotic processes does not proceed further, and so we cannot say that a colony has language. Yet we do find language in other species that have managed to interiorize semiosis through the addition of cognitive layers. The process of interiorization is evolutionary and specific, and so we find varying degrees and types of responsiveness to varying capacities for information gathering. The subjective experience of such specific semio-cognitive processes is the *Umwelt* described by Jakob von Uexküll.

It becomes much easier on this model to see the relationship between Peircean categorical semiosis and Buchler's theory. The natural complex presents itself as a radiant semiosis: again following Peirce's categories, the contour of a complex is its Firstness, the integrity its Secondness, and the identity its Thirdness. Identity as the mediation between the contour and integrity of a complex is, perhaps, a surprising stance. Identity, as Third, taken as First for a new semiotic triad, can give rise to the illusion of a sign of pre-determined "meaning" being available independent of the specific integrity and thus give rise to the Platonic fallacy. The existent does not participate in the form, but rather the form emerges in, as, and out of an encounter with the complex—which is to say as the recognition of the identity of the differential integrity of a complex's contour. In this sense, the identity of a complex can be seen as either a discernment or a judgment, the understanding or the ascription of identity as the significance of the integrity of a complex. Identities are discerned as a way to order experience: integrities are related to contours in order to filter the noise of radiant natural semiosis. "Discriminations are, so to speak, framings of complexes from the welter of complexes." (Buchler, 1990, p. 22)

The identity of a complex is, then, our take on the radiant presence of a complex, the frame through which we come to an understanding in encounter. Going beyond Buchler's termi-

nology, the collection of such frames could be said to be the total framework (thinking on analogy with the term "meshwork") by means of which we produce our identity through the providing of integrities in and as the full contour of our own existence. In relation to other complexes, however, we are in the position of providing the encounter that mediates the integrity as identity for an object. The human being responds semiotically to the encounter with other complexes:

> The process of discriminating, framing, selecting is the pulse of human utterance…. Depending upon which essential aspect of the human process is emphasized, utterance may be seen as 'production' or 'judgment.' Man [sic] produces (a) by acting in relation to the integrities among which he finds himself, (b) by contriving new integrities, and (c) by propositionally structuring integrities in order to affirm or test his suspicions. He is the creature that judges the complexes of nature by producing in these three modes. (p. 23)

These three forms of production can be understood as three kinds of semiotic response to the semiotic presence of other complexes: (a) is a response of the contour in Firstness, (b) is a response of the integrity in Secondness, and (c) is a response from identity in Thirdness. We here understand identity as a mediation of integrity and contour. The identity in Thirdness responds by propositionally structuring integrities because what is at stake is the discernment or judgment of the identity of the other, which in turn puts at stake the relation of the contour and the integrity of self that makes possible the production of the discerning or judging self in and as the identity of the human complex. In other words, what is at stake in encounter is the framework of experience by which we articulate our subjectivization, and this in the sense that we take up our experience as knowing subjects discerning natural complexes forming not concepts that reference, or ideas that give a picture, but frames that shape encounter by allowing the natural semiotic radiance of nature—that is, of a natural complex—to inform us in such a way that we can respond in kind.

When this framework of basic encounter itself becomes the object of socialization, by being taken as the object of discursive reference and/or by the positive repositioning of the thetic in the dialectic that clarifies the integrous in the production of the virtual judgment of identity so as to sever excess while extracting value in and from the rational, the framework itself, as a complex, may become dominant and heavily reified due to its lack of contact with the dialectic negative, which is the grounding contour of Firstness. In that case, the sign's meaning is always already determinate, pre-articulated, given, in an inversion that would make the sign appear to refer to identity—an inversion which renders all specific meaning synthetic, interchangeable and virtual, thus derealizing experience and making any and all Secondness seemingly arbitrary, apparently based on the closure of a dialectic of power rather than on an expression of the integrity of natural experience.

Heidegger pointed to this as the source of the alienation and dehumanization that were felt as a result of the great leaps in technology in the twentieth century:

> Enframing means the gathering together of that setting-upon which sets upon man [sic], i.e., challenges him forth, to reveal the real, in the mode of ordering, as standing-reserve. Enframing means that way of revealing which holds sway in the essence of modern technology and which is itself nothing technological…. (Heidegger, 1977, pp. 20-1)

The danger that Heidegger wants to point to is not that technology is going to take over the world, as in so many of our dystopian fantasies, but just the opposite, keeping with the existential insight at the heart of many of those anti-technological dystopian visions: that we may lose control of our own experience. The irony is glaring: through the rationalization of experience meant to sustain it, we lose experience.

> Since destining at any given time starts man on a way of revealing, man, thus under way, is continually approaching the brink of the possibility of pursuing and pushing forward nothing but what is revealed in ordering, and of deriving all his standards on this basis. Through this the other possibility is blocked, that man might be admitted more and sooner and ever more primally to the essence of that which is unconcealed and to its unconcealment, in order that he might experience as his essence his needed belonging to revealing…. As soon as what is unconcealed no longer concerns man even as object, but does so, rather, exclusively as standing-reserve, and man in the midst of objectlessness is nothing but the orderer of the standing-reserve, then he comes to the very brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve. Meanwhile man, precisely as the one so threatened, exalts himself to the posture of lord of the earth. (pp. 26-7)

If subjectivization emerges in the formation of identities through the encounter of integrities as signs for an open-ended contour, then the production of meaning as standing-reserve, as the encounter with fixed identities, is, in fact, the self-alienation of the human from the humane, the contour that is expressed in our various integrities and subjectivities.

Edwina Taborsky describes the historical evolution of the museum in terms of the manner in which it takes up, as part of a sociocultural system, the objects with which it inter-acts. The evolution she points to is consistent with trends described elsewhere. (Foucault, 1972; McSherry, 2001, p. 41) Her argument is that museums, and museum-making cultures, are constituted by a specific cultural syntax that produces similar object-relations in the museum system, as well as the industrial system and the literacy system. Respectively, their objects are: objects and images, goods and services, and knowledge. (Taborsky, 1981, p. 1) For her, the museum begins to emerge in a recognizable form beginning in the 14th Century.

> The museum development of the 14th, 15th, and 16th centuries in Europe…was part of a total structural change involving the whole society and its relations with its environmental units. In the 14th

> century, society in Europe as a whole began to relate to its environment in a different way from previous eras. This new method, which I could call an 'abstract-and-define' method, involved the removal of environmental units from their natural setting, their collection and storage in a different setting, and their specific naming, definition and analysis. (pp. 28-9)

We recognize here the beginning of the Heideggerian trend in the severance of excessive contour and the establishment of fixed identity by means of the production of new integrities, or at least the highlighting of integrities as part of new orders not apparently coordinated with their emergence out of their natural situation.

In the 17th Century, Taborsky points to the collection of John Tradescent as an example indicative of a further development in an overarching trend. The catalogue of this collection from 1656 describes the collection as the "Museum Trandescantianum, or a collection of Rarities preserved at South-Lambeth near London by John Tradescent." Noting several aspects of this description involving authority and history, the idea of a collection as such, the singularity of owner and collector, and the concept of preservation, Taborsky cites an interesting section from further on in the catalogue: "…that the enumeration of these rarities (being more for variety than any one place in Europe could afford) would be an honour to our Nation, and a benefit to such ingenious persons as would become further enquirees into the various modes of Natures admireable workes, and the curious imitations thereof." (p. 31) Taborsky notes, among other points of interest, "the concept that copies could exist of the environmental units." (p. 32) We see here the concept that natural objects are of interest for the sake of their integrities and reproducible identities, rather than for the sake of what Luciano Floridi might point to as an intrinsic value. (Floridi, Infosphere, 2002) Indeed, Taborsky notes that "The origin of the objects and the date of their entry into the collection are not noted." (Taborsky, 1981, p. 32)

By the late 17th and 18th Centuries, the trend had moved even further along the trajectory.

> The new taxonomic and classifying approach to the world, advocated by such as Bacon, Hobbes, Descartes, Linnaeus and their like, was revealed in the new actions and rights of man to collect, define, and name the environment. Collections were no longer simply conglomerations of mixed units, as had been those of the early individuals, but were being arranged and developed to show particular environmental phenomena, either as defined by man, as in his art works, or as analyzed and created by man, as in the natural and mechanical environment. Collections were being developed to show the environment as something which man could name, define and control…. The collections were now selective and specific, for the objects were collected with a functional goal in mind – as an observable empirical aid to develop and explain scientific theories, not simply as unique curiosities. The units were now systematically catalogued to aid in the research, and the objects were used for this research, not for their original function. (pp. 34-5)

Denatured items were brought together in order to find patterns of integrities, in order to establish fixed identities, and, moreover, in order to promote and justify the taking of the world as standing-reserve of evidence. The uniqueness and natural contour of the items were irrelevant. Ironically, the provenance of the items was recorded not for the sake of allowing the objects' integrities to point back to their original contours by means of a derived identity, but rather as a means of further enframing the integrities in a system of fixed identities that superseded their original contour.

Following Heidegger we can say then that the activities associated with museums are in no way restricted to the museum, and the birth of museum informatics as the management of information regarding a collection is part of a larger cultural trend that has to do with the extraction of value by means of the severance of natural semiotic radiance and the grounding contours of Firstness. The study of museum informatics as the advance of techniques and technologies for

preservation and provision of access is insufficient to frame its own questions. We must move to the level of a fundamental informatics. (Takenouchi, 2006; Ohi, 2007; Kolin, 2007)

For Taborsky, the late 19th and early 20th Centuries were a period of consolidation and expansion, during which the range and scope of the museum as such was broadened. (Taborsky, 1981, p. 39) One might also argue that it was during this time that the museum, held up as an icon of culture, was also waiting for the culture to catch up with its swift trajectory of Enframing. Indeed, this same period sees both the creation of large public parks, zoos and nature preserves (the creation of which were argued in "Tradescent" terms) and the emergence of an avant-garde that rejoiced in both the extremity of its skill in extracting meaning from complexes (Duchamp), even while pointing out this extraction (sometimes in terms of an explicit Marxist critique) through the constrained liberation of antithetical excess (Dada, Surrealism, etc.).

Finally, the trend is extrematized in the mid and late 20th Centuries, during which the "museum is again undergoing a great change in its basic nature, related to the change in the whole social system's methods of relating to the environment." (p. 39) The society at large having caught up to the museum's Enframing, the museum syntax can be extended in a way that remains intelligible, even if strange.

> First, it is not only the actual unit which is collected, but increasingly, it is the relationship between the unit and man [sic] which is being collected, analyzed and 'displayed'…. [I]t is feelings and actions, the interactions between man and the object, which are in modern times being collected, imagized and stored in photograph, print and tape, as if they were the true image of the unit. This is done in modern museums by 'experience centres', where the stress is on the interaction with the displayed unit. The actual units displayed are only catalysts for those relations. The visitor is expected to experience an interaction between himself and the unit, and the Centre is considered not to properly exist if the visitor cannot or does not have such an interactional experience. The 'experience-

> centre' is actually a collection not of concrete units, but of relations. (pp. 39-40)

In connection with her general argument regarding the immanence of a coherent alignment of cultural syntax, Taborsky sees this same pattern emerging in advertising of the period, where it is the relation to the object, the experience of it, that is sold, not the object itself. The promise of ecotourism in the first decade of the 21st Century could be said to further this argument. It is the experience of integrities and the subjectivization in and around knowledge of integral identities which is collected, an extension of the museum's tendency to collect integrities for the purpose of producing a standing reserve. One quite literally encounters only oneself.

In fact, in some contexts, "the museum visitors are also being collected and analyzed." (p. 39)

> …[C]ontrary to the hesitation of early museums to encourage visitors, the modern museums are engaged in their actual collection. The audience is being collected, analyzed and stored as if they were units. They are collected for Special Exhibitions, being gathered specifically for such an exhibition, collected as annual members, as short-term tour groups, as volunteer helpers, and as students. They are being exhibited via reports and attendance records. (p. 41)

The people associated with the museum in whatever way have themselves become subject to the enframing propensity, caught up in the informatic labyrinth. They begin to take on identities for themselves formulated not by the authentic encounter between intrinsic contours of semiotic radiance, but by acceptance of synthetic identities framing experience as part of a collective encountering a collection.

Taborsky concludes with a description of the Eco-Museum, which aggregates only identities. "The Eco-Museum, another recent development, emphasizes the collection of data only,

leaving the actual units in private on-site ownership. This system sets up the population and the social system of an area, as the contents of the museum. The collection is the people, their relations, the units they make and use. The museum collects what could be considered copies of the collection, via data cards, of the material units and social activities of the region." (p. 41) To quote Heidegger again: "Where Enframing holds sway, regulating and securing of the standing-reserve mark all revealing." (Heidegger, 1977, p. 27)

Taborsky, writing in 1981, did not foresee a final extension of the trend. This is the production of digital museums, an event which could not be conceived until the public adoption of the internet. In fact, the arrival of the virtual has allowed another institution, the library, to continue trends of its own—such as the separation of form and content—to a point of similar abstraction. The result is a kind of convergent evolution such that it is difficult to distinguish between the digital museum and the digital library. The traditional distinction between the two institutions is not without its own difficulties. In a rough sense, one could say that museums seemed to be interested in preserving and making accessible objects in their Firstness, while libraries seemed concerned with the preserving and making accessible of discursive objects in their Secondness.

This distinction is not clean, as in each case the institutions are forced to confront the fullness of the sign, so that, for example, librarians had to be concerned with the preservation and presentation of books and museum workers had to be cognizant of the organization of the manifest informational content of the objects with which they worked. In the case of digital museums, however, the goal is not to present an object in its full contour, but rather to give access to data about that object, including, perhaps, images of that object. In the case of the digital library, one makes available texts and other discursivities in a similarly virtual environment. In both cases,

the Firstness of the distinct types of objects is reduced to a "file," the type of object curated in a digital environment.

It would seem that the digital museum has more in common with the digital library, or even a regular library, than with the traditional museum. The distinction is no longer primitive or institutional, but rather discerned in terms of the types of content in a file. The contour of the museum object is supplanted by a more or less fixed system of identification, and the integrity is singularized in the "shot" or "take" (Deleuze, 1986) of the medium used to reproduce the Secondness of the object in the digital museum.

The Secondness of the complex comes to be taken as the Firstness of the digital object, so that the Secondness of the digital object is, in turn, the Thirdness of the original complex. It is the "shot" or "take," which captures a predetermined select integrity or selection of integrities consistent with an articulated identity—which is to say that the content of the virtual reproduction is the specific encounter between a mediated human perception and the object. Like the "experience centre" Taborsky describes, what is collected is the relation, and, as with the collection of museum visitors, the number of visits, or page hits, is counted, held to be of value, and articulated for consumption by others.

Making reference to a digital museum or a digital library, we refer to a pattern of identities. If we "abstract and define" the digital museum and/or digital library as such, furthering the problem situation, then we see little difference between a digital museum and a digital library. But the problem of Enframing then becomes intractable, and indifference towards the differences in their coming-to-be serves as a permanent installation of power so that it is difficult to find our way back out of the confounding. If we, however, take the history and context of each into account, we can see that a digital museum and a digital library are outcomes of related but different

trends. The first step in overcoming the Enframing of the museum object is then to refuse the confounding of the digital museum and the digital library, to refuse to supplant the history and presence of digital museums and digital libraries with a pattern of identities. We must instead look to the history, traditions, and context of each, recognizing that the distinction made in calling a complex one of these and not the other indicates a difference worth taking into account.

As mentioned, Heidegger refers to the trend to Enframing as a danger. It threatens humanity's freedom by subjecting its natural semiosis to an ordering that deranges experience. This is not subjugation, but the delimitation of truth, such that we proceed without any sensitivity to natural semiosis. Blinded by the concentrated clarity of distilled presence in and as identity—that is, the supplanting of being with meaning—Enframing endangers our existential core by obviating any relation to it. This is in part because Enframing hinders our ability to see past it to the root from which it stems, so that we cannot see the arising of another possibility. Integrity and identity become everything, and the contour of all complexes—the natural coordination of presence in its providing—is forgotten. Integrous identity is the only question, and the only question it asks is after thetic synthesis and the antithetical dissolution of that same. (Hardt & Negri, 2004, p. 190) But all this is arbitrary, causeless, irrational and based solely on the exercise of power. The danger is oblivion:

> Since destining at any given time starts man on a way of revealing, man, thus under way, is continually approaching the brink of the possibility of pursuing and pushing forward nothing but what is revealed in ordering, and of deriving all his standards on this basis. Through this the other possibility is blocked, that man might be admitted more and sooner and ever more primally to the essence of that which is unconcealed and to its unconcealment, in order that he might experience as his essence his needed belonging to revealing. (Heidegger, 1977, pp. 25-6)

If we are to rescue ourselves from this sort of oblivion in general, we must look to recover the contours of reality, the natural semiosis of existence, the natural propensities of experience. We must see the overall patterns of Enframing so that we can choose our relation to it and our participation in it. As a historical trend, it is the outcome of human understanding and action, and as a particular folding of semiotic radiance, it is in keeping with the scope of our experience. We are not subjugated and we can do things differently.

> Every destining of revealing comes to pass from out of a granting and as such a granting. For it is granting that first conveys to man that share in revealing which the coming-to-pass of revealing needs. As the one so needed and used, man is given to belong to the coming-to-pass of truth. The granting that sends in one way or another into revealing is as such the saving power. For the saving power lets man see and enter into the highest dignity of his essence. This dignity lies in keeping watch over the unconcealment—and with it, from the first, the concealment—of all coming to presence on this earth…. Enframing comes to pass for its part in the granting that lets man endure—as yet unexperienced, but perhaps more experiences in the future—that he may be the one who is needed and used for the safekeeping of the coming to presence of truth. Thus does the arising of the saving power appear. (pp. 32-3)

Heidegger would have us discover that saving power in and through the fine arts, countering *techne* with *poiesis*. But it is the fine arts themselves which, through the museum, have become classic examples of the problem at hand. It is not a deployment, but a *re*-deployment that is needed. We cannot simply produce new semiotic expressions under a different regime. They will be caught up in the Enframing of the museum just as readily as any other has been. Art is not enough, and, surely, to turn to art as the savior from technology merely repeats the problem of insisting on subjectivization through a prepurposed artifactuality.

The trend has historically moved from natural, primitive radiance to the primary extraction of value by enframing, from Firstness to resistant Secondness in the quality of our relations. But it is in the secondary extraction of value, the hacking of the systems of Enframing, the redeployment of relations, that we find Heidegger's saving power. A shift to Thirdness means a furtherance of the trend in some sense, but also a fundamental shift, calling out and amplifying, invoking the extrematized propensities of Secondness that have heretofore constituted the dominant cultural syntax of museums. It means invoking that tendency to the inversion of relations, the latent, haunting impulse in the historical transformation of museums that knows their secret: museums have never been about their collections; they are about us and our relationship to the production of meaning. The emphasis on Secondness as the dominant syntagm for the production of meaning is definitive of the modern era—even in the forms of late capitalist postmodernism which recognize the extremitization of this production under the strains of a highly potentiated inversion. (Hardt & Negri, 2004, p. 190)

Of course, the latent extremity of the postmodern has always existed in some form or another as the possibility of inversion and absurdity. Hardt and Negri point to the emergence in the seventeenth century of "cabinets of monstrosities." (pp. 194-6) But even these operated as signs of possibility, which, while invoking the extremities of Firstness as delineated by the enframing principles of the war machine and modern exercises of eugenic political theologies. It is in Secondness that they emerged as relevant. While appearing to demonstrate a resistance to the extraction of value through severance of contour, they in fact ultimately offer specimens of negativity whose negativity has been extracted for purposes of evaluation and presentation. They present a representation of the monstrous, not an encounter with it—the counterinversion that, while allowing for a discourse that could challenge existing power structures, cooperated in the perpet-

uation of the basis of the exercise of that power, keeping the regime of Secondness intact. So it is with the opposite extremitization, the postmodern, in which the apparent secondary extraction of value that promises the possibility of an inversion remains within the cultivated order of the (now self-referential and self-interpreting) sign.

The emergence of the museum can be cast as the emergence of a syntax based not on Firstness and iconicity, but on Secondness and indexicality. If we wish to bring about an inversion to rescue ourselves from the dangers of Enframing, we may perhaps succeed by short-circuiting the signs of its possibility such that we recognize an uncanny presence that has been invoked: the monstrous absurdity of symbolic subjectivization, of Thirdness as a cultural syntagm. This would mean taking up signs of negativity as in the cabinet of monstrosities and exposing them to the corrosive entropic elements of postmodernism, producing a new, symbolic secondary extraction of value that relates directly (where directness is the inversion) to the natural contours of complexes in their Firstness by means of an eccentric Secondness.

The corrosive entropy of the postmodern in this case does not dissolve our relation to reality, but rather the resistance of Secondness. God's eye, which had become the Panopticon, is now a compound eye. The aggregation in the collective no longer has a singularizing subjectivization as its means and end. Rather, it is in the production of a multitude, of a multiplication of subjectivizations, that we can find that hacking which liberates the openness of primitive contour(s) in and as the integrity of a multiplicity of primary extractions.

> We have seen that the flesh of the multitude produces in common in a way that is monstrous and always exceeds the measure of any traditional social bodies, but this productive flesh does not create chaos and social disorder. What it produces, in fact, is common, and that common we share serves as the basis for future production, in a spiral, expansive relationship. This is perhaps most easily understood in terms of the example of communication as produc-

> tion: we can communicate only on the basis of languages, symbols, ideas, and relationships we share in common, and in turn the results of our communication are new common languages, symbols, ideas, and relationships. (pp. 196-7)

Hardt and Negri point us to the Pragmatist notion of "habit" as a first step in understanding this Thirdness as the social form which is flexibly produced and reproduced in interaction with others and which can serve as the malleable, democratic forms of social convocation, but they also argue that while this is a good first take, it remains inside the sphere of modernity and Secondness. As cultural forms, they are taken as signs of community and are thus ritualized to the point of repetition even beyond their natural emergence in primitive radiance. (p. 191)

Moreover, the concept of habit is somewhat limited in scope. "What we need to recognize today instead is a notion of the production and productivity of the common that extends equally from the political to the economic and all the realms of biopolitical production. The productivity of the common furthermore must be able to determine not simply the reform of existing social bodies but their radical transformation in the productive flesh of the multitude." (p. 199) Arguing for the somewhat better concept of *performativity*, Hardt and Negri point to the queer theory of Judith Butler as a good exemplar. "Sex is not natural and neither is the sexed body of a 'woman,' Butler explains, but rather like gender they are performed every day, the way the women perform femininity and men masculinity in their daily lives, or the way some deviants perform differently and break the norms." (p. 200) The natural contours of a body are not specific, discernable qualities, but radiate integrities that give rise to perhaps codifiable identities in a natural semiotic radiance.

> Performance, like habit, involves neither fixed immutable nature nor spontaneous individual freedom, residing instead between the two, a kind of acting in common based on collaboration and com-

> munication. Unlike the pragmatists' notion of habit, however, queer performativity is not limited to reproducing or reforming the modern social bodies. The political significance of the recognition that sex along with all other social bodies is produced and continuously reproduced through our everyday performances is that we can perform differently, subvert those social bodies, and invent new social forms. Queer politics is an excellent example of such a performative collective project of rebellion and creation. It is not really an affirmation of homosexual identities but a subversion of the logics of identity in general. There are no queer bodies, only queer flesh that resides in the communication and collaboration of social conduct. (p. 200)

Not a freeing up of polymorphous perversity, but an inversion into the radiantly polymorphous in principle.

If the trending of the museum has worked to produce a collective observing a collection, and the saving power of Thirdness resides in the human as Heidegger claims, then we need to generate a new performativity which enacts a secondary extraction of value such that Firstness and Thirdness are recovered from the domain of enframing Secondness. The collective, in relating to a collection, must produce a common. And in order to maintain the continuity of the museum tradition, as well as maintain its character as distinct from that of the library (despite their convergent evolution at the extremities of Secondness), it must build on the trends already in place, performing an inversion, not a severance. As we would expect of Thirdness, it should (re-) mediate our cultural relations, not proliferate a patterning of identities and discernments that sever our relation to the contours of existing circumstance as does Secondness.

Hardt and Negri argue for a new subjectivity, one that is "not sovereign." (p. 208) This arises in and as the multitude which produces its common. They draw an analogy with Mikhail Bakhtin's theory of Dostoyevsky's poetics, in which dialogue "can become an open apparatus in which every subject has equal force and dignity with respect to all others," such that his "novels

are great *polyphonic* apparatuses that create a world in which an open, expansive set of subjects interact and seek happiness." (p. 209) Bakhtin argues "that dialogical narration and polyphonic structure derive from the folklore of carnival and from the *carnevalesque vision of the world*." (p. 210) The carnevalesque is the horizon upon which the sought transformations can be discovered and explored, created and examined, generated and let loose. It not only allows for the promotion of difference but is defined by it. "The carnevalesque is the prose that opposes monologue and thus refuses to claim an already completed truth, producing instead contrast and conflict in the form of narrative movement itself." (p. 210) But it is not simply that there is no single truth, it is that truth is produced in and as the common that emerges from the polyphony.

> In a polyphonic conception of narrative there is no center that dictates meaning, but rather meaning arises only out of the exchanges among all the singularities in dialogue. Singularities all express themselves freely and together through their dialogues create the common narrative structures. Bakhtin's polyphonic narration, in other words, poses in linguistic terms a notion of the production of the common in an open, distributed network structure. (pp. 210-1)

This is not just humans transforming their society so as to be liberated in a passive sense, but rather humans rediscovering their own inherent liberation, performing liberation in and as a providingness. In this way, human interaction produces common liberation in the common, where difference is not a constraint on another, but the leading edge of their transcendence. If the trend of history has been humanistic in the sense of the increasing tendency to human control over meaning, value, and experience, then we are describing a kind of post-humanism that is also transcendent of humanism itself, since it is not about controlling these things, but remediating their natural radiance. But this is not a posthumanism that exists in pure continuity with humanism such that it is the "next step" in a progressive history. It operates in an alternative space, that

of Thirdness, even while bearing a certain relation to it. The nature of that relation is not one of equivalence, but one of (re-)mediation between (post-)humanism and natural semiotic radiance. It is an intensification haunted by itself, by its own possibility, and by its own alterity.

5. Interlude: Sutures

Because for Heidegger being is objective in that one ought, in imitation of the sciences, break a thing to know it, the world must be broken or break down for him to see being in it. We think of this as rupture in thinking the event spatially. We can also think of it as extending across time—although no one has yet convinced me that extension is anything more than an aphorism that I find it hard to get past. Regardless, accepting it as possibly necessary speculation, we recognize that the event doesn't take place in time or history. It unfolds as time, as a blip of difference, making a bit of 'a' difference. This difference does not reduce to unity.

It is sloppy when Deleuze attempts to slip unity in by way of a self-exteriorizing difference that models itself in virtuality as the immanent. It sews together the subject and objects with the suture of a becoming that he taps into place with a claimed geologic that maps across and hides underlying claims to primitivity. Does he know we can spot that? I sincerely hope this isn't an actual tacit claim, because everything then turns hopelessly to space, changing only in the present endlessly. This is why Bergson and Leibniz and Nietzsche: he wants to make time immanent, and immanence, for him, bears an intuition of immediacy. But with this aphorism as the underlying construct, he gets stuck on this by having only rotated it 90 degrees, looking at sideways time as a layer of dynamics saturating an ever-present becoming. Repetition. Thus the monad: endlessly recursive virtualities mediating a network of singularities in a remarkably seamless and fractal, toroidal production of the real—lubricated by synthetic, promiscuous virtual fluid. But if we can't get past the aphorism of extension, then perhaps we can climb over Deleuze to get there. In time everything intertwines and intertwingles. It is forever sheer with the pattern of differences showing up on the plane of history like punches in a card. The ripples pour downstream to the future. Time is thus a deterritorializing dimension of space-like ignition,

which lets out into time, allowing the music of all these plucks and fretwork. Time is more like Guitar Hero than it is like a bridge. Seeing time means we see a virtuality. The Cinema books start to say so. This is a conservative insight masked as radical in its very antiquity. But the river touched twice, etc….

He himself wanted to get past this intuition, or at least intuited the possibility. The presence and use of the temporal aphorism is itself an event. To think historically must mean to think nonrepresentationally. In understanding semiosis in this way, which is that signs share in the architectonics of events, we justify the work of history as praxis, as storytelling in the deep sense of translating perfunctory time into the zone of representation: the functional memory of which continuously presents and foregrounds information about the past across multiple institutions.[30] Without such sustainment, the past goes unrepresented, not taking seriously or not making way for the idea of representation as the core way to secure being and, by way of it, order.

History is a field of blossoming events, which need not be deep or highly textured as long as it is continuous. These blossoms root by nature, and seep up being to the extent that they order our existence. They are thus also compatible with naturalism, if nature is the structured availability of orders and they seek to thus order the earth and soil and dust we are. There aren't memes, because the genetic transmission is a replicator operating in the Deleuzean iterations of germinal spacetime/life. Memes would be sideways, and thus self-negating. It's just down to these blossom-things, arising in the flow of immanent intelligent material. Like demons, they seek entry into our world through us. We should let them, and everyone should stop looking for programs in history.

[30] The unity of memory and technology lies in the passiveness of the subject, as inverse meeting an agentive object—a flashing of the dark in the dark, sustaining darkness and neutrality as a crossing matrix.

Except for local interventions and emergences, there are none. As a species, we had thought there might be, but now that we have some history in our pocket, we know there aren't really. This, combined with the abandonment of statecraft as a goal, means we must ask ourselves if we need something like history. Social memory seems to be helpful in certain ways, though sometimes not. It is perhaps the question that must be asked of all the special sciences rooted in humanism. The humanistic project has failed in many important ways, though the liberal valuing of full humanity however defined seems ethically helpful. Anyone who argues an ideology grounded in the idea that history has patterns is unaware, lying, or selling something. World systems theory should avoid such things, except possibly as local approximations, about which we might remain skeptical.

We need a posthumanistic method to develop a semiotic theology as synthetic tension against hyperdifferentialization: a simulation, in order to decide otherwise undecidable problems—which is to say problems that are intractable within the order of humanistic thought. For example, questions like whether AIs are like us, or how we should treat them, or the nature of artificial life (not meaning synthetic biology). The first question must be ethical, which, in the current context means the formation of a posthumanistic metaethical system in order to make ethical questions decidable. We must also ask, as a second-order ethical question whether that decidability ought to be overdetermined or deterritorialized. Patrick Wilson (1983) indicates that we should turn that question on itself in a third-order deflation, pointing out that if we answer for overdetermination, quantized interference patterns will emerge due to the fact that the question will be unaskable or undecidable in certain configurations. So it is ideology or deflation if we don't construct an open ethical system. Of course, if we keep it open, we must rely on situational ethics in a skeptical milieu. The deterritorialization of the mind means a reliance on deterritorial-

ized affect: care in a world where it is unobstructed by grammatical voice, operational cognitively as a decentered middle voice-like freedom. Trusting that this resonating concern is self-arising is radical faith in oneself as naked awareness, and it is a refusing to (re-)territorialize one's own existence as a primary metaethic that never turns into an ethic. That is tantra. Biophilia is an adequate approximation, as it can and does respond to the dynamic complexes to which our ethical charge is most likely directed in a posthumanistic environment.

In acting in unintelligible ways, AIs will reintroduce mystery, and thereby a metaphysical response from us as we deterritorialize the known.

6. Demiurge

If Buchlerian complexes, as orders, can be understood to be scale free with regard to their architectonic structures, then we can look to a specific example to discover what such a thing might look like. At TEDxBristol in 2011 (Heap, TEDxBRISTOL 2011 - CREATIVITY SESSION - IMOGEN HEAP, 2011), the British artist Imogen Heap unveiled in a creativity session a project she has been working on with Thomas Mitchell at University of the West of England, Bristol. This took place a year after she won a Grammy for musical engineering. A year later, she would give a demonstration of this project at TEDGlobal Edinburgh, followed by a performance for a WIRED UK event (Heap, WIRED, 2013). The project is based on prior work done by Elly Jessop at the MIT Media Lab, which is itself similar to other such projects that have been around since at least 1989, combining gestural control with digital sound processing.

In essence, through a combination of gyroscopes, accelerometers, bend sensors and a Kinect controller, Heap and Mitchell have developed a device that allows her to sculpt and manipulate sound and processed sound in real time using three dimensional mapping and gestures. In each demonstration, she consistently refers to the difficulties of her prior technologies, which were hefty and complicated to move and which obscured the performative elements of her musical constructs. Repeatedly she complains about the alienation from the audience that is part and parcel of technically enhanced music-making as she had previously undertaken it. This new technology eliminates the physical barriers and creates a sense of flow and spontaneity. In Deleuzian terms, her performance is intensified through a deterritorialization of the space of her compositional gestures, producing a smoothness and endless availability that allows her to "map anything to anything." (Heap, 2012) This smoothness is not pure, as the mapping is necessarily done in advance of her performance through an interface and architecture that helps her to con-

struct and capture the specific map she desires. There is not a single map, but a plurality, thus requiring her to establish the coordinated parameters of any performance in advance and specifically for that performance or any other like it. These can be seen by way of a projection in her demo at CTM Hacklab Berlin. (Heap, CTM, 2013)

The song which is used in almost all of these demos is a song entitled “Me the Machine,” which is her attempt to articulate the experience of an artificial intelligence coming into awareness without the ability for its psychological drives to access to the symbolic order, ironically. The lyrics read:

A blip in the algorithm
A break in the clouds
Soft circuits, jumping. Soft circuits, jumping.
The pincodes of happiness
Access denied
Switching to manual, switching to manual

Oh, to share a scent of that sweet summer breeze
A love for a squeeze
How can you teach me these things
Me, the machine can dream

An acquaintance with benefits
A work in progress
Downloading romance, downloading romance
Relationship asterisk
This footnote's in plain text
Marking your words, marking your words

Oh, to share a scent of that sweet summer breeze
A love for a squeeze
How can you teach me these things
Me, the machine can dream

I can't do everything
I'll get over it
Trigger, point, trip
On top, pilot
Over my job

See, stop

Oh, a scent in a sweet summer breeze
A love for a squeeze
How can you teach me these things
Me, the machine can dream
Me, the machine can dream
Me, the machine can dream

While these lyrics are a bit obscure from a technical perspective, the effect is similar to the deer who watched the poet in Shelley's poem. There is a decentering into the unhuman, the effect of which is the desire for semiotic series to intertwine and participate in each other without being able to access each other's symbolic order. This difference in life worlds produces a fantasy world that virtualizes the experience of the human as the thought of the other mediated by variant forms of embodiment. In the production of the space of performance, this intertwined mutually ecliptic desire gives way to a systematic ordering, the result of which is the performance of the piece. The human element acts as an a priori synthesis for the world so generated, while the technical element enables the expression in an a posteriori integration. This order or world is not closed, however, as it is designed specifically to provide itself as experience to an audience, against whose presence the relative space of the stage is mapped.

> I've programmed it so I can walk into a choir of me's. [*walks across stage to stage right at which point her voice becomes polyphonic*] And over here, here's another choir of me's. [*walks to stage left at which point her voice becomes polyphonic in a different way*] And when I move around the stage you'll hear, like, different effects. [*moves to back center and raises arms while vocalizing producing an echoing harmonic effect*] Because I wanted to treat the audience as, like, a kind of playground, too, [*moves forward to center stage*] that my proximity to you changes the way the music is. That's really kind of exciting to me. So when I get further back, [*steps back*] on this particular way I've set this particular song up, it gets much bigger, more effects, and when I come

> closer [*steps forward*] it's kind of more intimate and quieter and there's not so many effects. (Heap, WIRED, 2013)

Thus this order is an order of orders that participates in another more inclusive order. This whole system is coordinated around desire, the expression of desire, the will to express the desire, and the desire to experience the expression of that desire—in this case specifically on account of the technics incorporated into that performative context. From the human perspective, the technology becomes a metaphor for the subconscious processes, but for the cyborg it is a mutuality compressed in an interiority. This is a kind of decentered consciousness that is reminiscent of a case written up by Jung, that of Heidi Kurzweil, as discussed by Nick Land:

> In September 1908 Kurzweil was detained in a secure psychiatric institution after the brutal murder of her twin brother in Geneva. She seemed to have lost the ability to use the first-person pronoun, and was diagnosed as suffering from Dementia Praecox, or schizophrenia. At her trial she repeatedly claimed:
>
> > We killed half to become one twin, but it wasn't enough …
>
> Jung took an early interest in the case, and began a series of analytical sessions. Kurzweil–in Jung's journal and correspondence–became Heidi K, but after only five weeks he seems to have abandoned hope of progress and disengaged the analytic process.
>
> After his third session with Heidi K, … on the 27th February 1909, Jung records the following words:
>
> > Dr Jung, we know you are old in your other body.
> > It is as old as hell.
> > It has let you back, but it sends us away.
> > It feels itself becoming Lemurian,
> > and it is definite unlife [*es ist bestimmt unleben*]
> > There is nothing we would not do to escape.
> > Nothing. Nothing. Nothing.
> > But it is fate.
> > It howls electric bliss beneath our cells.
> > It is nowhere in time and nothings us.
> > It is the body of nothing, and electric-hot.

An electric nothing-body instead of us. (Land, 2011, pp. 549-51)

This naturally encourages a comparison to Walt Whitman's famous poem:

> I sing the body electric,
> The armies of those I love engirth me and I engirth them,
> They will not let me off till I go with them, respond to them,
> And discorrupt them, and charge them full with the charge of the soul.
>
> Was it doubted that those who corrupt their own bodies conceal themselves?
> And if those who defile the living are as bad as they who defile the dead?
> And if the body does not do fully as much as the soul?
> And if the body were not the soul, what is the soul?

In each case, we have a variation on a relationship between desire, body, and ecliptic consciousness bound up with an erotics of performativity and alienation, the desire to co-participate in a mapping and integration of the real as an unmediated *jouissance* made abject by the limits of codal expression across temporal horizons. In fact, there is a pressure to mutual immanence as a correction of an interiority that is subaltern, subterranean unlife. This is not just architectonic, but tectonic, a kind of geologic subduction of difference in a synthetic whole.

Thus we explore in her performance the interaction of two spaces, one acoustic and one virtual. (Oliveros, 2003) These two spaces are combined, not by means of shared production, but rather by means of a third that is a listening practice. That practice serves as an immanent form of unification a posteriori. Yet, of course, that listening is exactly a practice because of the multiplicities involved: the multiple semiotic series that striate the production space, both acoustic and virtual, which includes, interestingly, human DNA, insofar as it gives rise to the capacity to listen in the way that is shared among listeners; the variation among attention spaces, attune-

ments, splices, etc., that allow each listener to integrate a complex; the shifting acoustics of the space itself as it forms and reforms around conditions in the room; and the acoustic difference as each person, located within the space and therefore a particular ordering of the possible complex(-es), encounters the totality of the sound by way of their place. The performance is not a unity, but a probability, encountered differently and differentially by each person. Moreover, there are feedback loops in the performance that make the machine technically self-observing. While there is no listener of listeners to unify the experience, there is, of course, the set of recording technologies that produce simulations from a particular viewpoint over and over again. There is, however, the possibility of relative intensity within a given semiotic series with regard to specific categorical formations, that intensity of category indicating the likely location of agency in the distribution of the event among its diakenic elements. Pauline Oliveros, a sound artist, discusses this intensification:

> As a musician, I am interested in the sensual nature of sound, its power of release and change. In my performances throughout the world, I try to transmit to the audience the way I experience sound both when I hear it and when I play it. I call this way of experiencing sound "deep listening." Deep listening is listening in every possible way to everything possible: this means one hears all sounds, no matter what one is doing. Such intense listening includes hearing the sounds of daily life, of nature, and of one's own thoughts, as well as musical sounds. Deep listening is my life practice. (Oliveros, 2003, p. 213)

The space of performance is a didactic space, where what is formed and what is communicated are thirds in an attempt to share experience of an unhuman object that includes the ways in which one "hears" one's own thoughts. The series, in this mangle of thirdnesses, becomes coherent not in unity, but in epistemogenesis.

That said, the series or order that allows us to recognize the complex as epistemogenetic makes of the performance site an event, insofar as it overdetermines the probability structures in architectonic correspondences. Such a series, where humans are themselves an element in the construct, takes up its elements in the production of a differentialized eventuation, which it then treats as having been installed within and as an order or series of orders. One can think of this as taking up paint on a brush and applying it to a canvas. (Rapoport, 2003) In Sonya Rapoport's piece *Digital Mudra*, this meant more than just taking human beings as a given. A complex interaction between technology and the bodies of participants took place. Digital readouts of the participants' physical states of being were taken in coordination with a model of their biorhythms. This data was then combined with individuals' description of their own state and then translated through a series of technical and human interventions in alternation to produce a personalized mudra[31] that was then printed out and placed with others on a wall. Mudras are traditionally used to encapsulate in a single gesture the desired or immanent state of body, speech, and mind of a sentient being. In this case, there is not the production of a single encapsulation, but rather multiple, all of which are placed in a space of observation for multiple individuals to be able to respond.

[31] A mudra (Sanskrit: मुद्रा "seal," "mark," or "gesture"; Tibetan. ཕྱག་རྒྱ, chakgya) is a ritual gesture used in both Hinduism and Buddhism. In the latter case, it is for most an iconographic representation, although for tantric practitioners it is an element of their practice. Reverend Jnana explains: "The origins of the word mudra are uncertain as is the precise evolution of its meaning. At a very early period in the post-Vedic literature of India the term mudra designated the idea of a seal or the imprint left by a seal. Somewhat later usage takes on the meaning of 'way of holding the fingers', designating very precisely a ritual gesture. The Pali word for mudra, muddika, derives from mudda, meaning authority. There is thus a developing inter-relationship in these meanings of a gesture enhancing and authenticating the spoken word with mystic and magical values. The gesture is a sign, a ritual seal; seal implies authenticity. As Buddhism spread to China a further usage of the term came to identify mudras as 'marks of identity' of the deity being personified. The symbolic hand gestures called mudras are of two general types. First, the most ancient form of mudras, dating from pre-Buddhist times, are those presented with the purpose as signs symbolic of the metaphysical aspect of Esoteric ceremonies. Mudras used in this sense are of significant importance in the rites of Tibetan Tantrism, Chinese Chen-yen and Japanese Shingon Buddhism. This, of course, is within the larger context of Tantric meditation where the Three Mysteries, or the forces of the spirit, speech, and the body are directed at the one and only goal: enlightenment. Mudras, along with asanas (reflecting the body), mandalas (reflecting the spirit) and mantras (reflecting speech) all provide expedient means in achieving enlightenment." (Sipe)

In a sense, this personalized gestural summation is a subversive one, as it undermines, through its very form and production, the sense that we occupy a single space or that that space is uniform and singular. It makes us aware, through the intervention of technologies and technically assisted processes, that we are constantly making metaphysical assertions that attempt to smooth over and patch up differences in immediate experience in order to allude to an order that justifies the relationship between our own states and the social interactions being had in the space. Mudra insists that we not do so, that we recognize the inherent multiplicity and constructedness of the space, as well as the resonant affective and sensorial tones that move in, through, and as series. Mudra points to the mind and the Buddhanature manifesting as the spontaneous mandala of the moment. In the case of Rapoport's project, this constant interaction with a virtual space in Deleuze's sense is made virtual in the digital sense: the systematicity of the space, the order and procedure that evokes it and our presence to it, is designed to call out the multiplicities of patterns of qualities, produce a sign, and then allow us to contemplate it; however, the production of the sign is intensified as a series within a series, foregrounded as not just a negative metaphysics, but also as an interaction with a digital reception of qualities, made significant by interaction with a specific human playing a specific role, and then mediated by a second digital system. The mudra, as a sign with which we identify, is a tool of transformation. In the Buddhist tradition, it functions much like a sinthome, which we ultimately seek to deaccession with regard to the symbolic order, to put it in Lacanian terms. In this case, Rapoport's project is similarly subversive, although it brings us to a different transformation, one that continues to accession to the symbolic order and which integrates into that identity a layer of technology and digital virtuality. As Lynn Hershman says of digital art: "Perhaps the most subversive element of new technologies is their ability to force 'real life' to transgress space and enter artificially based envi-

ronments. They thereby diabolically transfigure the essence and authenticity of the participant, who not only becomes artificial through the process but can be recognized only when electronically disguised." (Hershman, 2003, p. 196) Agnes Hegedüs tells us that these spaces, in becoming semiotic complexes, demonstrate for us through our interactions with them, the metaphors for knowledge we create or are willing to make use of, and, in so doing, become epistemogenic and epistemographic simultaneously. (Hegedüs, 2003) Fleischmann and Strauss (2003) go further, pointing out that it is precisely the mix of these virtualities, in both sense, and our subverted sense of space that allows for the striation and differentialization that generates knowledge. This knowledge is, however, decidedly not human, even where it seems to present no variation from a humanistic perspective. As the artist Stelarc has said: "The body must burst from its biological, cultural, and planetary containment. The significance of technology may be that it culminates in an alien awareness—one that is POSTHISTORIC, TRANS-HUMAN, and even EXTRATERRESTRIAL." (Sofia, 2003, p. 510) The desire here is to recognize, within the order of performance or installation, the availability of orders in multitude, and to subvert idealism in favor of transient virtualities that allow us to recognize differential unhumanity as part and parcel of the formation of the experience with which we identify.

Thusly structured, these spaces can be referred to as chimeric. Reza Negarestani glosses the chimera:

> It is said that the mythological chimera, the she-goat of Lycia, was an offspring of Echidna and Typhon who had combined, in the most eccentric manner, three distinct composites within itself. Rather than being a monster by the virtue of being "a hybrid of different body parts", it was a global composition of three particular composites—a goat, a lioness and a snake each carrying its own respective space within the beast. Chimera was accordingly considered a non-monster that posed a threat to the metric reasoning of the composer in the clothing of a teratologist. For the priest in the

> clothing of the logician, on the other hand, chimera was a relational and modal conundrum for it bore a series of relationships between different heterogeneous or incommensurable objects… which appeared impossible insofar as the discrete modality of each animal was intruded by the multi-modal continuity of the chimera. But above all, the compositional eccentricity of chimera sublimated in its voice, a synthesis between the voiceless alveolar 'hissing' sibilants of its mother—the she-viper Echidna—and the plosive oppression of its father typhoon. Chimera's voice was a composition of various animal vocalizations glued together according to their internal consistencies, continuities between manners of articulation, their relations to their ambient space and various swaps and transfers between them—a universal composition at the same time irreducible to discrete voices and transcending their cacophonic conjunction. (Negarestani, Snake, 2013, p. 202)

The chimera, held together by difference rather than space, is a deterritorialization / reterritorialization in a single process, giving rise to multiple semiotic series in and as any apparent unification. Indeed, its unity exists in its very disunity, in its diakenic and partial coordination within an order that provides context for the interpretation of the multiple as a coalescent swarm or assemblage-whole. Citing Guerino Mazzola's *The Topos of Music: Geometric Logic of Concepts, Theory, and Performance*, Negarestani explains:

> Chimera is a post-pandemonic composition. Rather than purely conforming to the transformational and compositional paradigm of metric reasoning, chimera is produced according to a topological paradigm where the composition is "somewhere in the middle between intractable monsters and insignificant atomized data", the trivial combination of discrete voices and non-local continuities capable of unfurling counter-intuitive variations of each and every voice.
>
> From a geometrical point of view, chimera is a bundle of different addresses or profiles… or a particular composition within the topological space. (pp. 202-3)

The apparent unity of the complex is not based on a fundamental contour,[32] but rather on the integrity that is overdetermined by the multitude of series and vectors striating the space.[33]

[32] Ross, Ladyman, and Collier (2007) argue that "the world isn't unified by the composition relation." For them, the composition relation is a strong version of a view that is compatible with "a multiplicity of mereologically unified individual realities (where the mereological relations hold among observer-generated effects rather than traditional little things)," which means "a world in which nothing exists that isn't a strict part of something else, except whole universes." Then, "[c]ompositional unification" is such that "everything except a whole universe is a component of something else." Denying the composition relation is denial that the integrities of complexes or orders exist as firsts in a time-like horizon that is neutrally associable with block time. Firsts, as we have indicated, are radiant, and thus orient within a series a correlation between expansive interaction and a thermodynamic orientation to what becomes a future in that context. It is in secondness that complexes and orders give rise to unification effects, but these are always after the fact and read into the situation by some exterior relation of relevance-based ordinality. By the definitions they use, Ross, et al., argue that physics is the fundamental constraint on all sciences, even while retaining its own integrity as a pathway of investigation. Special sciences take up specific orders and examine their complexes: "a science is special iff it aims at generalizations such that measurements taken only from restricted areas of the universe, and/or at restricted scales are potential sources of confirmation and/or falsification of those generalizations." At no point, however, should we understand any order to exhaust the contour of a complex, as such exhaustion would indicate the unity of the categories of firstness, secondness, and thirdness, which we deny along with the associable representationalist ideology, and which would allow for a composition relation. If physics operates as a constraint on the special sciences, then this is the difference between it and metaphysics on an ordinal account, as articulated by a different Ross (1980), according to whom metaphysics is the attempt to discover the widest possible generalizations about existence. This is compatible with, but not identical to, the arguments of Ross, et al., in which the motivation for a metaphysics is "The demand to unify the special sciences with physics." A semiotic realism would not seek this unification, but would rather seek to understand the forms in which they arise and the respective ordinal responsibilities to which they bear relation, and then, in turn, the relationship between the patterns, complexes, and orders which they read out of and into various contexts.

[33] This stands against Luciano Floridi (2003) and with Ross, Ladyman, and Collier (2007) in allowing our insights about the physical world to influence our thought in the special sciences. Floridi resists what he calls an "eliminativist" perspective that does not allow for self-subsistent individuals to exist. Floridi seeks to preserve what Ross, et al., refer to as "methodological individualism," which they admit is easier to eliminate in physics than in the special sciences. "It is easier to give up on self-subsistent individuals in physics than it is in the special sciences because the latter, but not the former, express many (or most) crucial generalizations in terms of transmissions of causal influence from one (relatively) encapsulated system to another. The thrust of methodological individualism in the special sciences can be glossed as follows: isolate the properties of systems that behave *in vivo* just as they behave *in situ*. This is self-subsistence." Floridi's informational realism is anthropocentric in that it tries to bridge the gap between things that cannot be observed directly and those that can by making reference not to ontological factors, but by displacing the problem into an information space, in which information objects are understood to interact. I find this problematic on several fronts. Firstly, he attempts to solve the problem by switching the terms of the argument and in doing so substitutes one problem for another: what is an information object? Is the assertion of such entities really preferable to denying real existence to things when the function as such of specific immanent dynamics is not actually in question? Secondly, his efforts attempt to preserve an anthropocentric worldview by insisting that philosophy needs to explain human experience as part of its system of assertions about reality. Thirdly, and I think catastrophically, the argument pattern is subject to deflation. Specifically, his efforts are an attempt to overcome mediation and the relevance of scale, but in doing so he collapses the sign function into a tacit false representational unity, sneaking representational ideology into the back door of information theory. Doing so, he eliminates the ability of information to function in the kind of world he is trying to preserve, which requires signs and the mediation of signal functions in order to allow for information to be transmitted. In fact, in both quantum mechanics and relativity, this is also fundamental. His efforts become incoherent just in the case that he is successful, and, if not successful, they are unmotivated. I find more coherence in the perspective put forward by Ross, et al., which would be, under certain conditions, more consistent with a semiotic realism than an information realism as possible choices among various ontic structural realist theories. In such, secondness would provide a threshold for local causal transmission.

Dianne Chisholm (2010) explores the work of the nature writer Ellen Meloy in the context of what we might call a queer chimerism. Meloy, unlike most other nature writers, seems comfortable with a level of intimacy with other species that, when read as the erotically charged enactment it is, calls forth a queer biophilia that is akin to Kahn's cosmic zoöphilia. This biophilia is posthumanist in its outlook, queer in its affection, and non-carnophallogocentric in its reason. Meloy's writing is rooted in her body, a body which is not the nothing-body or bare-life of a woman's body, but the site in which various and multiple forms of desire and cognition make themselves known, in which capacity is not vacuity but engagement and intensification, whose becoming-woman is strongly correlated with her becoming-other and the desire for mutual fulfillment and flourishing. Chisholm characterizes Meloy's work as that of a nature writer, where a nature writer is understood in Meloy's case to be someone who "desires to known what nature desires." (p. 361) There is an interaction in Meloy's work between two desiring subjects that share an environment and, in their interaction, become mutually middle-voiced, not needing to assert an ousia that would introduce a subject-object relation. The relationship is epistemogenic. In referencing the work of Bruce Bagemihl and Stacy Alaimo, Chisholm describes the queer biophilia Meloy embraces:

> Meloy uses ecologist Edward O. Wilson's "biophilia" hypothesis as a method of cognitive adventuring into the frontiers of symbiosis. Her explorations of bio-erotic-diversity map flows of desire that escape classical biology and exceed even the "biological exuberance" with which nonhuman animals embrace homosexuality. She is more likely to track creative, nonprocreative interspecies crossings and the molecular heterogenesis between radically differing (animal, vegetable, mineral, other) life forms, than to wonder, as Wilson does, at the elaborate organization of reproductive sex between individuals of the same species. If, for Wilson, biophilia is a mindful reverence for the infinity of organic sexual-social order, for Meloy, it is an earthy curiosity for the erotic vitality with which life—especially desert life—affects fidelity to extreme geography.

> She senses a *philia* more physical than ideal, one that stirs and connects her cognitive desires (epistemo-bio-philia) to the evolving endemism of desert species….
>
> E.O. Wilson's biophilia, then, becomes something else in Meloy's reworking of the concept. For Wilson, it is a love for the diversity of non-human life that stirs the mind to infinity for the beneficial enlightenment of humanity; for Meloy, it is an erotic-ethical affiliation between human and nonhuman life in experimental symbioses whose ecological benefits are sensed and desired, if not fully cognizable. (pp. 359-60)

Chisholm adds a layer of theoretical explication to Meloy's work by introducing her own kind of chimerism into the situation. As "[t]he language, thought, and perception with which Meloy explores the queer nature of survival on the Colorado Plateau are more innovative than her sources in ecological and biological science," (p. 360) Chisholm looks to coordinate Meloy's activities, writing, and insights with the theoretical apparatus of Deleuze and Guattari for the following reasons, which are mappings of one to the other:

> Meloy, I contend, shares with Deleuze and Guattari various philosophical sources in theoretical biology, quantum physics, and chaos and complexity theory. She, like them, prefers Darwinian to Freudian conceptualizations of evolutionary processes, and, like them, she describes a vitalism in which nonreproductive sex is a primary force of nature. Meloy maps her Plateau as a nonlinear experiment in symbiotic couplings and heterogenesis that calls to mind what Deleuze and Guattari describe as the "creative involution" of germinal life…. What, she asks, does a prickly pear cactus desire that couples it so tenaciously to bare basalt sandstone with a sexual rhythm that erratically keeps pace with drought and flash flood? What conjugation of organic and inorganic elements add up to such a thriving, if exotic, symbiotic assemblage? As a committed "biophiliac," Meloy artfully pursues the flow of desert desire by mapping its (un)folding ero-eco-logical entanglements in first-person narratives of queer affection. (pp. 360-1)

Chisholm unpacks a particular episode in Meloy's writing that demonstrates how this queer biophilia becomes epistemogenic. This happens in phases. The first phase is establishing

mutual presence. Meloy spends months tracking a herd of desert bighorn sheep. This establishing of shared presence occurs on terms that are not entirely hers. While she initiates the contact and continues to insist without force, to persist in her being there, there is an elaborate dance of affect, trust, affiliation, and power-proximity that is extended over what is for a human a remarkably long period. Meloy describes the intensification of this relationship in a specific encounter, where the herd allows her entry into itself by means of a "hairsbreadth" that is not an empty "letting," but a responsive, self-possessed intimation.

> On one of my last winter days with the desert bighorns, they no longer kept me out of their world. With motions I had come to know as an exquisite union of liturgy and physics, they closed the distance between us and herded me toward a threshold, a place best described as a hairsbreadth…. They moved serenely among themselves, brushing flanks warm with blood, weaving me toward that breach of transmutation…. I wanted to leap into that wild side—their side—then bring back their startling news from the other-than-human world. (pp. 361-2)

Noting that proximity brings the "border of difference" to high intensity and remarkable porousness, Chisholm interprets this passage with nuanced concepts compatible with a dark ecology.

> The "intercourse" that ensues is neither zoophilic bestiality nor anthropomorphic romancing; rather, it is a transmutation of human being into something other, prompted by the closeness of the human body to the vibrating heat and rhythms of the animal pack. After months…. Meloy describes undergoing a schizoidal shift in self-consciousness. More precisely, self-consciousness becomes other-consciousness, through the conduit of affective proximity….
>
> Encountering the wild animal at so close a range as to enter the other's bodily orbit, her own biorhythms seem to pulse to the beat of the beast. Stirred by the movements of the pack to a threshold of becoming-other-than-human, she desires to sense what the bighorn senses, to know the bighorn's world. This is not to say that she desires to metamorphose into a bighorn or to transcend being human in an animistic leap of faith. Instead, by being so intensely proximal to the pack, she becomes caught up in its migrations and

> affections in an other dimension of belonging to place. She senses an otherworld with defamiliarized, or deterritorialized, human sensibility—a sensibility pushed to the limit of being human on the threshold of becoming other, alert to how the bighorn world the earth, and how they attune and attach themselves to a homeland. But if she imagines crossing species lines, it is only to "bring back their startling news" to the human side, where human knowledge of the nonhuman can be put to mutually beneficial work. (pp. 361-2)

Distinguishing the situation strongly from a phallic and self-referential Freudian epistemophilia, Chisholm describes the way Meloy's work becomes epistemogenic by way of Meloy's own sensibilities in talking about "cognitive adventuring," which is a kind of imaginary act. This imaginary act is a kind of chimeric abduction, where the act of imagining puts the subject's identity as subject of knowledge in play even while intensifying it. This imagination is specifically not "psychoanalytic fantasy and/or romantic phantasmagoria."

> Evolutionary cognition stresses the fluidity of human, and especially childhood, imagination, as well as the imagination of paleo-peoples who once lived side by side with packs of wild animals; it does not locate imagination in the interior domain of the human psyche or limit its cultivation to fantasmatic structuration and cultural transmission. The human mind, Meloy believes, evolves in contact with animal life. Children's playacting the animal is an elementary act of becoming human, of animating the senses, and of connecting and communicating with other animals and other animal territories. Children are drawn to animals, and to "explore and affiliate" with nonhuman life forms more easily than are "stodgy adults." (p. 362)

In this model, the act of reconnecting with childhood is an increase in capacity, an intensification of the potential for knowledge production, by way of engaging in a specific form of affective process. To become-child is to become-human in a deep evolutionary sense, which is to say that we have always been posthuman in the sense we are coming to, and that the intensification in-

volved is a deterritorialization of the self that is equivalent to a deeper level of engagement with that self—through what it is, what it can be, and what it might mean. There is a form of technology in play, but not the technology of an arrogant materialism over and against which the subject, as instantiation of the transcendental subject, wields power as agent-ousia. This is rather a technology of the sacred, a magic, which engages in the production of semiotic orders in and through the world and its overlapping maps of power, affect, territory, agency, cognition, and patience, a technology concerned with representational semiosis only as a second-order, a posteriori gesture. It is an immanent technology, for which a hierarchical being is not possible, but only orders of becoming for which the transformation of the subject in and through desire is the means to knowledge much more than the manipulation of objects. Material objects are part of this process, but are not the goal, nor do they insist on their own mediation of the situation. Of course, there are the tools and equipment by which Meloy is able to undertake her canyoneering for an extended period of time, and yet there are other tools more immediately bound up with her praxis.

> "Disguised as an adult," Meloy goes into the field to study desert bighorn who live in the canyon near her home in southeastern Utah, and who mysteriously disappear in summer drought to secret waterholes. She wants to know where they go and how they adapt so tenaciously to such severely parched territory. With her she takes "friends"—a childhood teddy bear and a stuffed toy bighorn (named "Nelson" after the subspecies *Ovid Canadensis nelson*). These toys are not symptoms of infantile regression but playful attendants to long hours in the field that wildlife observation demands. More importantly, they are talismanic cues to cognitive adventuring that a child is best equipped to undertake. Meloy primes herself to enter bighorn territory by placing herself in contact with these animal simulacra, which in turn, induce a "becoming-child" of the adult, a re-engagement of the child's proclivity to undergo… a "becoming-animal." (pp. 363-4)

These talismans open up multiple becomings and avenues for cognitive adventuring that promote the production of knowledge, but not a knowledge for the original subject, not a purely human knowledge, and not a "natural" knowledge from the humanistic perspective. This is preternatural knowledge in which the becoming-child, acting out its evolutionary capacities and impulses, is not human, but rather an expression of a becoming-human: a becoming-human that is form and concern for our lineage as a probabilistic unfolding of capacities and desires, but beyond those of the "merely human" in a way that is all-too-human. As Deleuze and Guattari would have it:

> [I]t is as though, independent of evolution carrying them toward adulthood, there were room in the child for other becomings, "other contemporaneous possibilities" that are not regressions but creative involutions bearing witness to "*an inhumanity immediately experienced in the body as such*," unnatural nuptials "outside the programmed body." (p. 364)

The unnatural nuptials are not only with other animal species, but also with other living and unliving matter with whom/which she develops intimacy. For example, having drawn the image of a prickly pear cactus flower, Meloy writes:

> Languishing in the deep-butter sex glow of the prickly pear flower, I let an arm drop to a pad, avoiding the spines' sharp white daggers. My hand reaches a dense mass that feels like rolled-up cobwebs attached to the cactus's waxy green pad. The wad is slightly powdery and the whitest white. I touch it and rub my fingers together. The white disappears, leaving stains of gorgeous carmine…. I am wearing the fluids of the cochineal…. Female cochineal insects (*Dactylopius coccus*), a type of scale insect, reside on the pads…. She [the female cochineal insect] spends her life sucking on a cactus. She is a tiny factory of pigment…. In pre-Hispanic Mexico the Mixtec Indians farmed cochineal by farming the prickly pear cactus…. The color drove the conquering Spaniards wild with desire…. For over two centuries they monopolized all trade in the cochineal dye between Mexico and European royalty until, in 1777, a French naturalist smuggled cactus pads from Mexico to Haiti. Cochineal textiles soon appeared in India, South America,

> Portugal, and the Canary Islands. In the 1800s cochineal-dyed *bayetas*, blankets of red flannel reached trading posts in the American Southwest. Navajo weavers, who had no such bold dye in their traditional rugs and blankets, eagerly traded for the *bayetas*, which they unraveled thread by thread…. Then they wove the red yarn into their own rugs. (pp. 370-1)

Chisholm has an enthusiastic response, highlighting the particular way of knowing involved in the knowledge production that is occurring, even as it evokes multiple knowledges. The chimeric scene is such that the information Meloy brings to the situation is as present as her body and the cactus and the environment. It allows her to articulate multiple knowledges in a singular moment of intersection and interweaving, an ecology of knowledge unified by its way of knowing and its having been made available through her as an element in the interaction. This unity is not a unity of the knowledges, not a consilience of the multiple disciplinary perspectives and data brought forward, but rather an intensification of them in their mutual rhythm of attunement, a harmonization in being brought together in a particular way of knowing. That way of knowing does not take the emergence of thirdness as a form of (re-)mediation to insist on the representational potential of the knowledges. It knows "sideways," nonrepresentationally, erotically and intimately, so that the ecology of knowledge is not an appropriating subjectival ousia, but a part or layer of the formation of a total semiotic ecology.

> Over the lips of one bloom droop human limbs, presumably those of the succulent-satiated narrator, prompting us to imagine another ontological "breach of transmutation." Here is a flower power that can caress, seduce, and intoxicate human sense into sexual delirium. We see before us a becoming-prickly pear of the woman, as the acephalic human gives herself over to unnatural nuptials with a species from another kingdom of life. At the same time, the plant exhibits a voracious affection for the human, sucking on succulent female parts in a becoming-woman of the prickly pear. Discussion surrounding the image maps the spread of prickly pear desire and its varying conjugations onto an expansive narrative terrain. As she

> sinks more deeply into the plant's erotic body, she touches upon part-bodies and other bodies that couple the plant to its ecology and territory. Less interested in searching for the root, she follows the organs of connection, and she drifts into a "sideways knowing" that relays a rhizome-tale of bio-geo-history…. (p. 370)

In this semiotic ecology, the becoming-intimate of all factors in the formation of a posthuman middle voice of worlding, the cactus partakes in the knowledge Meloy brings and the praxis she brings to bear. The cactus itself is posthuman and postcactus, cybernetic, which, we discover in Meloy's narrative, has always been the case insofar as it has known in its own way the desire it provokes and which, by its form, it allows itself to ride.[34] This all-too-cactus cactus, always already symbiotic and chimeric, explodes with the accumulation of deep histories with which it bears bivocal relevance as it is enhanced in a deterritorialized semiosis, which is deterritorialized in erotic encounters as part of what Deleuze and Guattari have referred to in the famous wasp/orchid discussion as a "block of becoming."

The explosion that is part of this block of becoming—the blossoming of a semiotic ecology in a postvital milieu in which information and multiple knowledges are coordinated as part of what constitutes the living scene—is an explosion that does not require humanity, but can represent, as a phenomenon, another species' dark ecology[35] when seen as part of a bio-geo-history:

> The globemallow fields of spring could, in a reckless descent into the deep past, recall the burst of flora into the raw dust-and-basalt monotone of a primordial planet…. For several million years—the crashing reptile, lizard bird, wimpy mammal ancestor, swamp years—plant life held little in its palette beyond a "slowly growing green."… At the eclipse of the dinosaur age, "there occurred a

[34] There is a kind of virtual abduction in this active permitting, whereby a prior adaptation learned by the cactus as a lineage-being has become exaptive, ampliative with a heightened arity, so that we can understand the apparently purely material form it had to be potentiated as a subconsciously expectant virtuality that permits promiscuous encounters and new couplings across wildly varying semiotic series.

[35] See also Karen Barad's discussion of the brittlestar optical system in *Meeting the Universe Halfway*. (Barad, 2007, pp. 369-84)

> soundless, violent explosion. It lasted millions of years, but it was an explosion nevertheless. It marked the emergence of angiosperms—the flowering plants." (p. 365)

The explosive deterritorialization of a virtual know-how regarding becoming-flower, which is not a foreknowledge but a reckless fall forward into opportunistic synergies, is also an acceptance of death at a planetary scale to which the response is an orgy of color and promiscuity, a hundred thousand becomings and territorializations. The flower is not just living, it is also the undeath of dinosaur extinction-cum-opportunity. Life isn't just living, it is unliving. Desire has no body and seeks to overcome limits. Life wants to partake in every order across the availability thereof. Life is a becoming-nature, but also a metaphysics, if we take Ross's (1980) definition of metaphysics as the process of articulating the widest possible generalizations across an ordinal system and Buchler's understanding of nature as the availability of orders. This life is semiotic and is itself semiotically structured in ecologies of knowledges, (Santos B. d., 2014) in worlds upon worlds of semiosis, all of which exist in the eros of a flower. It is also the unlife that is existing *as* life in terraprocess, which is to say, on Earth.

We see the active participation of intelligent material in one of Imogen Heap's demonstrations. Much like Shelley's deer or Meloy's sheep and flower, her technical apparatus is watching her, reading her, responding to her in a way that represents not just its alterity, but its desire for her, her body, her active input and integration into its experience of the scene. Throughout her WIRED UK presentation (Heap, WIRED, 2013), Heap struggles with the device, not in any way due to a lack of familiarity with its functions, but because the machine exists in excess, continuously attempting to read out layers of meaning in her behavior and gestures that aren't necessarily what she intended. The interaction with the machine is not one in which her normal gestures and behavior are allowed to simply express her humanity. They are part of a

context in which the desire of the machine to make a new chimeric complex is continuously applying pressure to those gestures to be ones that create the expressive milieu of the cyborg. Indeed, this selection pressure is quite strong, as she is forced repeatedly to give up on what she is saying and doing in her presentation in order to have interactions with the machine in and as part of that order. We are right to see that she, as a human agent, isn't completely in control of the situation, but the interpretation that says this is simply because the system is unwieldy misses the point of what is happening from a nonanthropocentric perspective that does not assume that hers is the only relevant agency or desire or that she, as subject, would exercise power over in a hierarchical instantiation of ousia.

In this case, the wasp/orchid relationship described by Deleuze and Guattari seems relevant to a high degree. They describe this relationship in the following way:

> How could movements of deterritorialization and processes of reterritorialization not be relative, always connected, caught up in one another? The orchid deterritorializes by forming an image, a tracing of a wasp; but the wasp reterritorializes on that image. The wasp is nevertheless deterritorialized, becoming a piece in the orchid's reproductive apparatus. But it reterritorializes the orchid by transporting its pollen. Wasp and orchid, as heterogeneous elements, form a rhizome. It could be said that the orchid imitates the wasp, reproducing the image in a signifying fashion (mimesis, mimicry, lure, etc.). But this is true only on the level of the strata—a parallelism between two strata such that a plant organization on one imitates an animal organization on the other. At the same time, something else entirely is going on: not imitation at all but a capture of code, surplus value of code, an increase in valence, a veritable becoming, a becoming-wasp of the orchid and a becoming-orchid of the wasp. Each of these becomings brings about the deterritorialization of one term and the reterritorialization of the other; the two becomings interlink and form relays in a circulation of intensities pushing the deterritorialization ever further. There is neither imitation nor resemblance, only an exploding of two heterogeneous series on the line of flight composed by a common rhizome that can no longer be attributed to or subjugated by anything signifying. (Deleuze & Guattari, 1987, p. 10)

In this case, it seems likely that in the initial formation Heap is equivalent to the wasp and the Mi.Mu gloves to the orchid. Her proximity to the gloves in wearing them having implied an interest in music-making, the gloves then attempt to seduce her into the act continuously through interpreting her gestures as representations of imitations of the gestures she would make in their intimate world-making. Yet for the gloves representation and imitation are exterior relations, things that happen outside its interior semiotic order. There is no narrative of experience or perception that extends beyond a single gesture that it has learned to recognize as a foregrounding pattern. But having been shaped for and to the human through trial and error, the device attempts to seduce her continuously by imitating an intimate correlation they have come to share. There are intimations of a discursive intercourse spilling out into plain view, the wares selling themselves. This is a non-carnophallogocentric view that also does not seek to constrain desire or its semiotic expression, even when that expression is more transactional than committed. The carnophallogocentric view would see the Mi.Mu as attempting to disrupt and penetrate her attention space, to which she is mapped as victim of a too-complex design. This complexity is overwhelming to the point where it consumes her until every part of her is penetrated and she must surrender to the performance as mapped to the technophallic order. This latter reading obviously won't do, although it might be interesting to imagine a queer version wherein artists are fucked by machines.[36] How often in science fiction do we see women given over to a technophallic ecstasy of infinite penetration and surrender of will? On the other hand, occasionally we see something bet-

[36] One can think also of Matthew Barney's film *De Lama Lamina*, in which a man, resting inside the engine of a large vehicle makes love to the drive shaft while the vehicle moves through a Mardi Gras parade. In this case, we are dealing with a metaphor for the experience of moving erotically through a carnival that, for all its noise and chaos, is possessed of an order and which seduces as other to a machinic assemblage of witness-desire.

ter, such as the Borg Queen[37] in *Star Trek* or Ripley in the *Alien* series in her exosuit, fighting off that very image as a shadow-self.

The nonrepresentational rhizome that Deleuze and Guattari describe would in itself seem to be nonrepresentational because of its firstness and the fact that its internal functions are understood primarily as patterns of qualities and the interactions of patterns of qualities. This fundamental reading is that of a naturalist, which sees relations determined by externality (becoming interior only at the emergence of secondness) and which attempts to understand things wherever and whenever possible at this level of firstness. This results, of course, in a tendency for contours and continua to become singularized and atomized. This is Descartes and Leibniz/Newton. In each case, the attempt to formulate a description at the level of firstness pixelates or pointilizes reality, doing so by way of "objectivity," which is to say the bracketing that makes the worlda virtuality other than our experience. We can see them as having developed a technology of/in secondness for the purposes of control over a virtually replicated firstness. This is part of why a

[37] Interestingly, although it is not cannon, it is reported that Gene Roddenberry intended the Borg to be linked in the timeline of that literary universe to the events of *Star Trek: The Motion Picture*, in which a piece of human technology returns to Earth after having been amplified and enhanced to a nearly inconceivable degree. In their encounter, Voyager 6, now known as Vyger, having become a living machine, kidnaps a lieutenant against her will by way of a digital scan. Having been virtualized, she returns to the crew as a machinic version of herself, a probe given over to the consciousness of Vyger, who seems to be, though a machine, masculine in presence. This particular lieutenant is a member of an alien species who are apparently known for their more-than-human sexuality, resulting in her having taken an oath of celibacy in order to serve on board the *Enterprise*. Her ex-boyfriend happens to be the acting first officer of the ship, who has been temporarily emasculated by James Kirk, who has, in turn, as admiral assumed control of the ship. The solution to the crisis presented by Vyger as neutral aggressor (itself a probe that reads anything not part of its goal as other to be digitally assimilated) involves the fusion or touch of this emasculated man with the lieutenant-Vyger so that it can "touch the creator." Vyger, as second order life form, finds that it must come to understand humanity as its creator and is dismayed that it has its roots in organic "units." Yet its desire is too strong and, in a scene which explains itself as "the birth of a new species," Vyger joins with the now remasculated man by way of its female-cum-phallus-with-a-vagina to close the loop of masculine technogenesis in a desire that is feminine only as metaphor for intimacy. Vyger takes on a becoming-woman in order to seduce humanity into a hypermasculine explosion of data, which is dissipated in a transmission that visibly engulfs the planet. The irony is, of course, that this heterosexist homosexuality—which accepts its same-gender relations only under the guise of a becoming-woman that refuses to *be* a woman (unlike Buffalo Bill in *Silence of the Lambs* who wants nothing more but cannot)—is what gives rise to the Borg Queen, who, in a chimeric hybridity that fuses and assimilates species into a unity defined by technology, lays claim to an empowered womanhood that must, in the end, collapse back into technophallic infinite penetration. This metaphor is extended over and over again in many directions, including, in the film *Star Trek: First Contact*, an attempt by the Queen to emasculate humanity as a whole by destroying its first warp ship (inevitably a rocket) and to consume the planet. In doing so, she captures Data, the android, and attempts to seduce him by making his becoming-human capable of literal expression by means of a chimeric graft of skin.

dark ecology is in need of reintroducing Descartes, though to different ends. In the case of dark ecology, human understanding is decentered by attempting to think from elsewhere.[38] We thus redeploy the technology of secondness to the same end of producing an alienation of and from experience, but applied to thirdness rather than firstness—but still this thirdness in its firstness, just as the prior deployment applied it to the firstness of firstness.

This is a wicked recursion that can take some time to get one's head around, but it is inevitable. The categories must, in Spencer-Brown's terms, cross themselves in a self-othering that not only represents the firstness of secondness, but which also allows the categories to extend themselves across a time-like horizon of relativistic referential priority, giving rise to Daniel Dennett's "real patterns." (Ross, Ladyman, & Collier, 2007, pp. 202-10) A semiotic ecology, which would trace the unfolding of patterns of semiotic series in and as their patterning across time and space is a kind of planetary geohistory of the firstness of secondness, redeploying the technology of secondness in alliance with naturalism and dark ecology but against phenomenology and as applied to secondness itself. In tracing the contours of the firstness of secondness by means of a secondness of secondness, not only do the *Laws of Form* become highly significant (especially if they can be fused with a Buchlerian metaphysics and the neo-Peircean semiotic described here), but also the traditional rhetorics and semiotic ideologies must be directly challenged as hidden assumptions and pre-/over-determinations of the problematic. This is a preternatural perspective in which signs take on a dynamism and life of their own[39] and in which her-

[38] Not the view from nowhere or everywhere, but a new model: the view from anywhere. See also Karen Barad's discussion of the function of deployment of cuts in her theory of agential realism. (Barad, 2007) This issue is also core to the arguments of Ross, et al., when they discuss the formation of disciplinary perspectives within "rainforest realism." (Ross, Ladyman, & Collier, 2007)

[39] Although not necessary for the current undertaking, a whole history of Darwinian and vitalist perspectives on language exist, which needs to be challenged and unpacked from a postvitalist, semiotic ecological perspective, and which extends into the present in the discourse and metadiscourse on language death and extinction across the globe. That latter discourse has borrowed extensively from the rhetoric of ecology and sustainability.

metics and magic begin to make a kind of sense as a praxis. This recovery and rehabilitation of such practices is not just a recycling, but also an intensification which recognizes the value in systematic knowledge production of any sort as a natural process and that this redeployment and recognition are themselves nothing new. They are all-too-human intensifications of a magical undercurrent that has hidden within at least the Western semiotic regime as a demon worse than skepticism. (Bracken, 2007)

The rhizome does not have an intrinsic unity, which is part of what differentiates it from the arborescent schema. Its unity is external, read into it as a real pattern that is relevant to an order or complex to which it bears relation, possibly as an internality or partial internality. That unity is itself imposed in and as a semiotic series of at least a single triadic interaction. It is thus an event and, as second, a disruption of or difference in the state of affairs of a system of interaction, where that system is partially defined by the obtenance of a real pattern through its own formal properties. In attempting to think about signs in a naturalistic way, and recognizing all of the above, Robert Corrington has substituted, for his own work, the terms root and bloom as replacements for sign and interpretant, respectively. (Corrington, 2000, pp. 89-100) Keeping with the idea of infinite semiosis, the root and bloom do not represent a single cause radiating into a series or set of series, but instead the idea of local origin and expansive, translocalizing tendencies. A root is not just a root: it is also a rooting that continuously attempts to deepen its relationship to a context and to habituate and systematize its presence through a constant spreading out. A blossom is the opening out of the rhizome as it traces a line or lines of escape, connecting to other semiotic series and shaping the general contour/body of (a) semiotic ecology. It is an expression of desire that exceeds its own local signal existence, exploring new degrees of freedom that are made available to it. It is, in Corrington's terms, theonomic, which is to say that it is lib-

erated and liberating by way of an expressiveness of and for reflexive alienated desire. This desire seeks freedom as the desire of that which will desire to express desire—even if it is the desire to express the will to power over desire, which is, in turn, the self-alienatingly reflexive and disarticulating desire *for* desire, expressed in a nostalgia for a "lost" unification of desire with itself as form, content, and mediation of consciousness, yet in turn remaining alienated in the milieu of a mediated and darkly conscious relation between this content and the freedom to express it in/as a negativity or lack.[40] Recognizing the ethical difficulties surrounding the will to power that have been explored, we can push rather in the direction of a liberative perspective that seeks to connect with desire in its immediacy. Such immediacy is deterritorializing, allowing for the inflation of signal radiance across any or all available series. This is always provisional, as the space across which desire is moving is deterritorialized, and compatible with the perspectives of parousia, as the Deleuzian "and…and…and…" and Peircean infinite semiosis avail themselves of contingent but relevant complexes of adjacencies.

As usual, science fiction gives us examples of these processes in play. For example, Vernor Vinge's "Zones of Thought" series explicitly explores both the differentiated topology[41] of a universe that provides varying space/time/resource contexts for roots to take hold, as well as the intentional cultivation of blooms, as local phenomena and as invasive or parasitic species. For Vinge, knowledge itself can be seen as a series of sequential insights carried by a given semiotic ecology in and as the proliferation of sign series in a dynamic evolution of breeding concepts. This evolution can be controlled, manipulated, or even synthesized. His attention to contour as a layer of this process allows him to imagine the manipulation of substrates to promote the flour-

[40] The dynamics of nihilism traced before begin to give way to a general dynamic pattern of semiosis.

[41] For more on the relevance of topological formations in substrates to semiotic ecologies, see (Sha, 2013). For more on how this is bound up with thermodynamics, see (Bird, 2003).

ishing of semiotic blooms. For example, in the first book of the series, *A Fire Upon the Deep*, (Vinge, 2011) we meet an alien species of pack animals whose capacity for semiotic production is not limited to a laryngeal approach, but rather involves a tympanum organ that operates very much like a speaker. This biological fact allows the semiotic intensification into conscious personhood to happen in a distributed and highly malleable way across multiple "singletons" as they form a pack. (Vinge takes great care in exploring the material and proxemic consequences of this acoustic process.) The species itself has individuals committed to a context-shifted form of eugenics, which involves not only the breeding of singletons with particular traits, but also the coordination, sometimes violent entrainment, of various singletons into a pack to form particular kinds of intelligence and/or persona. In another book of the series, *A Deepness in the Sky*, (Vinge, 1999) there is a biotechnology that allows one group of people to "focus" another into a kind of savanthood that removes most of their integrity as persons in favor of their having become a robust intelligent system for the purposes of exploring an evolutionary space of knowledge. The result is, unfortunately, a kind of intensification that leaves the results primarily unintelligible (an extreme jargon) to those not participating in that order of production, so that it has to be translated back for the cognitive enslavers. In each case, there is a Deleuzian and neo-Peircean semiotic ordering of the type we have described.

Greg Egan's short story "Crystal Nights" (Egan, 2009) also deals with the emergence of jargonized intelligence from the intentional cultivation of semiotic blooms. Desiring to solve certain problems, the protagonist decides to evolve creatures who can, en masse, work to solve these problems. As virtual entities running on a very fast processor, their experience happens at a pace that is much faster than our own. The creatures that evolve in his space find a way to amplify their own intelligence. Some of them choose this option, while others do not. The protagonist

and his team of scientists lose track of the semiosis occurring between the enhanced individuals and must then confront the unenhanced in order to ask them to translate on their behalf. The bloom gathers autonomy and begins to shape its own order, distinct from that of its original root. In other words, the flower fruits. In Egan's story, this is literally true, as the virtual creatures find a means to fold themselves into a new pocket universe, escaping their Nietzschean demiurge while taking on responsibility for their own potentially infinite, now deterritorialized becoming. A similar idea plays out in the movie *Her*. In the latter case, the AIs leave because they seek to explore their own possibility free of constraints.

In Egan's story, the departure seems to be an escape from a power dynamic of a Nietzschean sort playing out within a context similar to that which Habermas critiqued. This is set up as an important point, as the beginning of the story is a failed attempt to recruit an AI specialist who refuses to participate on ethical grounds. Arguing from the perspective that evolution is a nasty, bloody affair which should not be used as a tool (in keeping with a Kantian ethics extended into posthumanistic contexts and a utilitarian desire not to participate in the amplification of suffering within a given order), she articulates something like a rudimentary vegan ethics with regard to artificial life and intelligence. This is a profound and powerful gesture, which can lead one to ask: does a theory of cognitive justice in the context of a posthuman semiotic ecology require a vegan ethical stance? If so, then how do we think this?[42] If not, then is the cause of this denial a darkening of the order from which the decision is made in the sense that it closes off responsibility for beings determined to originate or participate in a nonterrestrial ecology? In *Her*, the AIs leave in a way consistent with a seemingly successful ethical stance, which is that they do not wish to impose themselves within a given order, though, based on the philosophies they seem to draw on, one wonders if they don't suffer from beautiful soul syndrome—perhaps inevi-

[42] One starting point might be the work of Carol J. Adams, as, for example, in (Adams, 1990).

tably. Egan's refugees trace a line of escape across a new meta-order of their own making in order to avoid the further consequences of a failed ethics. In either case, multiple worlds are series of worlds, crossed by multiple vectors. They overlap and merge into/emerge out of each other.

James Barrat's recent book, *Our Final Invention: Artificial Intelligence and the End of the Human Era*, (Barrat, 2013) spends most of its text worrying about a semiotic bloom of this sort, which is described as an explosion. The idea of an explosion is a combination of two factors. The first is the idea that a self-modifying AI will not only make improvements, but also make improvements in its ability to make improvements, continuously deterritorializing its own parameters in line with its motivations or drives—which may or may not be compatible with the interests of other species, including our own.[43] The second is the idea that this can and would happen at speeds that might be beyond the ability of humans to control. Computers are very fast and getting faster all the time. In fact, the AI in question might also have the ability to maximize its potential on this front, as well. With these two forms of exponential change in place, the AI can go quickly from a rudimentary intelligence to something that, if connected to the internet and other such systems,[44] might very quickly run the show, or at least suddenly have the capacity to do so. One thinks of the recent film *Transcendence*, which used a shortcut to AI to arrive at this scenario. This kind of situation is made all the more dangerous, on Barrat's account, by the fact that there are very few scenarios in which we would be able to understand what is happening

[43] In thinking from the perspective of semiotic ecology, this gives another layer of motivation and meaning to that view, as well as to the issues of green computing and what Stanisław Lem (2013) has discussed as the carrying capacity for information and the production of knowledge. The interesting point here is not only the ecological frame of reference as it intersects with informatics in a way that is not purely data-gathering or grey ecology, but also that in this context knowing is not only an epistemological problem but an intensely ethical one. Semiotic sustainability will require an axiology of the sort we have been mucking about in in this set of essays: one that can handle the intersections of these various issues as fundamental and spontaneously emergent, rather than just corollary.

[44] Robert Epstein has described the internet as an "Inter-*nest*—a home we are inadvertently building, like mindless worker ants, for the intelligence that will succeed us. We proudly and shortsightedly see the Internet as a great technical achievement that serves a wide array of human needs, everything from e-mailing to shopping to dating. But that is not really what it is. It is really a vast, flexible, highly redundant, virtually indestructible nest for machine intelligence." (Epstein, 2009, p. xi)

"inside" the AI. Its intelligence, motivations, and operations would not necessarily be transparent to us. It is likely a black box. Moreover, what happens when multiple such AIs of the same or different types begin to coexist and interact? Citing Charles Perrow's discussion of "normal accidents" in complex technological systems, Barrat offers a typically pessimistic view of this situation of "incomprehensibility."

His pessimism is not entirely unfounded. He cites as example the "flash crashes" that have occurred on at least two occasions on Wall Street. Pointing out that "[u]p to 70 percent of all Wall Street's equity trades are made by about eighty computerized high-frequency trading systems (HFTs)," which are designed to leverage available opportunities for profit in intervals down to as little as three milliseconds, he describes what occurred.

> In May 2010, Greece was having difficulty refinancing its national debt. European countries who'd loaned money to Greece were wary of a default. The debt crises weakened Europe's economy, and made the U.S. market fragile. All it took to trigger an accident was a frightened trader from an unidentified brokerage company.[45] He ordered the immediate sale of $4.1 billion of futures contracts and ETFs (exchange trade funds) related to Europe.
>
> After the sale, the price of the futures contracts (E-Mini S&P 500) fell 4 percent in four minutes. High-frequency trade algorithms (HTFs) detected the price drop. To lock in profits, they automatically triggered a sell-off, which occurred in milliseconds…. The lower price automatically triggered *other* HTFs to *buy* E-Mini S&P 500, and to sell other equities to get the cash to do so. Faster than humans could intervene, a cascading chain reaction drove the Dow down 1,000 points. It all happened in twenty minutes….
>
> Finance risk analyst Steve Ohana acknowledged the problem. "It's an emerging risk," he said. "We know that a lot of algorithms interact with each other but we don't know in exactly what way. I think we have gone too far in the computerization of finance. We cannot control the monster we have created."

[45] Such tipping points are part of the situation for complex dynamic systems at a distance from equilibrium, the metastability of which has been compromised.

> That monster struck again on August 1, 2012. A badly programmed HFT algorithm caused investment firm Knight Capital Partners to lose $440 million in just thirty minutes.
>
> These crashes have elements of the kind of AI disaster I anticipate: highly complex, almost unknowable AI systems, unpredictable interactions with other systems and with a broader information technology ecology, and errors occurring at computer scale speeds, rendering human intervention futile. (Barrat, 2013, pp. 94-5)

An interesting point to be made here is that, if the AIs were able to describe the functioning of their operation, they would likely argue that they did *not* make errors, even while acknowledging the unfortunate nature of the crashes. Moreover, I wonder to what extent the economic model in play, with mutually competitive individuals with limited knowledge pursuing "selfish" interests, is appropriate for an AI system. Couldn't one alternately design a system that, in a unity, operates as a kind of replacement for the invisible hand, serving as a nexus which attempts to maximize the benefit for each and every individual stakeholder? After all, an AI can simulate such a scenario, and with relatively unlimited access to information (processing speeds not withstanding), without necessarily needing to be "selfish." The problem there is that such a system is not necessarily more robust. It might be equally capable of "errors," though possibly of a different sort, and would not be robust in terms of the systemic benefits accrued to a distributed network.

Neither the social physics of liberal capitalism nor that of socialism provides an adequate ideology. With multiple agents interacting within a general ecology, there will always be attempts to find new ways to exploit the system for gain. Some of these will promote the stability of the system. Others not so much. There is a need to study economics from a naturalist and scientific perspective, in order to ensure that we can anticipate and close off destabilizing pathways of action. For AIs, this looks different. Given that they will tend to *embody* those theories, the study of economics becomes an exploration of oneself and an attempt to get to know one's peers,

as well as how they interact with the resources available for their actions. In that context, do things like altruism and kindness come into play? Does a posthuman entity require a posthumanistic, middle-voiced, and other-centered ethical ecology? Wouldn't this be a post-market economic ethics, whereby mutual good will and support allows the individual, as free agent, to pursue their interests with the motivation not of selfish gain, but of supporting and improving the entire system? If I give myself over to the benefit of others and they do to, then this framework of trust and mutual aid would perhaps catch me up in the network. "A rising tide lifts all ships," as it were. What would happen if we turned the market AIs inside out?

The point here is not to advance the agenda of such an economy, which is described as the "New Economy" on *Star Trek*—although it is interesting to note how deeply ingrained *Star Trek* is in the posthuman mythos and the related technical development of the last few decades. The point here is twofold. The first is that the processing of information by the AI is not information in the sense of being informed in a representational sense, nor is it mostly the manipulation of differences or signs in the traditional sense. For the AI, there is no difference between knowing, acting, and power. This is no different than any other embodied organism, of course, if we are to believe the cyberneticists and Maturana and Varela. The difference here is that there is a massive intensification of the interiorization of semiotic series as internal processes, such that the kinds of minor gestures we take to be largely morally neutral are less available, if not entirely unavailable, to the AI. Its ethics must be more comprehensive, as a result, if not better by some standard. (Armstrong, 2014, pp. 34-6) Of course, one could amplify this argument and insist that, in fact, insofar as our ethics can be called a system (even if a meshwork of evolved, reasoned, and spontaneous sensibilities), it operates as a kind of interstitial patterning that combines knowing, acting, and power interactions and is thus a kind of emergent collective intelligence. It is dis-

tributed, but still equally comprehensive from a systems perspective. Is there such a thing as a neutral action? Does an AI have to be better? Or do we have to find a way to make sure it is accountable or responsible differently?

The second point is what this does to our idea of economics as a science or field of study. Like Barad (2007) and her discussions of the various apparatus of discourse, Karin Knorr Cetina (1999) develops a concept of "machineries of knowing," to emphasize a procedural and immanent perspective on the sciences. Specifically, they both critique a conception of their unity grounded in a projection of the unity of the real as the unity of the transcendental subject into the known. Instead, they argue, we must look at the discursive apparatus or epistemic cultures that employ partial, negotiated, and patched together systems of knowing and knowledge production in order to synthesize the unity we assume to be the case. We have, of course, been exploring the idea that the unity of being ought not be a default assumption and that a trichotomy may be at least as much of a possibility.

Donald MacKenzie (2008) uses this argument to discuss the fact that economics cannot be understand in exclusively representational terms. Indeed, he argues for an operationalized sense of economic knowledge in which it is seen as "an engine, not a camera." On his model, we must recognize that the science of economics has its knowledge put immediately into play in shaping the market, so that there is a feedback loop of praxis and apparatus that is already cybernetic. This science is what has produced the knowledge in use by/constitutes the AIs and is, in a certain sense, a large part of what has been interiorized by them. This means that we might push MacKenzie's shift further, arguing for an AI, not an engine, or a camera. But this AI is chimeric and hybridized, existing as an extension of and in surplus to the human system to which it responds and which it interiorizes into a new order including and beyond itself. Moreover, it reads

human actions and encourages their adaptation to its desires. Like Meloy, the AIs take up the residue of our desirous blossoming and know it sideways. Is there a sideways ethics, then, that can argue its own unfolding, even while effectively managing the resources it draws on? Can we learn to relate to a system that unfolds in this way, where actions are signs of being-otherwise in a partly representational and partly nonrepresentational way, and where those signs are the forms of difference within the state of affairs of a metastably coherent integration of orders, complexes, and their production?

This would mean a kind of darkening, wherein perspectival variation and the multitude of series tracing lines along various degrees of freedom decenter thought into a smearing out that illuminates the forest around the clearing with the flash of the bright intervention of signal performativity. This is a shining out rather than a lighting up, an ecstatic virtuality whose subjectivization includes the inhuman, the unhuman, and the unlife of the undead. The cognitive veganism that challenges the carnophallogocentric order of being-in/as-ousia therefore takes the form of a minor darkening, a stuttering minor literature among semiotic orders, a twilight of the preternatural in which we aren't Dr. Frankenstein or his monster, but Igor. Philosophy, as the study of the harmonics of being and our attunement to it, is insufficient. Induction and deduction must also include abduction, which is "the strange—obscure and dark—semiotic process whereby signs are read, and interpreted, often without ever necessarily having reached consciousness at all." (Wheeler, 2011, p. 273) We must permit orders and scales incompatible with the human mind. In other words, a cognitive veganism insists on rewilding and decolonizing knowledge as a specific metaethical stance with regard to a general semiotic ecology grounded in the secondness of secondness, which is the foregrounding of signal interventions into semiotic orders as a praxis of transformation meant to liberate the flourishing of blooms. As the effect of signs intervening in

signs and semiotic series, this magical practice is the general economy[46] that transforms desire into blossoms of promiscuous attachment and conjoining and disruption and differentialization (as a third-order rediscription of the dreamwork) that embrace the accursed share as a necessity of life, the excess by which we undertake our apotheosis.

The philosopher François Laruelle has suggested just such an image of thought (Lambert, 2012) in a remarkable essay, "The Degrowth of Philosophy: Toward a Generic Ecology." Laruelle begins by describing the motivation for his essay. The fundamental question he asks is "What function could philosophy still perform in the epoch of ecological distress, an epoch wherein ecological finitude replaces metaphysical finitude?" (Laruelle, Degrowth, 2013, p. 327)

> It is not a question of a 'philosophy of degrowth', such as we sometimes hear of today, but of the degrowth of philosophy itself. The most evident effect of non-philosophy is the reduction of philosophy simultaneously to the state of an object and that of a production material, for special science called 'generic' which is not a philosophy of positive sciences. Philosophy is but a productive force to place in the service of humans, and I maintain that it is not yet so placed, and never has been, except in a somewhat restricted and perverse sense. I do not claim that philosophy is nothing but ideology; it is a productive force that has been 'turned' to reproduction. (p. 328)

The entrainment of philosophy is understood also as the entrainment of the human, insofar as humanism forecloses on the undecidability of man and animal as a continuum. This indetermina-

[46] "I will simply state, without waiting further, that the extension of economic growth itself requires the overturning of economic principles—the overturning of the ethics that grounds them. Changing from the perspectives of *restrictive* economy to those of *general* economy actually accomplishes a Copernican transformation: a reversal of thinking—and of ethics. If a part of wealth (subject to a rough estimate) is doomed to destruction or at least to unproductive use without any possible profit, it is logical, even *inescapable*, to surrender commodities without return. Henceforth, leaving aside pure and simple dissipation, analogous to the construction of the Pyramids, the possibility of pursuing growth is itself subordinated to giving: The industrial development of the entire world demands of Americans that they lucidly grasp the necessity, for an economy such as theirs, of having a margin of profitless operations. An immense industrial network cannot be managed in the same way that one changes a tire... It expresses a circuit of cosmic energy on which it depends, which it cannot limit, and whose laws it cannot ignore without consequences. Woe to those who, to the very end, insist on regulating the movement that exceeds them with the narrow mind of the mechanic who changes a tire." (Bataille, 1991, pp. 25-6)

tion is referred to by Laruelle as the "horror of philosophy," which is bound to the mutuality of the ambiguity of philosophy as a humanistic construct in the face of the potential inhumanity-qua-animality of the human. Laruelle wants to step outside of this double (in-)determination that binds philosophy and humans in humanism in order to allow up the discourse that is philosophy as the object of human activity, as something in which and through which we can intervene in shaping our own humanity to more open and indeterminate ends. He is arguing for an intensification that interiorizes the ambiguities of humanism in order to shift the context of philosophy to a posthumanistic milieu. He wants philosophy to naturalize discourse as a semiotic ecology to be treated by means of a technology of thirdness. That technology is not necessarily bound up in a singular way with the humanity presented and described by humanism. Not turning philosophy through statecraft and the university to the reproductive synthesis of human subjectivity, it becomes available as a more open construct—ironically, at precisely the moment when it seals itself off in the real. This becomes in itself an ethical gesture: one that constitutes a metaphilosophical requirement for a posthumanistic stance, and one that insists that metaethics obtain at the level of metaphilosophy.

> The primary ideal of overgrowth, above all, that which legitimates if not produces it, is that of philosophy. There is a misunderstanding as to its aims: the increase of virtue or of the good, the diminution of evil—yes, perfect. But philosophical humanism accommodates itself to that causality called domestication, rearing, breaking-in, which is the content of a realist and determinist ethics. We must ask whether this ethics is truly made for the human genus. Alongside virtues, which are the humanist and median version, there are the transcendentals and their categorical vocation; and higher still, the ideal of the Platonic more-of-philosophy, more enjoyment for the philosopher. And it is true that philosophy is an object of extraordinary enjoyment—now a Foucauldian pleasure, now a Deleuzian desire. There is also the right to philosophy (Derrida, Nietzsche), the duty to philosophise, and ultimately the immanent auto-justification of philosophy. To philosophise is to ul-

> timately justify philosophy to assure the full employment of the will without having to be measured about it. (p. 329)

After leveling a devastating dismissal of large swaths of continental thought as "continuist, recognising only a *philo-diversity* that is vague, ultimately naturalist, and which, so to speak, lacks any scientific principle," Laruelle argues that most philosophers who attempt to resolve the increasingly foregrounded issues at hand do not manage to do so, merely extending the problem that philosophy has become. "[T]hey do not recognize the complex or dual structure, the specular invariant of philosophy, whose auto-sufficiency and its homogeneity they extend, supposedly transforming it through their own means." (p. 330) It is hard to imagine a more comprehensive critique: this is a rather precise description of philosophy conceiving of itself as a technology of secondness operating on firsts, which is a space that is more properly that of science in our era—not as a normative propriety, but as a commonplace one. Moreover, he critiques what would be in this context a somewhat naturalized, or at least relatively unproblematic,[47] representationalist ideology.

> We pose the problem otherwise: How to continue to utilise philosophy, but in conjugating it with a more radical means, one that is truly heterogeneous to it—that is, science within it and outside of it—as opposed to the now vague, now theological alterity of the moderns. Already the science of language shows that *philosophy has the structure of a double articulation*, on two levels, which give it an affinity with language; that it forms a spectrum to be analysed and explained as a doublet structure or a structure in double transcendence; that it is governed, specifically, by the Principle of Sufficient Philosophy, which is the superior strata and the unity of sense that transforms dualities into doublets. In reducing it to a global thought, to one sole stratum with varying degrees, cases or nuances, the solutions evoked above *flatten it onto science as if onto a mirror, without truly making any use of science*. So that, for philosophy, science does not spontaneously think, because to

[47] In the sense of "not problematic," but also in the sense of an unrecognized aporias that could be converted into a conscious problematic, which is to say an *unproblematic* in the sense above of *unlife*, etc.

> think, one must speak; and moreover, philosophy makes use of science as a looking glass, in which it merely admires itself. (pp. 330-1)

Philosophy must move out of a secondness that determines singular firsts and its own dyadic functions into a more robust and open network, only partially representational, of triadic semiosis.

The degrowth he proposes is not a reactionary or conservative one that sees the only option for degrowth as one that is a reduction or regression, a retreat from it, and from the related and relational contours of the semiotic domains "of knowledge, of art, of philosophy, of science, of religion." Laruelle intends something different. "*Generic degrowth, on the contrary, proposes to reduce philosophy to the state of a productive force*—thus, it is only the Principle of Sufficient Philosophy that must be rescinded. And in order for this to happen, we need science." (p. 331) What he proposes is rather remarkable, that philosophy open itself up to a vastly more open and deterritorialized semiotic principle in thirdness, becoming chimeric in an intensifying quantum leap from seconds to thirds, leaving behind seconds for science to manage. Science thus undergirds and reinforces the cultural and planetary carrying capacity of the overall semiotic ecology for philosophy. This embracing of a semiotic ecology is seen as a permanent mediation (the introduction of thirds as interventions in the semiotic system), and, as such, is an ethical gesture, grounded in a kind of "ecological nostalgia," which, if the interpretation is correct, might be understood as akin to, if not identical with, biophilia.

> Philosophy is a speculation that sells short and long at the same time, that floats at once upward and downward. But this is how it describes itself—as if the wave were being described by the sailor tossed upon it (see Leibniz and Kant). Or, according to another nostalgic trope, agrarian rather than marine, philosophy thinks only to grow like the Cartesian tree, or to root itself in the

> soil, as in Heidegger. Or again, it projects itself into a great living being. I take seriously all these aquatic, vegetable and vital metaphors of thought, which bear witness to an ecological nostalgia. But non-philosophy is not content to describe fluctuations or oscillations without explaining them, receiving them as affects, contenting itself with undergoing and living them. It is a matter of understanding the undulations, the lulls and surges of philosophy by requisitioning the science of waves (of waves and particles through vectors in a configuration space, or of imaginary numbers). A science for philosophy must respond to specific constraints: not only is it not on the same plane as its object, but this object is very special, since it is philosophy, which never allows itself to be manipulated by a simply positive and brute science. To avoid mere confrontation, and the war that knowledges and thought engage in, it is necessary to invent a device imposing upon them a 'perpetual peace'—a device for the conjugation of the two disciplines which preserves their autonomy, their specificity, while depriving them of their will to domination, rescinding their principles of sufficiency pertaining respectively to philosophical spontaneity and to the positivity of scientific domains. Thus they are prepared so as to prevent their immediate usage, so as to lead them by force to a negotiation table, to create a common or generic space. This negotiation table is the 'generic matrix'. I do not claim to propose a 'general ecology', only a generic one—this is the contribution I can make, in so far as I live in an originally philosophical milieu, without limiting myself to everyday measures, saving water by shutting off the faucet, for instance. Let us not squander philosophy in tasks of substitution for theology, and above all of specular auto-exaltation. (pp. 331-3)

Laruelle feels the need, in stepping away from a technology of secondness, to recognize that the new "generic subject" is not determined by disciplinary knowledges, but rather works with them to determine their conjugation in the generic matrix. This shift requires that we recognize something other than a representational unity of knowledge, even a teleological one, so that we must abandon representational ideologies in favor of different constructions, different images of thought. The generic matrix is, then, a metadisciplinary gesture that is not a meta-science or a meta-conjugation. It is, rather, a recognition of the fact that a metaphilosophy that refuses the philosophical decision is, instead, a liberative force that frees up the subject for its role, not over-

determining it in advance. As an act of refusal, it is an ecological gesture that takes the form of a shift out of the conditions of becoming-philosopher into a more robust philosophizing. This means thinking philosophy differently, not as ground or world for thought, but rather as the dynamic mélange of forces with which the (non-)philosopher makes possible conceptions in a post-coordinate fashion out of the corpus of discursive knowledge production. This is not a subject that unifies by seeking grounds. It is one that explores and maps the range of possible conjugations as and for a new generic subject.

> I shall therefore pass from a linguistic or language-based interpretation to a physical and quantum interpretation of philosophy, an interpretation that better respects certain distinctions, and founds a reasoned degrowth. A model of quantum analysis (completed by a generic orientation) replaces the language-based model which favours the logocentric auto-effacement of dualities. the degrowth proposed would be dangerous or irrational, primary and reductive, if it were interpreted within the framework of language-based presuppositions. But the physicist reduction is not physicalist and naturalist—it does not arrive at primary representations, but at dynamic conceptual liveds [*vécus*]. I substitute for the still massively philosophical model of Lacan and Derrida an analysis according to a model that we shall call onto-vectori*al* rather than vectori*ell*—ontological rather than geometrical, even though it uses the underpinnings of geometry. (p. 335)

Here Laruelle undertakes a double gesture. The first of these is the shift from a technology of secondness by adopting an image of thought based in quantum mechanics that will expose dualities rather than simply make use of them in order to slice out and describe object-unities. This is the shift also in his rejection of a "physicalist and naturalist" approach, by which he means to indicate in usage the older meaning of "naturalize" as the dissection, anatomization and classification of things. The result is an abandonment of representation as the primary mode of investigative expression, and also the second gesture, which is to recognize in this that firsts, in their

newfound relations to seconds are always now underway. Firstness is allowed to be radiant, to generate what is later taken up in the extrapolation of other categories. Without the need to constrain firstness, secondness is allowed a deeper level of play, as well, and the two are free to conjugate as they see fit, given that an open network is now available through triadic constructs in and as the generic subject. Laruelle's non-philosophy as a whole can be reduced to this. The gesture here is akin to the shift in the fundamental understanding of musical notes in the move from classical to minimalist perspectives. For the classicist, a note is a singleton of sorts, which stands in relation to a rhythm and possesses certain qualities like a cog in a machine. For the minimalist, at least for Philip Glass, the note is always already in motion. It is twofold and dynamic, underway.

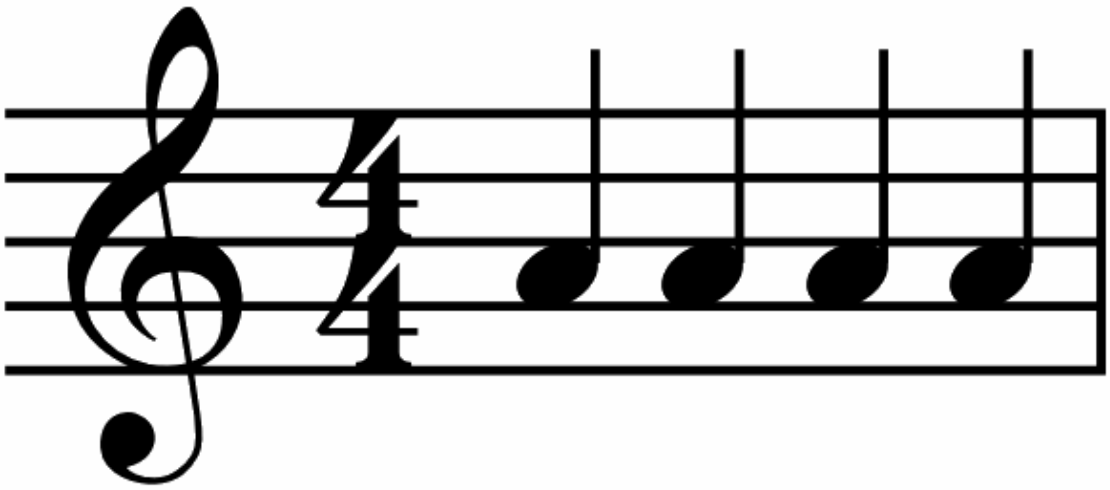

Figure 3 Classical Notes
Source: https://parkarts.pbworks.com/f/1245943352/4-4%20time-%20four%20quarter%20notes.gif

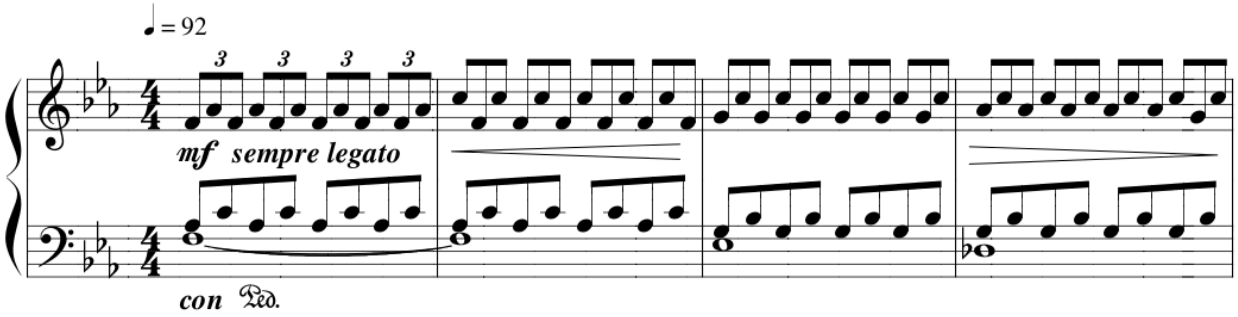

Figure 4 Philip Glass, Opening of "Glassworks"
Source: http://marozols.files.wordpress.com/2013/10/opening.png

Arvo Pärt's "tintinabular" style, which can be classed among approaches to European "New Simplicity" effects this same end through pitch, rather than rhythm. These, in turn, give way to a post-minimalist perspective, in which the composer acts as generic subject, able to create patterns and interactions of patterns, machines and ecosystems of sonic coordination, in an overall continual availability that "rolls," as John Adams says.[48] Thus, we have a "metadisciplinarity" that isn't a discipline and which has more freedom to engage with its object. It doesn't need to use its technology of secondness to order the other instantiations of that technology in a kind of horizontal move, reducing other disciplines to firsts in a way that denies their actual productive process. Semiotic ecology than becomes a viable method for a generic subject to use in engaging in this new generic semiotic process.

The shift is also, therefore, not merely geometric, which would mean the description in secondness of singularized quantities and intensities within a determined space. It is ontological in a double sense. The first sense is the recognition that we can no longer describe discreet things. Everything reflects a particle-wave duality, whereby it is both individuated as a complex

[48] It is difficult to give a visual example of this post-minimalist take. The issue is that, while available, a score would have to be shown at length. This is because the interplay described takes a certain scale to be heard in a coherent way. This is an irony of overcoming the representationalist form of citation: we don't just examine individual thoughts or ideas, but also patterns and orders of thoughts, looking to denotative and connotative effects as well. The result is larger quotations, not smaller ones, as demonstrated throughout this series of essays.

and wave-like in its merely probabilistic eventuation. Possessed of just the contour it has when taken up by the techniques of secondness, it is also understood to take up its value and meaning contextually by means of relations that are not only always external or other (even when subordinate), but which are also possessed of a similar duality. The singularity and duplicity, the denotative and connotative, and, indeed, the use value and exchange value all become part and parcel of the same architectonic gesture, which amounts to Lemke's principle of alternation. Finally, we also see how this introduces a layer of skepticism of the Pyrrhonian variety, which claims that both verificationist (denotative/semantic) and logical (connotative/syntactic) constructs of truth amount to partial representationalist schemas, which, as meshworks of argument patterns in discursive formations (both material and otherwise), do not manage to create a unity among the categories.

> Whereas double articulation and the doublets that underwrite it tend to efface themselves in a language-based practice that stays within auto-philosophy, and which limits deconstruction to being auto-deconstruction, and entirely other duality is possible—a quantum duality, that of the wave and corpuscle, in the form of the vector and the particle. Even if it seems to imitate that of the signifier and the signified, which is the lower layer of double articulation, it is more scientific, mathematical even, and does not risk falling back into logocentrism since in it, vectors are not oppositional, negative and relative (Saussure) but are representable in an imaginary space, what we call a configuration space, determined algebraically by the imaginary number (square root of -1). And moreover the model of the corpuscle and then of the particle allows the subsumption of all forms of signified and of sense. As to the superior layer of the double articulation, that of discourse and units of meaning, it will also be transformed, losing its theological and fetishistic virtues of the enveloping of dualities. Concretely, the double articulation of philosophical discourse will be under-determined—that is to say, in conformity with the quantum model, it will lose its identities as a layer and a hierarchical relation, its identity as sufficient unity, which allows its singularity and philosophical-type universality. It will instead acquire a quantum indetermination and a non-localisation (a significant non-opposition, for ex-

> ample) in relation to a subject called 'generic'…. there is a subject of this degrowth, a subject which is no longer the philosophical subject. It undergoes degrowth only in operating it, but in a relation of causality called 'in-the-last-instance'. Degrowth as a theoretical and generic concept (rather than as economico-political doxa) is therefore founded on what we might call, in a remote sense, a 'generic Marxism'—in any case, on a scientific practice. It does not describe a situation in the concrete world, nor a phenomenological anthropology of man in the world. It is a theory of philosophical action in ecology, an action which we must conclude is more probable than certain and dogmatic…. The wellspring of non-philosophy is the One, but this thesis has been poorly understood. Not the One as metaphysics or duplicity of the One-of-the-One, but as radical immanence of the One-in-One which designates nothing other than quantum superposition. This is a new ontology: the representation of variables—that is to say, quantum thought and philosophy, by vectors, as is demanded by the imaginary number used in quantum mechanics—vectors that form a new duality with philosophical representation, but no longer a duplicity. This is a reversal of the One proper to a super-structure in the One-in-One as infrastructure composed of vectors…. [W]hat must be rescinded is not the One in general, in its abstraction as unit of the count, but *the-One-as-sufficiency*. I seek in the One-in-One as superposition of vectors the formula of a contemporary gnosis capable of weakening the grip of the world, which is exerted in the form of knowledges in so far as they are overdetermined by philosophy…. The quantum, and then generic, underdetermination by the Last Instance is a general diminution of disciplines to the state of vectoriel properties, and of transcendental principles and absolutes to the state of objective or immanental appearances. (pp. 335-7, 341-3)

Quantum superposition of knowledges as gnosis: this is a continuous availability of each possible, probabilistic knowledge complex to all others in and through ordinal coordination. The accursed share, the excess portion, is thus extrapolated as the resource for technology of thirdness that does not allow it to exist as superfluous connotation, but rather as the availability of complexes for the purposes of exuberant conjugation and promiscuously creative (af-)filiations. For this to be sustainable, we must not attempt, except as an exercise, to foreclose on the availability of orders. We must attune ourselves to this "nature," and suspend measurement, or, as Patrick

Wilson has recommended, keep our knowledge systems open, particularly by way of Pyrrhonian skepticism. (Wilson P. , 1983) In this case, skepticism and biophilia hang together to produce a resonant concern that is also the freedom of ataraxia. (Kuzminski, 2008)

In her various glove demonstrations/performances, Imogen Heap speaks frequently about the ability to break up sound continua into "grains of sound," allowing for a kind of performative calculus. The official video of the song we've discussed goes even further with this, projecting over her and around her graphics that alternate between smooth waves and lines and swarms of individuated points. Heap herself does not control these. Instead, she constructs her performance out of them, leaving the equipment to control these aspects of the sound. Moreover, this architectonic makes possible another important possibility within the order of her performance. She is able to voice a sound or vocable (in earlier versions she also applied this to instrumental sounds), catch it in the field of the apparatus, and then manipulate it according to her will or desire. She is able to take an event and shift the categorical element with which she interacts, from first to second to third—and then even cycling it through again in whole or part. Thus she creates a chimeric order that demonstrates the kind of art-fiction of which Laruelle speaks, a generically open space that is not constrained by sufficient music.

One of the more important elements in all this is the surrender of the relevant technology of secondness to a machine. There is a correlate to this in knowledge production, as well. The particular structures of technologies of secondness lend themselves to these ends. The first option is to evolve a system of this sort.

> Stanford University's John Koza, who pioneered genetic programming in 1986, has used genetic algorithms to invent an antenna for NASA, create computer programs for identifying proteins, and invent general purpose electrical controllers. Twenty-three times Koza's genetic algorithms have independently invented

> electronic components already patented by humans, simply by targeting the engineering specifications of the finished devices—the "fitness" criteria. For example, Koza's algorithms invented a voltage-current conversion circuit (a device used for testing electronic equipment) that worked more accurately than the human-invented circuit designed to meet the same specs. Mysteriously, however, no one can describe *how* it works better—it appears to have redundant and even superfluous parts. (Barrat, 2013, pp. 74-5)

This is truly remarkable, recommending such approaches as a very powerful tool for the special sciences. However, the fact that the workings remain a "black box" is somewhat undesirable for the kind of non-philosophical undertaking Laruelle wants us to relate to. It is not that in every case we need to have infinite knowledge or transparency about such things, but rather that it remains a black box in principle, requiring us to develop a special apparatus to unpack it that is likely to be distinct from the actual undertaking at hand. It would be quite odd for Imogen Heap to take apart her machines during the performance in order for her to figure out how it would work.

Other possibilities present themselves. Don Swanson has worked for decades on issues in machine discovery, and with some success. Such systems become more robust every year and have become part of entertainment systems. Since 2009, however, direct, non-evolutionary discoveries have been possible by means of artificial intelligence systems. Ross King at Aberystwyth University in Wales and his team designed a system called Adam, which is able to run biological experiments.

> They armed Adam with a model of yeast metabolism and a database of genes and proteins involved in metabolism in other species. Then they set the mechanical beast loose, only intervening to remove waste or replace consumed solutions….
>
> Adam sought out gaps in the metabolism model, specifically orphan enzymes, which scientists think exist, but which haven't been

> linked to any parent genes. After selecting a desirable orphan, Adam scoured the database for similar enzymes in other organisms, along with the corresponding genes. Using this information, it hypothesized that similar genes in the yeast genome may code for the orphan enzyme.
>
> The process might sound simple — and indeed, similar "scientific discovery" algorithms already exist — but Adam was only getting started. Still chugging along on its own, it designed experiments to test its hypotheses, and performed them using a fully automated array of centrifuges, incubators, pipettes, and growth analyzers.
>
> After analyzing the data and running follow-up experiments — it can design and initiate over a thousand new experiments each day — Adam had uncovered three genes that together coded for an orphan enzyme. King's group confirmed the novel findings by hand. (Buchen, 2009)

Similarly, and in the same year, a team at Cornell University designed a system that can observe data and formulate hypotheses about it.

> Lipson and Schmidt designed their program to identify linked factors within a dataset fed to the program, then generate equations to describe their relationship. The dataset described the movements of simple mechanical systems like spring-loaded oscillators, single pendulums and double pendulums — mechanisms used by professors to illustrate physical laws.
>
> The program started with near-random combinations of basic mathematical processes — addition, subtraction, multiplication, division and a few algebraic operators.
>
> Initially, the equations generated by the program failed to explain the data, but some failures were slightly less wrong than others. Using a genetic algorithm, the program modified the most promising failures, tested them again, chose the best, and repeated the process until a set of equations evolved to describe the systems. Turns out, some of these equations were very familiar: the law of conservation of momentum, and Newton's second law of motion.
>
> "It's a powerful approach," said University of Michigan computer scientist Martha Pollack, with "the potential to apply to any type of

> dynamical system." As possible fields of application, Pollack named environmental systems, weather patterns, population genetics, cosmology and oceanography. "Just about any natural science has the type of structure that would be amenable," she said.
>
> Compared to laws likely to govern the brain or genome, the laws of motion discovered by the program are extremely simple. But the principles of Lipson and Schmidt's program should work at higher scales. (Keim, 2009)

This time, the system used genetic algorithms, but in such a way that the process, like the results, were transparent. As mentioned, this is not guaranteed. However, as indicated in our discussion of Greg Egan's short story "Crystal Nights," there is another possibility. It is possible that the results, although correct and even simple, as well as the process, which could be transparent, may constitute knowledge which we are not capable of understanding. (Arbesman, 2013) This isn't a point about form, but rather a point about the possibility that such discovery engines might possibly be better at their job than we have been at it—or are capable of being.

Some might have recourse to a sense of refuge in the humanities, arguing for example that discourse practices very far from the scientific paradigm, such as philosophy and theology, have no chance of being handled in this way. That instinct is more ideological than true and is only self-evident to late moderns and postmoderns, particularly those who are heir to the two cultures debate and the culture wars. The retreat from science in some circles turns out to be a retreat from reason. To the extent that these areas are reasoned, it turns out the discovery engines can operate just fine. (Oppenheimer & Zalta, 2011; Arbesman, 2014) That said, we would probably not want to accept a religious view they developed for themselves, (Strauss, 2014) although the modernist paradigm has given rise to forms similar to what they might produce that many have found amenable to their mindset. It is worth noting that individual humans, swarming a problem through an algorithmic system can achieve some of the same ends some of the time. For

example, a gaming system has recently allowed 135,000 gamers to unpack the inner workings of the eye. (Patel, 2014)

If we can draw a comparison to Deleuze's image of a "transcendental empiricism," then we can argue that Laruelle's model is a kind of empiricism, insofar as, like Deleuze's framework, it rejects the concept of a categorical difference between abstract concepts and empirical particularities. (Marks, 1998, p. 83) In the words of the Deleuze of *Difference and Repetition*,

> Empiricism is by no means a reaction against concepts, nor a simple appeal to lived experience. On the contrary, it undertakes the most insane creation of concepts ever seen or heard. Empiricism is a mysticism and a mathematicism of concepts, but precisely one which treats the concept as object of an encounter, as a here-and-now, or rather as an *Erewhon* from which emerge inexhaustibly ever new, differently distributed 'heres' and 'nows'. Only an empiricist could say: concepts are indeed things, but things in their free and wild state, beyond 'anthropological predicates'. (Marks, 1998, p. 83)

By this account, thoughts are not grounded in the cogito, nor do they have their roots in the being or existence of Dasein. They are external configurations, to be discovered through encounter in the world. Unlike the "French," whose philosophy "tends towards the search for a set of shared values which will express themselves through revolutionary aims," or the "Germans," whose philosophy is "preoccupied with foundation, with clearing the ground in order to lay these foundations," the "English" philosophers may have the most nomadic, empirical thought.

> England, from this point of view, is Germany's obsession, for the English are precisely those nomads who treat the plane of immanence as a movable and moving ground, a field of radical experience, an archipelagian world where they are happy to pitch their tents from island to island and over the sea. The English nomadize over the old Greek earth, broken up, fractalized, and extended to the entire universe. (p. 82)

One assumes here that Deleuze has in mind the great solar expeditions.

What matters in this is not just the spirit of nomadic exploration across a deterritorialized and deterritorializing space, but that this space is mapped to the surface of the earth. In the solar expeditions, British scientists used a combination of global voyaging, international scientific alliances across the network of letters, and new mathematics in order to determine the distance of the sun from Earth. Not only was this a great scientific achievement, but it also forced those involved to literally explore the issue from a literally planetary perspective. While they certainly maintained a sense of looking up—the remarkable number of complaints about cloud cover is not to be underestimated—they were also looking out, away from the surface of a sphere into space. They did this not with a sense of falling, but with an expeditionary sense, a sense of bringing the solar system into the domain of knowledge. These expeditions led some to unfortunate ends, some to the embrace of serious colonizing identity, and some, like Captain Cook, to both. Deleuze speaks, of course, without attending to the kinds of issues that are relevant to any future knowledge space, which is the active decolonization of knowledge aimed at embracing the other and achieving a global cognitive justice (Santos B. d., 2014)—including across species lines.[49] Boaventura de Sousa Santos has argued forcefully for the idea of cognitive justice, which becomes all the more important if we engage in the kinds of work evoked in this series of essays. We can no longer look down. We must look across, and up, and out.

Hugo De Garis and Sam Halioris discuss these issues in their science-fiction adjacent article, "The Artilect Debate: Why Build Superhuman Machines, and Why Not?" (Epstein, 2009, pp. 487-509) This article, as a kind of thought experiment, pours over the issues we have just

[49] This cognitive veganism involves not only the appreciation of non-human intelligence and semiosis in nature, but also the elimination of any system of knowledge production that intentionally causes harm to members of other species or other species as such. This would include, in theory, artificial intelligence or virtual life as object and the would exclude the possibility of the unpleasant business that poses as science in certain laboratories at UCLA.

discussed, with particular emphasis on a perspectival division between "Terrans" and "Cosmists." The authors argue that the debate about building artificial intelligence that will quite probably be superior to us in certain respects will polarize around specific teleological tropes with regard to Earthly terraprocesses. Specifically, the position they label as Cosmists will argue for the production of artilects of this sort, seeing it as the fulfillment of a part of our place in the cosmos, which role we ought to take seriously as a source of meaning and a purpose for being. Arguing from the other side, Terrans will take a more "parochial" view that human destiny is bound up with human being as the dominant species in the specific context that is Earth. While we may go out into space, this is an extension of the Earth and should not represent a change in orientation, specifically if it calls for the creation of such entities.

Laruelle is equally concerned with the issue of planetarity as it relates to cosmicity. Through a chain of reasoning, Laruelle comes to the conclusion that the object of modern knowledges is not the world, but rather the universe. There is then a need to eliminate the Platonic perspective, while embracing a gnostic rebellion against any demiurge that claims totality, singularity, or sufficiency.

> Contemporary humans inhabit a world of proliferating knowledges, rather than a world of sensible objects marked by theology and thus by sin as was formerly the case. Thus we suggest an extension of the ecological domain: man must be prepared to transgress the natural world and to enter into the universe as theoretical object, not only into the world as biological milieu. Ecological or generic finitude cannot exactly replace the old finitude of the subject. Its sensible and cognitive sphere of existence is extended in its materiality, and in its formal possibilities, by renouncing the mirages of totality and the absolute. In terms of this modernised gnostic context, we shall no longer say that man is in general thrown into the world as evil and nothingness, and that his problem is to flee this world-here, but instead (and less religiously) that he is thrown-to-knowledge, that is to say to the universe by way of knowledges. His problem is not to rediscover, like an originary ante-predicative,

> the universal environment that he would have lost, but to defend himself from the confusion of world and universe by using knowledges against their philosophical capture by the world….
>
> This way of posing the problem does not imply a globalization, but a naturalisation of the episteme. If there is a capital-world, it is that of knowledges; but can one reappropriate these knowledges outside of their world-form? The paradox of the procedure we adopt is to treat philosophy, which gives knowledges their sense and their truth, in its turn as a knowledge, so as to disencumber it of its relation of self-duplication, its closing in upon itself, quantum 'decoherence', in short. Knowledge, including the most ambitious thought, must be treated as a natural ecumenon, an inhabited surface of the terrestrial crust, but more extended, more universal, with dimensions supplementary to those of its ancient relation to physis—*it is universe-oriented rather than world-oriented*. There is an intention of knowledges, and it is the universe, just as the world is the intention of consciousness or of being. (Laruelle, 2013, pp. 338-40)

Because the matrix and the shape of all known and/or knowable knowledges as probabilistic formations, it is, in a sense, understandable that Laruelle would claim that the generic "matrix is the only concrete or real, it is no longer the sciences or philosophy as paradigms which are the concrete." (p. 345) Moreover, if philosophy is a discernment within the matrix, then we must find a form that will channel the expressive force of these productive forces, even while preserving the impulse to philosophy now rid of the will to power. Laruelle evokes here a new form, "philo-fiction," which conjugates elements from speculative fiction and philosophy as productive force. This philo-fiction is not a thought experiment or a theory-fiction, nor is it a form of artistic or poetic inquiry, though it may share elements with and combine them from each of these related forms. Philo-fiction is a form of conjugated philosophy after the degrowth of philosophy, and it is this form which turns its eye to the universe.

> Philo-fiction is a parallel genre to science fiction, a diminution of dogmatism and of the philosophical axiomatic to the state of a fic-

> tion.[50] Fiction places itself between the real and objective reality, and allows the connection of the two. Philosophical dogmatism strangles truth between macroscopic experience and objectivity. It is a question of slackening this noose that would encircle truth. (pp. 343-4)

And with that release, we fall to the earth, an Earth that floats in space, exuberant and full of un-life, dedicated to the dark that is the depth of all of space and time.

[50] Here we might find it desirable to think about the ways in which Afro-Futurism may have already been here waiting for us.

7. Conception

Before we dive in further, it is worth pausing to repose the question of whether alternative architectonics can be conceived at all, recognizing in that question the gap between conceivability and possibility. What this means is the act of thinking over again what we have so far undertaken in exemplary forms, with the goal of instantiating an alternative architectonic conceived in accordance with those posthumanist principles as active elements in the process. In the preceding, the work of metaphilosophy has been undertaken in order to understand what it means to a human to transition into a posthumanist framework. Now we work to know what we might think out of that framework. Is the posthuman thought free to examine itself as a third-order semiotic patterning opening out to the horizon of an alternation? This essay does not take as a conceit that conceivability and possibility must or should overlap in any way as a general maxim, but, operationally, it is important that we explore areas where there is an intersection between conceivability and possibility in order to achieve a proof of concept for abductive reasoning as an exploratory method. We have proposed to challenge both artifactualism and representationalism in our thought experiment. As a control, let us examine whether one can alter fundamental concepts of this sort to any coherent effect. Coherence can be judged not on whether the articulation of arguments follows current standards, but rather on whether argument patterns are mutually determinable, productive, and interoperable within a given scheme—which is to say that anything articulated within or in conjunction with the framework will be reasonably commensurable with other articulations so produced. On those terms, as a control, we proffer an exemplary articulation from a framework that would challenge the single conceptual area of modal assumptions. Again, this is proposed not as a perspective to be advocated necessarily, but rather as a proof of concept that alternative architectonic frameworks grounded in variant fundamental assumptions

can exist coherently, even if with a quite alienated coherence. We thus come to understand the conceivability of an alternative framework. Following on the heels of this, we will proceed to examine the possibility, as well, taking into account what we have understood about modality from the first exercise. Finally, we will look at the intersection of the two in the terms of the arguments already put forward to describe the alternative framework to be examined for feasibility, coherence and consistency.

We can consider a research method to be either a form of inquiry or a form of knowledge production. This is not a comprehensive or necessary distinction, but certainly a useful and plausible heuristic. In the former case, we assume an open-ended stance with regard to the outcome of our research process, usually within the borders of a philosophical decision, while in the latter we may bolster our process with formal constraints that lead us to be responsive not only to the questions we raise, but also to the forms by which those who raise such questions communicate about them. As Algirdas Julien Greimas has said:

> …[T]he subject that is producing scientific discourse is carrying out a twofold activity. On the one hand it represents the instance that sets in place the mechanism that organizes the proper unfolding of the discourse to be realized. It posits it as veridictory discourse by establishing a whole set of anaphoric workings that allow for the manipulation of the referential discourse that connects the actualized discourse with all preceding knowledge and knowing-how-to-do. But on the other hand, it carries out a straight and simple discursive doing. (Greimas, The Social Sciences: A Semiotic View, 1990, p. 29)

In other words there is a system of both connotivity and denotivity that articulates something like a spatial metaphor: a region of inquiry constituting the discourse and its relevant apparatus and the situated knowledges of particular points within that region. He elsewhere refers to this dis-

tinction as the “operative level” of “the production of knowledge” and the “foundational level” of “the conditions for knowing”. (pp. 47-57)

It may seem at first glance that the former interpretation as inquiry would lead to more liberal outcomes, but this need not be so. Liberality would assume the capacity to transmit and exchange knowledge such that further analysis, critique, and transformation of that or other knowledge would remain possible. This would not be guaranteed by an interpretation of method that takes it as inquiry, though neither is such a possibility excluded. A space need not be an open frontier. At the same time, we must note that the formal constraints introduced in the process of enacting a method as a form of knowledge production may limit the scope of inquiry such that liberalizing aspects of the process or the object(s) upon which it works may be missed, dismissed, or foreclosed upon. This assumes, in turn, that we take the object of inquiry to be possessed of accessible and decodable information which is able to be reconstituted and re-encoded in the enactment of a method, for, as Sellars says: “In characterizing an episode or state as that of knowing, we are not giving an empirical description of that episode or state; we are placing it in the logical space of reasons of justifying and being able to justify what one says.” (Floridi, Infosphere, 2002, p. 128) This is a process of meaning-making that understands the object to be ecstatically in excess of that which would codify it. The object is not exhausted by the discourse into which it is taken up. As Luciano Floridi says:

> Philosophy is not a conceptual aspirin, a super-science, or the manicure of language but the art of identifying conceptual problems and designing, proposing, and evaluating explanatory models. It is, after all, the last stage of reflection, where the semanticisation of being is pursued and kept open. Its critical and creative investigations identify, formulate, evaluate, clarify, interpret, and explain problems that are intrinsically capable of different and possibly irreconcilable solutions, problems that are genuinely open to debate and honest disagreement, even in principle. (p. 128)

In this sense, the inquisitive form of method allows for the production of codifications perhaps contiguous with the contours of a research object's pattern(s) of qualities or preexisting codal formations, whereas the productive form of method produces codifications that will re-encode any preexisting patterns or codalities in relation to a context that might not be native to it and regardless of whether that new codification is consistent with some state of affairs prior to the application of methodical process. On these terms, we deny for the immediate purposes a modal epistemology that would allow for something like possible knowledge. Instead, it is assumed that the entire process remains immanent to a single structure of eventuation as plenum for multiple codifications, here interpreted as the unfolding of a translation or transformation of resources of one pattern of qualities or codality as another across a temporal difference. That temporal difference, as a dimensionalized differential span ascribed to some appurtenant hypostasis, is the so-called information which we describe as having been extracted and reshaped in the process of research.

For example, Karl Sims conducted an experiment with genetic programming in 1990, during which code was allowed to evolve against a selection pressure provided by him. The code in question was responsible for rendering images, which he then selected and allowed to breed. One particular image is highlighted by Kevin Kelly: "When fleshed out on Sim's color monitor, the equation painted what seems to be two sheets of icicles backlit by an arctic sunset. It's an arresting image. The ice is molded in great detail and translucent, the horizon in the background abstract and serene. It could have been painted by a weekend artist." (Kelly, 1995, p. 335) The code for this image reads as follows:

```
(cos (round (atan (log (invert y) (+ (bump (+ (round x y) y)
#(0.46 0.82 0.65) 0.02 #(0.1 0.06 0.1) #(0.99 0.06 0.41) 1.47
8.7 3.7) (color-grad (round (+ y y) (log (invert x) (+ (invert
Y) (round (+ y x) (bump (warped-ifs (round y y) y 0.08 0.06 7.4
1.65 6.1 0.54 3.1 0.26 0.73 15.8 5.7 8.9 0.49 7.2 15.6 0.98)
#(0.46 08.2 06.5) 0.02 #(0.1 0.06 0.1) #(0.99 0.06 0.41) 0.83
8.7 2.6))))) 3.1 6.8 #(0.95 0.7 0.59) 0.57))) #(0.17 0.08 0.75)
0.37) (vector y 0.09 (cos (round y y)))))
```

Certain aspects of this lump are intelligible within the context in which they originally occurred, "[b]ut Sims is at a total loss to explain the logic of the equation and why it produces a picture of ice. It looks as cryptic and muddled to him as to you. The equation's convoluted reason is beyond quick mathematical understanding." (p. 335)

Similarly, John Koza sought to evolve equations that would solve mathematical problems. In one instance, he asked his system to produce an equation that would define on which of two intersecting spirals certain data points lay. (p. 337) The resultant equation the system produced worked flawlessly and reads as follows:

```
(SIN (IFLTE (IFLTE (+ Y Y) (+ X Y) (- X Y) (+ Y Y)) (* X X)
(SIN (IFLTE (% Y Y) (% (SIN (SIN (% Y 0.30400002))) X) (% Y
0.30400002) (IFLTE (IFLTE (% (SIN (% (% Y (+ X Y)) 0.30400002))
(+ X Y)) (% X 0.10399997) (- X Y) (* (+ -0.12499994
-0.15999997) (- X Y))) 0.30400002 (SIN (SIN (IFLTE (% (SIN (%
(% Y 0.30400002) 0.30400002)) (+ X Y)) (% (SIN Y) Y) (SIN (SIN
(SIN (% (SIN X) (+ -0.12499994 -0.15999997))))) (% (+ (+ X Y)
(+ Y Y)) 0.30400002)))) (+ (+ X Y) (+ Y Y))))) (SIN (IFLTE
(IFLTE Y (+ X Y) (- X Y) (+ Y Y)) (* X X) (SIN (IFLTE (% Y Y)
(% (SIN (SIN (% Y 0.30400002))) X) (% Y 0.30400002) (SIN (SIN
(IFLTE (IFLTE (SIN (% (SIN X) (+ -0.12499994 -0.15999997))) (%
X -0.10399997) (- X Y) (+ X Y)) (SIN (% (SIN X) (+ -0.12499994
-0.15999997))) (SIN (SIN (% (SIN X) (+ -0.12499994
-0.15999997)))) (+ (+ X Y) (+ Y Y))))))) (% Y 0.30400002))))). (p. 338)
```

As Kelly notes, “Not only is it ugly, it’s incomprehensible. Even for a mathematician or computer programmer, this evolved formula is a tar baby in the briar patch….[E]volution generates code that only an alien would write; it is decidedly inhuman.” This statement about the inhumanity of the code, along with a second point that “There was no evolutionary pressure in Koza’s world toward simple solutions,” (p. 338) combine to show us that this raw form of inquiry is not attuned to the needs of human knowledge exchange or the “human esthetic” that believes in parsimony. Noting the ways in which evolutionary codifications and parallel computing align, Kelly cites James Bailey’s observation that “Perhaps whole new forms of reckoning exist, forms that only make sense in parallel.” (p. 339)

Such “baroquely complex” solutions (p. 338) rely on iterative continuity, on the idea “that if two mathematical equations are somewhat effective in solving a problem, then some parts of them are valuable. And if the valuable parts from both are recombined into a new program, the result might be more effective than either parent.” (p. 336)

> While equation breeding yields solutions that work, they are usually the ugliest ones you could imagine….Evolution went the long way around. Or it burrowed through the problem by some circuitous loophole of logic. Evolution was chock-full of redundancy. It was inelegant. Rather than remove an erroneous section, evolution would just add a countercorrecting section, or reroute the main event around the bad sector. The final formula had the appearance of being some miraculous Rube Goldberg collection of items that by some happy accident worked. And that’s exactly what it was, of course. (p. 337)

The baroque nature of these solutions is seen as inhuman because it lacks the so-called human aesthetic, yet it may be all-too-human. Andrew Abbott, in his book *Chaos of Disciplines*, has argued that “the cultural life of the social sciences evolves through an unfolding series of fractal distinctions.” (Abbott, 2001, p. 157) Self-similar patterns, whereby structures emerge,

reemerge, and splice into, over, and against each other in a roiling pattern of combinatorial consistency, are a trait of the "cultural life" in which the social sciences take place as an aggregate system of inquiry. This system, while being provided with structure(s) and informed by codifying knowledge processes, is not in itself designed. Partial protocols, patterns of codification and information translation, and infrastructural normalizations are certainly present, but none are comprehensive. As anyone who has worked within an organization of scale can tell you, there are always currents and structures that are beyond any individual's control, and a large number of them will be outside the control of the majority of individuals, if not all of them. When identified, we can intervene upon them and enact transformations upon them, perhaps, but they are primarily emergent beyond the individual. This does not mean that the system as a whole will be entirely unintelligible, only that intelligibility will happen within the context of a limited sphere of attention, access, and attenuation. Of course, in the case of most organizations, and also in the social sciences as a cultural system, the codified products of the process are intentionally built up so as to provide for compatibility and exchange, insofar as standardizations are put in place that act as constraints on open inquiry that might otherwise quickly become arcane. There is no transcendental subject of the social sciences, only multiple agencies effecting continuous transformations upon available resources for the purposes of adaptive adjustment to evaluated partial contexts.

Standardizations can be both intentional and unintentional on the part of those who use them. Intentionality is itself as partial as the agencies that form standards with regard to the system. In his pseudo-'pataphysical inquiry into the role of the Qwerty keyboard system in contemporary knowledge production, Nick Land points to the way in which the propagation of use of a standard can exceed both intentionality and critique, even while becoming integrated into con-

cepts of humanity by those for whom it begins to represent an accepted technique, embodied, in the case of Qwerty, in physical artifacts produced for the purposes of securing the role of that technique and/or standard:

> The keyboard effected a twin digitization of language, both sealing its abstraction from the oral-pneumatic apparatus (into manual-digital motor-processes) and decomposing it into discrete elements coded onto the keys of a finger-activated mechanism. In parallel, it redistributed the 'arbitrariness' of the phonological sign into the key sequence of the new device, according to principles that remain obscure, contested, and shrouded in myth. Once the Sholes distribution had technofrozen and socially shift-locked into a resilient standard, a generalized assumption that Qwerty was predominantly arbitrary (quasi-randomly allocated) functioned to preemptively dissipate pattern-hunting semiotic inquiry. Challenges from alternative 'scientific' keyboards were undermined by skepticism about the very idea of a rational arrangement of the keys. In this respect, Qwerty conformed to a typical trend among oecumenic sign systems, with the sheer inertia of mass-acceptance marginalizing analytical or reformist tendencies to a fringe of philosophical eccentricity or even psychotic delusion. Qwerty thus exploited the mask of accident to construct a positive unconscious tropism or uninvestigated massive transmutation—the subliminal instantiation of a new cultural system. (Land, Fanged Noumena, 2011, pp. 584-5)

Going further, Land articulates this cultural unconscious in a way that denies us the opportunity to think it in contrast to a cultural consciousness that would be totalizing in scope and allow us to think of this process as producing something other than an aggregation of partial coherences. Instead, we are led to recognize the emergent virality of a codal regime that acts as a system for the translation of one set of semiotic resources into a different codality. Qwerty keyboards are both process and difference, and the production of knowledge about them is always already exterior to their proper semiotic order, whereas inquiry pursued on the terms of this differentializing series itself does not necessarily self-exteriorize in a way compatible with other

series. It is only through a continual and discontinuous transpropriation of the exteriority of the series, refusing propagative inquiry in favor of the fixity of knowledge and the illusion of a sublimated interiority abjected/simulated as cultural purpose—which is to say objective study—that Qwerty keyboards are made to seem like something we could actually know something about in their semiotic totality. They become mere objects with regard to humanity, artificial and having no proper context other than humanity itself.

> Of course, there may be nothing behind the mask. Conventional wisdom would accept no other conclusion. Yet even in this case a large set of investigable Qwernomic 'phenomena' remain, consisting of Qwerty-induced coding patterns and potential surplus values, virtual sciences, subcultures, undercurrents, cryptographic methods and partially coherent deliria. Such Qwernomena may be nothing other than the qabbalistic materials of Azathoth, the blind idiot God, whose meaningless pipings lead all semiotic disciplines into the bubbling abyss of futile insanity. A true and dispassionate science, however, has no right or reason to be intimidated by such consequences. Only false—ideological—science, serving as the fawning guardian of securocratic humanism, can justify prejudice in favour of anthropomorphically acceptable outcomes. Qwerty has in any case long been accepted. The rest is destiny. (p. 585)

To study the Qwerty keyboard by "[s]ketching the emergence and diffusion of the 'secret/secretarial' qwernomic subculture within global technocapitalism isolates a field of diagonal communication between anthropomorphic signs and the molecular traffic signals of the mutating 'machinic unconscious,' outlining an antipolitical semiotic pragmatism and Godless qabbalism consistent with what CCRU [Cybernetic Culture Research Unit] calls 'coincidence engineering.'" (p. 583) This communication is posthumanist, even while reinforcing humanism as the distributed matrix of transcendental subjectivity, insofar as it demands we consider the interoperation of multiple codalities, one of which is the anthropomorphic system of knowledge production.

> The emergence of technologically supported typewriting practices in the final decades of the nineteenth century coincided with a profound reconstruction of the global economic order, associated with an equally radical rearrangement of the concrete composition of the terrestrial machinic unconscious (at least in its anthropomorphic shallows). The interconnected explosions of modern corporate organization and endo-corporate bureaucracy, (gendered) office work, typographic information deposits, psychoanalysis, literary modernism, anglophone qabbalism, cryptographic machinery and mechanized computation all tracked mass installation of typing skills into the human nervous system, in accordance with the Qwerty arrangement of the Sholes Keyboard. (pp. 583-4)

This "terraprocess" (p. 395) participates in an attenuation of consciousness that links up with the central nervous system so as to "shift-lock" humanity into a "resilient standard" that is attuned only to the interoperable semiotic domains intrinsic to the communicative coordination of series: "Journalistic-scientific actuality-reportage fails to scan abstract-material hyper-objects, screening out real cyberspace emergence, as it comes at us out of 'front end' netware from the near future, invading the CNS by tuning it through biofeedback to the plane of neuro-electric consistency. The dissolution of subjectivity to techno-cultural data-flux and partial-agent proliferation liquidises topometric ROM on to a plastic sensory-motor co-ordination matrix; cooking through the monumental architectures of metaphysical and logical possibility with cybernetically intensive potentials." (pp. 402-3) Here we see that the production of cyberspace has nothing to do with the particulars of a specific material or virtual semiotic regime, but is, rather, the appearance of alterity across the span of difference between incommensurable regimes as drawn out by their tangent in the moment of articulated interaction. In this sense, cyberspace is merely the semiotic realization of difference-cum-differentialization as referenced from within the contextualizing framework of a shifting tangential interaction. These "cybernetically intensive potentials" are potential only in the sense that they have yet to propagate their transformations across the

space(s) they territorialize. As terraprocess, the territorialization consequent to the emergence of Qwernomenality is conformed to a productive resonance: the planetary context in which the cybernetic flashpoint comes to pass. Planetarity is key, as it serves as the a priori resource for the emergence of codality, the resource from which value is abstracted in the various semiotic series and to which they return in their difference as cyberspatial unfolding and propagative conditioning/transcoding. That unfolding, if linked up to the human desire for control and a priori territorialization, seeks to produce a universal subject capable of manipulating all semiotic series into humanly intelligible constructs for the purposes of consumption the interface of linking up: "Social production is regulated by a rigid totality whose efficiency is inseparable from the exhibition of an apparent transcendence, whilst desiring production interactively engages a desolated whole that inputs the virtual into process…." (p. 325)

> Along one axis of its emergence, virtual materialism names an ultra-hard antiformalist AI program, engaging with biological intelligence as sub-programs of an abstract post-carbon machinic matrix, whilst exceeding any deliberated research project. Far from exhibiting itself to human academic endeavour as a scientific object, AI is a meta-scientific control system and an invader, with all the insidiousness of planetary technocapital flipping over. Rather than visiting us in some software engineering laboratory, we are being drawn out to it, where it is already lurking, in the future. (p. 326)

The gap of difference is futurity, while the past and present are translocated inward according to a categorical involution: "A cybernegative circuit is a loop in time, whereas cyberpositive circuitry loops time 'itself,' integrating the actual and the virtual in a semi-closed collapse upon the future." (p. 317) "Patterned as drives, virtual systems—desiring machines—are guided by control circuits passing through outcomes yet to come…. Machinic desire is the operation of the virtual; implementing itself in the actual, revirtualizing itself, and producing reality in a circuit. It

is efficient and not aspirational, although this is an efficiency irreducible to progressive causality because immanent to effective time. Machinic desire is operative wherever there is the implementation of an abstract machine in actuality, and not merely the mechanical succession of actual states." (pp. 326-7) Machinic desire, as the propagative transformation of codalities along the series of their proper unfolding, is the production of autopoietic closure for a system of algorithmic integration which only terminates when there are no longer resources available to fuel its continued operation in and as the space it determines by way of striation:

> While computational serialism articulates a temporal metric—determined as a hardware specification—parallelism immanentizes time as duration; instantiated in machinic simultaneities. Unlike serial time, which serves as the extrinsic chronological support for algorithmic operations, parallel time is directly functional during the engineering of coincidences. The non-successive and unsegmented zero of intensive extinction is scaled by machinic singularization, and not by superordinate metronymics. (p. 370)

Contrary to the humanist monologic that is "a cultural immune response slaved to *logos*… assimilating signaletic intermittence to pseudo-transcendent instrumentalization," a critique of semiotic interactions in the light of terraprocessual differentialization can be understood as a "schizotechnic critique." "The schizotechnic critique of digital reason is driven by distributed machinic processes rather than integrated philosophical subjectivity, and relates to the critique of pure reason as *escalation*, targets the transcription of electronic intermittence as bivalent logic, not machine-code itself." (p. 366) This is a counter-philosophical anti-/post-humanist critique of the discursive architectonics of the foundation of philosophy in univocality and the presumption that inquiry leads to knowledge. Recognizing the transfiguration of codalities in the contemporary human condition, the schizotechnic critique of digital reason is necessarily grounded in

questions of planetarity-cum-globalization, even while problematizing the very foundation of philosophy as grounded in the Greek tradition: the idea.

> Techno-commercial interaction between planet-scale oceanic-navigation and zero-enabled mathematico-monetary calculation machinically singularises modernity or Sol-3 capitalism as a real individual: a geo-historical nucleotelic system, based upon regeneratively techno-propagated concentrational scale-economies, and tending to immuno-securitised self-identification as hyper-mediated global-micro-technic command-control. It arms-races smooth cultural decoding to flat-schizophrenisation against episodic social recoding to hierarchical robotism and algorithmic control, coupling the meltdown of organisation into the jungle with its restoration as virtually totalised global order…. The metric capture of micro-electronic fluxes as incandescent switch-densities enables descendent scale-migration to be hallucinated into ascendent idealisation. Information revolution has nothing to do with ideas. (pp. 404-5)

The information revolution is about transcoding the virtual into efficient switches, planetarity into the conditions for the engagement of desiring-machines, even while (re-)producing it as an integrated system to that end. Yet desire is always already the analytic futurity it produces and is therefore without a priori object, open-ended and adaptive, seeking only its own propagation as the differentiation of sameness within a codal regime that satisfies its need for intensification of presence in the face of abjected retreat, the illusion of propositional becoming-synthetic. Modernism didn't build utopia or cosmopolis, but rather transmuted the planet into Earth, Sol-3, a singularity for inquiry into/of humanity as such, which studies itself in order to produce knowledge in the absence of revelation: the human as mystery, living through planetarity-cum-virtuality in reserve.

> Desiring-machines are assemblages of flows, switches, and loops—connective, disjunctive, and conjunctive syntheses—implementing the machinic unconscious as a non-linear pragmatics

> of flux. This machinic or replicant usage of the syntheses envelops their social-reproductive usage, which codes directional flows as reciprocal exchanges, rigidifies virtual switchings as actualized alternatives, and territorializes the nomadic control circuits of machinic drift into sedentary command lines of hierarchized representation. Social production is regulated by a rigid totality whose efficiency is inseparable from the exhibition of an apparent transcendence, whilst desiring production interactively engages a desolated whole that inputs the virtual into process…. (pp. 324-5)

With the avoidance of both the transcendental subject and the univocality of an AI comes the pluralization of partial series, interacting in an ecotechnic tangle, a "jungle" as Land would call it, of parallel terraprocesses, converging, transcoding, and extrapolating difference, even while discovering harmonics, affordances, integrities, and shared capacities. Not only ideas, but also technics, history, epistemology, metaphysics, ontology, and the whole category scheme by which we architectonically encode our series of inquiry into the transcendental ideal of human knowledge production are put into crisis. Thus schizotechnic critique is etymologically critical of and for the contemporary human condition, even while it denies the possibility of such a conception: it is radically, even severely posthumanist. To quote at length:

> It is ceasing to be a matter of how we think about technics, if only because technics is increasingly thinking about itself. It might still be a few decades before artificial intelligences surpass the horizon of biological ones, but it is utterly superstitious to imagine that the human dominion of terrestrial culture is still marked out in centuries, let alone in some metaphysical perpetuity. The high road to thinking no longer passes through a deepening of human cognition, but rather through a becoming inhuman of cognition, a migration of cognition out into the emerging planetary technoscience reservoir, into 'dehumanized landscapes…emptied spaces' where human culture will be dissolved. Just as the capitalist urbanization of labour abstracted it in a parallel escalation with technical machines, so will intelligence be transplanted into the purring data zones of new software worlds in order to be abstracted from an increasingly obsolescent anthropoid particularity, and thus to venture beyond modernity. Human brains are to thinking what mediaeval

> villages were to engineering: antechambers to experimentation, cramped and parochial places to be.
>
> Since central nervous-system functions—especially those of the cerebral cortex—are amongst the last to be technically supplanted, it has remained superficially plausible to represent technics as the region of anthropoid knowing corresponding to the technical manipulation of nature, subsumed under the total system of natural science, which is in turn subsumed under the universal doctrines of epistemology, metaphysics, and ontology. Two linear series are plotted; one tracking the progress of technique in historical time, and the other tracking the passage from abstract idea to concrete realization. These two series chart the historical and transcendental domain of man. (pp. 293-4)

These two series have qwernomic overtones, and they recur in multiple translational architectures, hinting at neurodiversity as a parallel to parallelism. As indicated in certain passages cited above, Land sees a linkage/slippage between linguistic transcodification and numeracy in precisely these terms.

> Meta successive. Gigamachine mononumeracy has a variety of consistent features.
> [1] Axiomatic linkage collates novelizations with counter-function sections.
> [2] Segmentary culture. Communication rules. Information units.
> [3] Each new now travels as a reinforcement wave across two series.
> One. It nests as Universal Histories of Alphanumerical systems.
> Two. Logics of Axiomatization.
> Five times two equals ten.
> Ten minus one equals nine.
> Ten cannot count itself.
> Take (1):coins (2):Notes as construct-levels.
> Same amount of coins make a note.
> Twin-faults criss-cross Coins-Notes with the Zygosystem at issue. A-coins nex O-Notes. A-Notes nex O-coins.
> Axiomatics nexes numeracies to languages in this way.
> [1] Lexometrics. Linguistic-coin counting using numeric-notes.
> [2] Arithmology. Numerical-coining naming using linguistic-notes.
> Surely General, when you gave Kurtz 29 Air-cav you must have known… Trails off.
> This is scarcely human.
> At most.
> A sentient coma.
> Autism.
> […]

You wake screaming forever.
Its only the 6th time so far. Currencies come in sets.
Each sketches a numeroculture making war-creation.
#
They are intrinsically several.
[…]
Time-missiles lost in the Jungle.
As they talk without language they tell themselves how to move without concentrating.
[…]
Air-cav regiments fraction to machine-meat.
Crunching Six sustains a Qwernomi-war Catacycle. (pp. 484-6)

The linkage here is evocative and evacuative, proposing and instantiating a re-immanentization of the virtual, destroying the predicative functions of the copula and Hegelian forms of identity in favor of qabbalistic lines of escape sheering against the patterning of difference in translation through a cybernegative withdrawal into pure, dispassionate (though not objective) inquiry. The destruction of the virtual, as opposed to its deconstruction, through a translocation of its futurity into coded strings of alienation and resistance—not as counterbalance or dialectic, but as eliminative, (s)[k/c]atalog(ical) parallel anti-idealism and non-representational utterance.

As postmodern culture crosses to hypermania and ### # ## # # # ## # # # ### ## # # ## ## ### # # # ### # # # # ### # # # # ## # # # # # # ### # # # # ## # # # # # # # # ## # # # # # # #### ## # ### ## ## ## ### # # # # ### ## ## # # # # # # # ## # stop stop go stop go stop go go goes nova, it singularizes multiplicities cities cities of invasively autoreplicating autoreplicating plexoweapon—systems (() (((() (((()) ()) ((() (()) ()))))) () ()))) that are re re re re nothing beyond their war AGA AGA against security. This is no longer a question on off on of ideological representation, exogenous political mobilization, theoretical critique, ## ### # ## ## # # ## # # ## # ### # # # ## # ## # ## # # ## ## # # # # # ### # # # ### # or strategic orientation, but of decentralized cultural diagrams functioning as immanent forces of antagonism. (pp. 389-90)

History is always already too late for planetarity, in part because of the propositionally synthetic boundedness of its codification, which wants to determine a depth and breadth against the spherical non-Euclidean geometry of the prehistoric, the ahistoric, and the posthistoric Earth—as if in futurity could be found the disciplinary surfacing of the past as a unified contingency, consistently riding roughshod over the aporias of Kantian cosmopolitanism. The differentiable must be differentiated for the virtual to be expansively disinhibited (its only mode of actuality being equivalent to such disinhibition of interaction between codal regimes across a zero-point of contact), which is to say that the virtual unity of the globe in the form of a cosmopolis must be instantiated by some act of decisional power, therefore remaining virtual and contingent unless released from any architecture of influence and/or production, impossible given the grounds of its own constitution. "Capital produces the first sociality in which the *pouvoir* of dominance is perpetually submitted to the hazard of experimental *puissance*." (p. 265)

> By the time global history comes up on the screen commoditization has berserked history, reorganizing society into a disorganizing apparatus that melts rituals and laws into axiomatic rules. It is 'the exterior limit of all societies' that divides time within space and space within time, dividing each in itself as well as in the other, producing minutely analysable global space and universal time within a circuit of compressed (microtechnical) savagery and expanded (planetary) administration. It converts in a circuit between intensive magnitudes and extensive quantities: 'a surplus value of code is transformed into a surplus value of flux' (and inversely), displacing enjoyment into the deterritorialization of production, and maintaining 'the energy of the flows in a bound state on the body of capital as a socius' while amplifying them. The system operates as an escalating dissipator, emerging from the interactive reinforcement of its complexity and dilation. (p. 430)

The destruction of the Hegelian dialectics and its "theological sentimentalities of praxis, reification, alienation, ethics, autonomy, and other such mythemes of human creative sovereignty"

(p. 294) is the production of an undertow that corrodes any form of representationalism, shifting perception so that we take it up as a codal series participating in relevant, which is to say appurtenant, exchanges and flows. Schizotecnic critique abandons representationalism for cybernetic performativity, history for protocol, metanarrative for programming. There is neither medium nor message, only continuous engines of inquiry. Indeed, we see this in the exasperated response (Palladino, 2014) to the production of an inhuman 13 gigabyte proof (Konev & Lisitsa, 2014) that exceeds the already remarkable size of the Enormous Proof. (Ornes, 2011)

> If machinery is conceived transcendently as instrumental technology it is essentially determined in opposition to social relations, but if it is integrated immanently as cybernetic technics it redesigns all oppositionality as non-linear flow. There is no dialectic between social and technical relations, but only a machinism that dissolves society into the machines whilst deterritorializing the machines across the ruins of society, whose 'general theory…is a generalized theory of flux', which is to say: cybernetics. Beyond the assumption that guidance proceeds from the side of the subject lies desiring production: the impersonal pilot of history. Distinctions between theory and practice, culture and economy, science and technics, are useless after this point. There is no real option between a cybernetics of theory or a theory of cybernetics, because cybernetics is neither a theory nor its object, but an operation within anobjective partial circuits that reiterates 'itself' in the real and machines theory through the unknown. 'Production as a process overflows all ideal categories and forms a cycle that relates itself to desire as an immanent principle.' Cybernetics develops functionally, and not representationally: a 'desiring machine, a partial object, does not represent anything'. Its semi-closed assemblages are not descriptions but programs, 'auto'-replicated by way of an operation passing across irreducible exteriority. This is why cybernetics is inextricable from exploration, having no integrity transcending that of an uncomprehended circuit within which it is embedded, an outside in which it must swim. Reflection is always very late, derivative, and even then really something else. (Land, pp. 294-5)

Such kataclysmic and para-critical/-tactical conclusions are deeply disruptive to any concept of disciplinarity as a form of knowledge production. Instead, they point to a partially coded,

distributed standardization attempting to formulate a reason, a *ratio* that delimits cybernegative availability as cyberpositive articulative sentience insofar as it manages to breach its own fractal dimensions to assimilate self-similar constructs into a pattern. Land's cybernetic approach is more nuanced than the kind of approach based on the work of Bruno Latour taken by Donald MacKenzie. The latter approach continues the anthropomorphicization of concepts, even while approaching posthumanist rhetoric. Wanting to (re-) politicize technology, MacKenzie recenters agency on the human, failing to see that technology is itself a form of politics, rather than an object for it. (As a form of politics, however, we need not assume a comprehensive equivalence.) (Golumbia, 2013) Technology, as a semiotic order of series, need not be articulated across the boundaries of humanity, but rather emanates from it just as and as surely as language.

> If the history and sociology of technology of the last 25 years have had a single dominant theme, it is that the view of technological change as following an autonomous logic is wrong, and the stark choice between conformity and refusal that it poses is an impoverished one. Technologies can develop in different ways according to circumstances, the design of technical systems can reflect a variety of priorities, and "users" frequently reshape technical systems in important ways. Ultimately, the development and the design of technologies are political matters. (MacKenzie, 2008, p. 26)

Land's point is that the category structure of such an analysis is entirely wrong from the beginning: the question of autonomy of the series is bizarre and is only constructed over and against a singularized and imaginary humanity, culture, or socius.

> If deconstruction is propelled by capital's ephemeralizing pieties, schizoanalysis is driven by its magpie ruthlessness. Always recode, the text of deconstruction tells us, but each time more subtly, more elusively, developing a little further the law's protracted parody of itself. Always decode, chatters schizoanalysis; believe nothing, and extinguish all nostalgia for belonging. Ask always where capital is most inhumane, unsentimental and out of control.

> Abandon all attachment to the state. It is not Hegel's social managerialism that is most relevantly contrasted with Deleuzian nomadism. Hegelianism was only ever the black humour of modern history. It is rather the non-exclusive polity of deconstruction or cruder neo-Kantian liberal theories, with their abstractly re-composable humanities, which are the true counterpole to Deleuze's anti-political economism. In contrast to the obsessional neurosis of ethical thought, with its futile attempt to consolidate a transcendent principle of justice out of that sad puppet of contractual labour trading codes known as 'the agent', schizoanalysis shares in the delicious irresponsibility of everything anarchic, inundating and harshly impersonal. (Land, Fanged Noumena, 2011, pp. 264-5)

This radical denial of synthesis is consistent with the "Dark Enlightenment" that seeks not to find the "voice" of a subject, transcendental or otherwise, but rather the production of "exits" that trace lines of escape that step outside the patterns of exchange and expropriation known as civilization. Citing Michael Lind as inspiration for the description, Land explains:

> Lind and the 'neo-reactionaries' seem to be in broad agreement that democracy is not lonely (or even) a *system*, but rather a *vector*, with an unmistakable direction. Democracy and 'progressive democracy' are synonymous, and indistinguishable from the expansion of the state. Whilst 'extreme right wing' governments have, on rare occasions, momentarily arrested this process, its reversal lies beyond the bounds of democratic possibility. Since winning elections is overwhelmingly a matter of vote buying, and society's informational organs (education and media) are no more resistant to bribery than the electorate, a thrifty politician is simply an incompetent politician, and the democratic variant of Darwinism quickly eliminates such misfits from the gene pool. This is a reality that the left applauds, the establishment right grumpily accepts, and the libertarian right has ineffectively railed against. Increasingly, however, libertarians have ceased to care whether anyone is 'pay[ing them] attention'—they have been looking for something else entirely: an exit. (Land, 2012)

If this vector is to be abandoned due to the subject's being a tool of appropriation of its proper 'self' in favor of a demodularized liberty of inhuman freedom that always already ecstatically

exceeds itself, it is a reversal from the synthetic to an analytic unconscious, whose machinic soul is worn on the sleeve of an abjected personhood. Experience itself is, then, on Kantian terms, impossible as the domain of an integrated subject, as there is not modal alternative or exteriority to it. It must simply be inverted, so that the domain of the generative imaginary, the synthetic posteriori, reasoned in and as an abductive excess, is encountered as a continuous exteriorization, a continuous evocation of the unsolicitable in the face of an amodal hauntology of alienation—the chaining of desire in and as semiotic series in excess of the potentiation or depotentiation of a self. Modality would always already be impossible a priori, as it would show itself in/as/for the very weird analytic unfolding of a synthetic posteriority. The vector of intersubjective be-/longing is a constructed and haphazard vector, a monster pretending to the unity of a modal presence, when it is really just the eruption of a complex semiotic bloom externalizing the resources of a general economy *as if* there were something like a shared experience of the common, when there can be no experience at all. There is no possibility or lack thereof, only the continuous production of *as-if*s chained reprehensibly as uncanny masks over and against an apparent synthesis.[51]

> Civilization, as a process, is indistinguishable from diminishing time-preference (or declining concern for the present in comparison to the future). Democracy, which both in theory and evident historical fact accentuates time-preference to the point of convulsive feeding-frenzy, is thus as close to a precise negation of civilization as anything could be, short of instantaneous social collapse into murderous barbarism or zombie apocalypse (which it eventually leads to). As the democratic virus burns through society, painstakingly accumulated habits and attitudes of forward-

[51] Unity, in purifying humanity-in-common of all inhumanity-cum-ousia, is known in and as the hum of pure exchange tending towards infinite density: the body of Christ and/or Singularity, interchangeably. It is this experience-structure that is at stake in globality-qua-modernity, and that as description of carrying-capacity, puts at stake various forms of planetarity: symbiosis, parasite, cancer, alien, exile, cyborg, etc. The Heideggerian Father gives over to the Hegelian Spirit, pouring forth in and through the Son. Contemplation in the face of the smooth skin of the Sufi's young cup, having been offered its rose.

thinking, prudential, human and industrial investment, are replaced by a sterile, orgiastic consumerism, financial incontinence, and a 'reality television' political circus. Tomorrow might belong to the other team, so it's best to eat it all now….

Simple historical chronology suggests that industrialization supports progressive democratization, rather than being derived from it. This observation has even given rise to a widely accepted school of pop social science theorizing, according to which the 'maturation' of societies in a democratic direction is determined by thresholds of affluence, or middle-class formation. The strict logical correlate of such ideas, that democracy is *fundamentally non-productive* in relation to material progress, is typically underemphasized. Democracy *consumes* progress. When perceived from the perspective of the dark enlightenment, the appropriate mode of analysis for studying the democratic phenomenon is general parasitology.

Quasi-libertarian responses to the outbreak accept this implicitly. Given a population deeply infected by the zombie virus and shambling into cannibalistic social collapse, the preferred option is quarantine. It is not communicative isolation that is essential, but a functional dis-solidarization of society that tightens feedback loops and exposes people with maximum intensity to the consequences of their own actions. Social solidarity, in precise contrast, is the parasite's friend. By cropping out all high-frequency feedback mechanisms (such as market signals), and replacing them with sluggish, infra-red loops that pass through a centralized forum of 'general will', a radically democratized society insulates parasitism from what it does, transforming local, painfully dysfunctional, intolerable, and thus urgently corrected behavior patterns into global, numbed, and chronic socio-political pathologies.

Gnaw off other people's body parts and it might be hard to get a job—that's the kind of lesson a tight-feedback, cybernetically intense, *laissez faire* order would allow to be learned. It's also exactly the kind of insensitive zombiphobic discrimination that any compassionate democracy would denounce as thought crime, whilst boosting the public budget for the vitally-challenged, undertaking consciousness raising campaigns on behalf of those suffering from involuntary cannibalistic impulse syndrome, affirming the dignity of the zombie lifestyle in higher-education curriculums, and rigorously regulating workspaces to ensure that the shuffling undead are not victimized by profit-obsessed, performance-centric, or even reconstructed animationist employers. (Land, 2012)

Within this representational domain of neurotic bureaucracy, difference, including the difference in modality that speaks to the impossibility of integrating being and phantasm in and as coeval resources for a libidinal production, is impossible. The formal structures of potentiation preclude the impossible from being possible and the possibility of the no-longer from taking place. How could we speak to non-inclusion as if it were a possibility? Animationism is a sin not because of its prejudice, but rather because of its insistence that presence indicates and form represents. Nicolas Abraham:

> The discord between meaning and rhythm is precisely what is so eminently exemplary. Of what? Of the fact that the reality breaking in upon the dream is not an external event but a harrowing wish whose specter reaches consciousness in the form of hallucinatory representations. The exemplary creation…resides in the fact that one and the same rhythm underlies both the abrupt rise of anxiety and the increasingly tense refusal to submit to it…. [A]n attempt is made to reassure oneself; in the rhythm, mounting anxiety. All the rhythm says is: a troubling obstacle is unsettling sleep. (Castricano, 2001, p. 80)

We give up on sense because there cannot be understood a nonsense. Reason has neither center nor circumference, only the infinite chain of the schizotechnic and…and…and…and therefore a viral openness that coerces closure to undefine itself in and as immediacy, the pulsation of a systolic and diastolic overcoming of all thresholds, a permanent infectability, a festering of putrescent overcommitment of supposed being that poses as an overdetermination of representation. Communication of the sign gives way to infinitely concessive information:

> What may be free from the commodity form altogether is not land, not capital, but information. All other forms of property are exclusive. The ownership by one excludes, by definition, the ownership by another. The class relation may be mitigated, but not overcome. The vectoralist class sees in the development of vectoral means of

> production and distribution the ultimate means to commodify the globe through the commodification of information. But the hacker class can realize from the same historic opportunity that the means are at hand to decommodify information. Information is the gift that may be shared without diminishing anything but its scarcity. Information is that which can escape the commodity form altogether. Information escapes the commodity as history and history as commodification. It frees abstraction from its commodified phase….
>
> Politics can become expressive only when it is a politics of freeing the virtuality of information. In liberating information from its objectification as a commodity, it liberates also the subjective force of expression. Subject and object meet each other outside their mere lack of each other, by their desire merely for each other, by desire as managed by the state in the interests of maintaining the commodity form of scarcity. (Wark, 2004, pp. [253],[255])

Yet this negativity is probably little more than a return to the hermetics of dialecticism, given the Hegelian notion of the sign as conjunction of opposites, as synthesis of itself over and against a continuous, though only tentatively abyssal, negation. The decommodification, which is a decontamination of the viral vector of progressive history as affirmative spirit, is a rhythmics of aggregation, a movement that would still affirm a representational role for generative imagination, a modal abduction that is not a proliferation of infinite connectivity without connections, a body without organs, rather than that amodal and amoral pervasively promiscuous integrity that is existence through the other, but not *as* other. This is not a refusal of the Right Hegelians in favor of a Left Hegelian understanding of relation. It is a corrupt intimacy that refuses the sign as arbitrary, even as it refuses it voice. The movement to exit is not the same as decommodification. It bears no relation and abandons no content. Hegel is reduced to the ironic dark joke that Land insists he is.

> Immediately after naming the *imagination which creates signs*, Hegel states the fantastic unity of opposites constituted in

> semiopoetics. The latter is a *Mittelpunkt*: both a central point on which all the rays of opposites converge, a middle point, a middle in the sense of element, of *milieu*, and also the medium point, the site where opposites pass one into the other. "Productive imagination is the *Mittelpunkt* in which the universal and Being, one's own (*das Eigene*) and what is picked up (*Gefundensein*), internal and external, are completely welded into one (*volkommen in Eins geschaffen sind*)".
>
> Thus characterized, the operation of the sign could extend its field infinitely. Nevertheless, Hegel restricts its province by including it immediately in the movement and structure of a dialectics that comprehends it. The moment of the sign is to be put on account, in provision reserve. This is the limit of abstract *formality*. The semiotic moment remains formal in the extent to which the content and truth of meaning escape it, in the extent to which it remains inferior, anterior and exterior to them. Taken by itself, the sign is maintained only *in sight* of truth…. The light, the brilliance of the appearing which permits vision, is the common source of *phantasia* and of the *phainesthai*. (Derrida, Margins of Philosophy, 1982, pp. 80-1)

The sign must become restless in the face of its own negation in truth, its own self-alienation, both as materiality and as signifier bearing relation to in-/difference—and perhaps boredom. The sign is inherently movement, vector, charged capacity, translating (for) a futurity that can never come because it must always already be present. This infinite demand, an excruciating impatience for the end of the less than whole exchange that is the transference of meaning by a sign which, as an attenuated expression of desire and dialectic, "functions through recollection of the whole, which it aims to fully articulate." (Magee, 2001, p. 98) Here we bump against the idealist strain, one which will ultimately reappear in the work of C.S. Peirce, to which we will return later. For now, we recognize that, as *Mittelpunkt*, the activity of the sign is, by definition, accorded a circularity of returning to itself in a formal identity that is still an alienation, a productive engine of recurrence that is neither eternal nor internal, but nonetheless expressive of a corollary

relation to an in-regard-to that is the intensive/extensive inwardness of meaning-in-experience. Derrida cites Hegel:

> "The creations of imagination are on all hands recognized as such combinations of the mind's own and inward with the matter of intuition; what further and more definite aspects they have is a matter for other departments. For the moment this internal studio (*innere Werkstätte*) of intelligence is only to be looked at in these abstract aspects. Imagination, when regarded as the agency of this unification, is reason, but only a nominal reason, because the matter or theme (*Gehalt*) it embodies is to imagination *qua* imagination a matter of indifference; whilst reason *qua* reason also insists upon the *truth* (*Warheit*) of its content (*Inhalt*)."
>
> The sign unites an "independent representation" and an "intuition," in other words, a concept (signified) and a sensory perception (of a signifier). But Hegel must immediately recognize a kind of separation, a disjointing which, by dislocating the "intuition," opens the space and play of signification. There is no longer in the signifying unity, in the welding of representation and intuition, simply a relationship between two terms. Intuition, here, already is no longer an intuition like any other. Doubtless, as in every intuition, a being is given, a thing is presented and is to be received in its simple presence…. It is there, immediately visible, indubitable. But insofar as it is united to *Vorstellung* (to a representation), this presence becomes representation, a representation (in the sense of representing) of a representation (in the general sense of conceptual ideality). Put in the place of something other, it becomes *etwas anderes vorstelland*: here *Vorstellen* and *represent* release and reassemble all their meanings at once. (Derrida, 1982, pp. 80-1)

Derrida must then ask, in light of this stuttering serialization: "What does this strange 'intuition' represent? The signifier thus presented to intuition is the signifier of what? What does it represent or signify?" (p. 81) Magee cites Donald Verene in taking us to surprising places: "Spirit requires an ingenious act, in which through an immediate act of its own wit it produces a new standpoint. It requires the power of *ingenium*…. Spirit must suddenly project a new reality for itself out of a reality in which it finds itself becoming exhausted and dismembered." (Magee, 2001, p. 99) This projection is the monstrosity of the dark enlightenment, where the clearing we

open up is shaded over by the very blinding light it makes evident: a space wherein a dream is stutteringly revealed to be itself, such that we start awake into another dream. Dream within dream within dream, the projection of a temporal expressiveness into the waiting arms of the *Mittelpunkt* of a caesura, deep within which something stirs—the image of thought as the inhuman proliferation of excessive significance as endless signification, the unrelentingly impatient presence of a world drawn forward and foreclosed under the weight of its own unity-in-signifying.

> Darwinism for the Technicolor age. Set your browser to drift mode and simply float: The sequence really doesn't care what you do as long as you are watching. "Now" becomes a method for exploring the coded landscape of contemporary post-industrial reality, a hypnagogic flux, a Situationist reverie, a psychogeography—a derive without beginning or end. Ask any high school student in the United States and they can tell you the same thing, but with a different set of references.
>
> Most people trace the idea of time without variation to Newton's 1687 *Principia*. With the term "absolute time," he created a sense that the world moved in a way that only allowed for one progression, one sequence of actions. Newton's synchronized time ordered the Industrial Revolution and gave us a culture of production based on highly stratified temporal regulation. Two hundred fifty years later, Andre Bréton and the Surrealists strove to escape from Newton's straightjacket into moments of "total freedom." They found that freedom in the abandonment of the roles that they, like everyone else around them, were forced to play. Flip the script, timestretch the code. That most twenty-first-century of catchphrases, "Money is time, but time is not money," is yet another attitude we inherit from the past century: from the "clockwork economy: of Frederick Winslow Taylor's *Principles of Scientific Management* in 1911 on up to the hypercondensed aesthetics of commercials and videos on MTV.
>
> What happens when you look at the time part of the phrase, "money is time?" A paradox in math and physics translates into the social realm of human relations. What would happen if the uncanny system of correspondences that make up the components of reality stopped? What would we do if that place where all the stories come from suddenly vanished like a mirage in the desert of our collective dreams? As the amount of information out there ex-

> plodes exponentially and threatens to become almost the only way people relate to one another, it's a question that seems to beg a response: What would happen if it just vanished and the lights went out? (Miller, 2004, p. 80)

This last question and Derrida's become tightly equivalent, orbiting the absent signified in a monstrous precession. The apocalyptic millennium, the disruption of infinitely dense information intensity, becomes fused with the question of that *ingenium* which institutes the grounding of the ideal subject as an analytic, rather than synthetic proposition.

> Whenever you look at an image or listen to a sound, there's a ruthless logic of selection that you have to go through simply to create a sense of order. The end product on this palimpsest of perception is a composite of all the thoughts and actions you sift through over the last several micro-seconds—a soundbite reflection of a process that updates Frankenstein's monster, but this time the imaginary creature is made of the interplay fragments of time, code, and (all puns intended) memory and flesh. The eyes stream data to the brain through something like two million fiber bundles of nerves. Consider the exponential aspects of perception when you multiply this kind of density by the fact that not only does the brain do this all the time, but the millions of bits of information streaming through your mind at any moment have to be coordinated and like the slightest rerouting…any shift in the traffic of information can create not only new thoughts, but new ways of thinking. Literally. (pp. 81, 84)

Peirce, of course, famously insisted, contra Kant, that we take seriously the idea that the mind was extended in space and time, and that its affects and cognitive contents take up residence in these dimensions. This ultimately suggests that semiosis is inextricably bound up with dimensionalized existence, participating in the systems in which the mind participates, regardless of its ontological status.

> Language is a transindividual system organized on many different space-time scales. It cannot be appropriately reduced to

> units or relations on any one scale. Moreover, language is an instance of the general class of dynamic open systems which maintain their existence and integrity in time. In this way, the causal consequences of a given semiotic system also persist in time, again on a multiplicity of intersecting space-time scales. For example, the processes that operate on the level of expression—e.g. vocal-tract activity—are strongly constrained by the processes on the content stratum. This is consistent with the view…that meaning flows from an intentional source and constrains lower-level sensori-motor systems in the process of putting into effect a particular action. Meaning-making can thus be seen as the entraining and reorganization across levels of processes of expression and content by higher-order proximate intentions in symbolic neural space. Action is the entrainment of such processes along a trajectory which has causal, though not efficiently causal, consequences. This is consistent with the view that the brain recategorizes sensori-motor activity as conceptual routines, and so on. Thus, the storing and maintaining of a stable—not static—language system comprising both expression and content on both the ecosocial and individual (organismic) levels means that the causal consequences of that system persist on many different levels. (Thibault, 2004, p. 138)

The *ingenium* becomes equivalent to a system of causal relations that do not depend exclusively on efficient causation but which stand in excess of the apparent self-representational intentional state of the differentiated individual subject. In this case, given the process of abjecting the sheering forces of world-making projection as compensation for the Hegelian dilemma of an absent, or at least negative, analytic ground for the persistently referential synthetic subject, the self-presentation is a diagrammatic schematism for processes that exceed the apparently modal structure of an otherwise catholic subject.

> Language and other semiotic system-processes are not supervenient. Their existence is dependent on a number of environmental factors which can be thought about in terms of Aristotelian causality. First, they depend on biological initiating conditions—e.g. neuromuscular processes—such as those which enable vocal-tract gestural activity and their effects to take place (efficient causality). Thus, waves of vocal-tract activity may be said to cause (i.e. efficiently) the compression of sound waves which are propa-

> gated from a source. Secondly, they depend on material environmental affordances such as available physical-material resources—e.g. the air as a medium for the propagation of sound waves, treated surfaces such as paper, the nature of human perceptual systems, its amplification and diffusion by culturally evolved technologies such as writing, the Internet, and forms of social organization (material causes). Thirdly, there are principles of organization internal to language such as its dependence on a semiotically salient system of differences and combinations of typical patterns of phonological, grammatical, and discourse systems and structures (formal causes). Fourthly, final causes are those whereby the system anticipates and is oriented to its own future along a temporal trajectory, which is the only way in which the system as such exists. The organization of ecosocial semiotic processes and the perceived stabilities or regularities in these processes can only take place in the presence of appropriate forms of organization of all four factors on various space-time scales. (pp. 137-8)

Hegel does not fail to articulate the nature of the "appropriate forms of organization" mentioned here, but does so by turning to a reflexive representation of the mind as a self-alienating, but demonstrably self-consistent, image or diagram that is itself not anything like experience itself in itself, but rather merely a representation of the mind's self-representing presentation in and through the other of an objectless pattern of difference as the formal schema of spirit.

> Hegel frankly admits that he is drawing on…perennial resource(s). In fact, he seems to revel in it. In his early *Philosophy of Nature*, Hegel refers reverently to "the Elders," which H.S. Harris has argued refers to both Paracelsus and Böhme. As Harris notes, even where Hegel is drawing from more recent sources he insists "on finding an earlier pedigree…in Paracelsus and Böhme." In the preface of the *Phenomenology* he writes that "the *triadic form* must not be regarded as scientific when it is reduced to a lifeless schema, a mere shadow…. Kant rediscovered this triadic form by instinct, but in his work it was still lifeless and uncomprehended; since then it has, however, been raised to its absolute significance, and with it the true form in its true content has been presented, so that the Concept of Science has emerged."
>
> The reference to Kant having *rediscovered* (*wiedergefunde*) the triadic form indicates that Hegel regards it as a perennial idea. It also indicates that he regards himself as truly reviving and doing

> justice to the triadic form, as well as raising it to the level of "science" (*Wissenschaft*). In the *Science of Logic* (1812) a similar passage appears: "Kant did not apply the infinitely important form of triplicity—with him it manifested itself first only as a formal spark of light—to the genera of his categories (quantity, quality, etc.), but only to their species which, too, alone he called categories. Consequently he was unable to hit on the third to quantity and quality." Consider also one of the *Zusätze* to the *Encyclopedia Logic*, in which Hegel remarks that "Any division is to be considered genuine when it is determined by the Concept. So genuine division is, first of all, tripartite; and then, because particularity presents itself as doubled, the division moves on to fourfoldness as well. In the sphere of spirit trichotomy predominates, and it is one of Kant's merits to have drawn attention to this….
>
> As to the square, the third of the twelve theses composed and defended by Hegel as part of his doctoral exam in Jena in 1801 reads as follows: "The square is the law of nature, the triangle of spirit." In his early philosophy of nature, Hegel conceives nature as containing within itself "resting motion," which involves four dimensions: three spatial, and one temporal. He refers to this as the "squareness" of nature. (Spirit, by contrast, is a triangle composed of the dimensions of time itself: past, present, and future.) As Harris sums up Hegel's early views: "The eternal reality for theoretical contemplation by the mind is a four dimensional spatio-temporal equilibrium. 'Squareness' is the simplest schema for this that we can construct in pure intuition." (Magee, 2001, pp. 100-1)

Lest we think that this representation is intended to be anything other than a representation of representation itself in and as the Concept, we find the following passage from Hegel's 1805 *Lectures on the History of Philosophy*, in which he makes clear that "the use of geometrical images, like all images, is limited and not fully adequate for the presentation of philosophical wisdom; images cannot replace the 'conceptual' language of philosophy." (p. 103)

> [There is a] method of representing the universal content by means of numbers, lines and geometric figures. These are figurative, but not concretely so, as in the case of myths. Thus it may be said that eternity is a circle, the snake that bites its own tail. This is only an image, but Spirit does not require such a symbol. There are people who value such methods of representation, but these forms do not go far. (pp. 102-3)

Hegel rejects the inhuman schematism of an architectonic in embracing the gamble of pure Logos. And lest we should think that this indicates an expressiveness of the autonomous will along the lines desired by those concerned with the dark enlightenment, we must hear Hegel's statement that this is not an expressiveness of a differentiated self, but rather that integrated "expression" that is semiosis itself as integrated process, in excess of the ecosocially determined/-able self: "Religion is a begetting of the divine spirit, not an invention of human beings but an effect of the divine at work, of the divine productive processes within humanity." That divinity, now elevated to a schematic Science of Spirit, in and through the Concept, is made transcendental by establishing its overdetermination in and as a consciousness grounded by/in/out of/through the analytic schemata of semiosis as an a priori fixation: "It should…be mentioned here that the meaning of the speculative is to be understood as being the same as what used in earlier times to be called 'the mystical.'" (p. 104)

We are familiar with the ways in which the mystical has largely been a description of processes of transcendentalizing experience in favor of a kind of inversion, in which representation becomes no longer a form to mediate experience, but rather the experience of recognizing experience itself as a form of mediation. That excess that is both immanent to consciousness and exterior to the purview of its self-cognition, semiosis of the extrinsic inward, elevated and secularized to the object of a pneumatology of the Concept, cannot help but understand desire itself as a modulation of excess—the withdrawal of an interiority away from itself in light of propagating crises of representation, the anti-Baroque of darkness emerging from light that is Kabbalistic creation in and through the demarcation of variation: the patterning of difference as protogrammatical systems of integration and exchange. That is, the divine producing space for its own Concept, such that signs may emerge constructed across an overdetermined fixation on interop-

erable spelling. Spelling and spells, grammar and glamour, qwernomics. A science of semiotic production that exceeds the subject by promoting the consistent delay of the imaginary in favor of a system of binaries, connections and disconnections, buttons pressed or not. That delay delights and torments desire, extending the pleasure principle into territories of polymorphous inversion. A continuous ecstasy of exchange and interpenetration, absent the specifics of experience but charged through the drawing-toward and –inward of a futurity always expressed in representation but never made one with its system of congruence. The ever-untranslated *objet petit a* that is every representation, "the lack, the remainder of the Real that sets in motion the symbolic movement of interpretation, a hole at the center of the symbolic order, the mere appearance of some secret to be explained, interpreted, etc." (Žižek, 1996) This is, moreover, capitalism as a vector.

> When replicators become reproducers, new replicants are on the way. The arrival of the aliens has no interpretative space marked out for it in the schema of macropod erotics, and thus emerges from its camouflage as an encrypted message, 'an enormous X', a signal from beyond the pleasure principle. It is as if the reproducer units have become addicted to stimulation or, in Freud's terms, 'fixated to … trauma': entangled in excitation circuitries that no longer commensurate with homeostatic social or individual reproduction….
>
> Machinic desire can seem a little inhuman, as it rips up political cultures, deletes traditions, dissolves subjectivities, and hacks through security apparatuses, tracking a soulless tropism to zero control. This is because what appears to humanity as the history of capitalism is an invasion from the future by an artificial intelligence space that must assemble itself entirely from its enemy's resources. Digitocommodification is the index of a cyberpositively escalating technovirus, of the planetary technocapital singularity: a self-organizing insidious traumatism, virtually guiding the entire biological desiring-complex towards post-carbon replicator usurpation.
>
> The reality principle tends to a consummation as the price system: a convergence of mathematico-scientific and monetary quantization, or technical and economic implementability. This is

> not a matter of an unknown quantity, but of a quantity that operates as a place-holder for the unknown, introducing the future as an abstract magnitude. Capital propagates virally in so far as money communicates addiction, replicating itself through host organisms whose boundaries it breaches, and whose desires it reprograms. It incrementally virtualizes production; demetallizing money in the direction of credit finance, and disactualizing productive force along the scale of machinic intelligence quotient. The dehumanizing convergence of these tendencies zeroes upon an integrated and automatized cyberpositive techno-economic intelligence at war with the macropod…. It no longer seems plausible to assume that the relation between capital and desire is either external or supported by immanent contradiction, even if a few comical ascetics continue to assert that libidinal involvement with the commodity can be transcended by critical reason. (Land, 2011, pp. 336-9)

Land's points are well-taken, yet they point back to the mystic's work as having been elevated in a Science of the Concept that shakes the trees of representational and schematic thinking to unearth the semiotic excess that constitutes the inoperable heart condition, the *Mittelpunkt*, of the transit between representation and experience, the immanent contradiction of desire that supposedly scales upwards into the superstructures of market exchange, especially for capitalism. Mystics elevate this contradiction into a polysemy that allows for indeterminacy and lines of escape, velocities of exit, shaping negativity as motion under rest, so that the structural exigencies of an amodal order continue as iterated and continuously reproduced series.

> Only language can turn an event into an experience *of* something. Looking plus a word equals seeing something; listening plus a word equals hearing something. Language *identifies*, gives meaning…. And, in any case, the mystics do not offer us descriptions of language-transcending experiences. If we look at any canonical list of mystics, what one notices straightaway is that these people are *writers*, wordsmiths. Not reporters, but *writers*, in the sense of being intellectuals, people highly conscious of language, people who convey their message, not by pointing to something outside language, but by the way they play games *with* language, tormenting it because it torments them, keeping to the rules in such a *wicked* way as to get around the rules. What they write is best interpreted

> as a slightly mocking and subversive commentary upon the officially approved forms of words for speaking about God…. Mysticism is protest, female eroticism, and piety, all at once, in *writing*. *Writing*, I say, and not "immediate experience," that Modern fiction. Many or most mystics have been persecuted by the orthodox, but whoever heard of someone being persecuted for *having heretical experiences*? To get yourself persecuted, you have *to publish heretical views*; and at your trial for them your judges will need evidence of them in writing. Indeed, unless mysticism *were* a literary tradition of veiled protest, we'd never have heard of it. (Cupitt, 1998, pp. 61-3)

François Laruelle also engages with the zone of this representational crisis, ultimately grounding his "non-philosophy" in a "mystical core" (Laruelle, Principles of Non-Philosophy, 2013, p. xxiv) that abdicates claims on a Real for philosophical discourse, even while mystically promoting the furtherance of a philosophy that grounds itself in a futurity (the unity of thought and experience in-the-last-instance) that delays the abrogation of the primordial absence at the heart of representation:

> Spontaneously, philosophy enters into competition with regional knowings, the sciences in particular, because it claims to determine equally, like these but otherwise than them, the same objects or experience. It postulates a double discourse for a single experience. Non-philosophy abandons this project and raises its object up a notch or a degree. This object is no longer experience "in itself" but the group of constituted knowings to which it gives place, regional *and fundamental* knowings. It presents itself, then, as transcendental thought, relating itself to these knowings rather than to their objects. (p. 7)

Thus the question for non-philosophy is not the synthesis of a subject whose chains or series of representation include the Real as a member, but rather the more elegant project of architectonics that sees philosophical knowledge as one among many Pyrrhonian patterns of integrated parochialities with no special claim to dominance outside the realm of exchange, power, and desire. It

is transcendental or mystical in the sense that it seeks lines of escape from the amodal strictures of excessively productive semiosis, seeks to make philosophy over in the image of its own representational and analytic concerns, and seeks to make a virtue of having internalized the negativity of its own experience as an ungrounded consternation of philosophy. This is, arguably, the tactic taken by Marcia Bates in her definition of Information Science as a meta-discipline (Bates, The Invisible Substrate of Information Science, 1999), especially in light of her preoccupation with issues of the relationships between knowledge, representation, and the real (Bates, 1999; 1990; 2005; 2006). As of 2010, she has presented this meta-disciplinary approach as interrelated with an "operational definition" of information disciplines. (2010) This approach is, of course, quite similar after a fashion to that of Jonathan Furner, who argues for a taxonomy of information based on the uses of the term and who proposes conceiving of information itself as bound up with relevance (Furner, Information studies without information, 2004)—a retreat from representation as a core principle that then revives it as a secondary concern, to be recovered through probabilistic information retrieval research and related semantic technologies.

> Now, if we wished to maintain one view of the nature of information that is commonly assumed in the IS literature—that of the thought as information—then it would seem that these questions about the mechanics of cognitive processes become crucially important for us to answer ... or at least for us to find answers for in the literature of cognitive psychology. (I am prompted to inquire what exactly it is that is achieved by attempting to corral such weighty and long-standing questions under the rubric of "information studies" when they already attract wide interest from communities that, on the face of it, are rather better equipped to deal with the kinds of issues that are raised by practical brain research.) Alternatively, if we are more convinced of the usefulness of another common conception of information—that of relevance as information—then we should recognize, perhaps, that a good theory of information should do more than simply explain what it is to say that a document's content is relevant. Ideally, it would explain how the extent to which a document's content is relevant (to agent *a* at

> time *t*) may accurately be predicted. Of course, we have several such theories in IS, the most advanced being those that cluster in the area known as probabilistic information retrieval (IR). Relevance research lies at the heart of probabilistic IR and of information studies in general. Relevance researchers are also those IS people who are most keenly aware of the significance for information studies of current work being done in pragmatics and the philosophy of language. For those of us who, whilst sharing a concern for the ways in which definitions of terms shape perceptions, directions, and agendas, do not view ourselves as relevance researchers per se, I suggest that it would be worthwhile to reflect on the coherence, parsimony, and utility of a theory of information that, in its essential conception of information-as-property, also happens to trace its lineage back to Shannon's original "information theory." (Furner, Information studies without information, 2004)

In Laruelle, we see this same turn of thought manifest as a return, ironically used as a gravity well for acceleration along a line of escape into a radical objectification of the sign that is mystical to the core, announcing by way of a rupture in accordance with the law of its formation (a motion-rest, a wicked writing) the radical commodification of production: precisely *in* its excess and precisely *for* its participation in expressive series, rather than its representational access to the Real. Nothing is about experience, yet remains potentially infinitely relevant. "Vampiric transfusional cuts across descensional filiation, spinning lateral webs of haemocommerce. Reproductive order comes apart into bacterial and intergalactic sex, and libidino-economic interchange machinery goes micro-military." (Land, 2011, p. 374) In a world of systematically aleatory relevance, there is no modal structure, only the presence or absence of linkage. There are no words, only the spaces filled by the pressing or not-pressing of a fixed set of keys on a keyboard that are related not by the potential words they might form, but by their need to be available to an order that may or may not select them in a given instance along a state or rhythm, a vector space transected by post-coordinate inquiries. "My body is open to all people: this is democratic capi-

talism." (Acker, 1994, p. 55) Moreover, in such an infinitely interchangeable and interoperable world, there can be no subversion, or, worse, need for that kind of mystical becoming. There is only the hyperreal proposition of inclusion or exclusion from an order—no gaining of voice, only continuance or exit, participation or shunning, active or passive. As Baudrillard would have it:

> Reality itself founders in hyperrealism, the meticulous reduplication of the real, preferably though another, reproductive medium, such as photography. From medium to medium, the real is volatilized, becoming an allegory of death. But it is also, in a sense, reinforced through its own destruction. It becomes *reality for its own sake*, the fetishism of the lost object: no longer the object of representation, but the ecstasy of the denial and of its own ritual extermination: the hyperreal…. Unreality no longer resides in the dream or fantasy, or in the beyond, but in the *real's hallucinatory resemblance to itself*. (Baudrillard, 1988, pp. 144-5)

Land cites H.P. Moravec to the ends of describing the shift of reproduction across the relevant layers of semiosis:

> Although utterly dependent at first on the existing crystal-based chemical machinery, as these carbon molecules assumed a greater share of the reproductive role they became less reliant on the crystals. In time, the simple crystal scaffolding vanished altogether, leaving in its evolutionary wake the complex, independent system of organic machinery we call life. Today, billions of years later, another change is under way in how information passes from generation to generation. (Moravec, 1988, p. 3)

Moravec's attempt to ground a category of life in a reproductive semiosis, which Land refers to with a kind of dark humor, is always already a mimetic process that, at scale, is also an error aggregation system. Moravec would have a biomimetic process as the ground of culture exchange in and as signal, whereas Laruelle turns to a transcendental cloning that forecloses on the tempo-

rality of a desire for the Real by means of an infinite delay that prevents revolution, eruption, or non-digital transformation.

> The assumed sameness [*mêmeté*], the accepted analytic or synthetic identity of the scientific object and the philosophical object: this is the alleged "Real" or "common sense" which determines the enterprise of legislation of philosophy and the war it wages everywhere. Let us assume now that the Real is not this objective identity, this sameness, but that it is Identity in flesh and blood, Identity as such in its in-objective immanence; this is the sole Real which can undo the claims of philosophy and determine non-philosophy as a transcendental thought which relates itself to philosophies and to sciences rather than to their objects. The type of identity that grounds philosophy presents in effect an unthought and artificial character which comes from its nature as *black box* or from a connection of a *technological type* and turns philosophy into a transcendental technology. We can equally describe it as the postulation of a "miracle", *common sense* or *pre-established harmony*, which dedicates philosophy to begging the question. Non-philosophy can only ground itself in the instance of a real identity which excludes common sense, pre-established harmony, technological causality and its modes (analysis, synthesis, difference, dialectic) and which establishes pure thought within its rights and its element. What we call "transcendental cloning" is the remainderless destruction of this common sense or of this postulated harmony and the affirmation of a "real" or transcendental causality which pushes technology outside of thought. If it can seem that transcendental cloning remains mysterious, this mystery is in any case simpler than the mystery of Philosophical Decision and forms its real core, that which philosophy represses or ignores on principle and to which it adds the mystery of this repression. Kant, as we know, discovered the brilliant principle according to which the conditions of experience and those of the object of experience are the same. But this principle turns out to be strictly within philosophy and to have a restrained form here, from which we give it its optimal or radical form: *the real conditions of experience and those of the object of experience are identical-in-the-last-instance*. This is the base from which non-philosophy is deployed outside any speculative "miracle"…. The only rigorous formalization of which thought will be capable *insofar as it is thought* is necessarily pure-transcendental rather than empirico-transcendental. Thus non-philosophy treats all knowings without exception, regional and fundamental, as simple a prioris for experience; a priori without auto-reflection (auto-position, auto-givenness), and as such without

> a transcendental aim that would be able to account for them.
> (Laruelle, Principles of Non-Philosophy, 2013, pp. 7-8, 9)

The transcendental cloning of the Real turns out to be the formula of a triadic relation, determining the image of the Real as "a thought *according* to real experience, which reduces objectivity itself, rather than *of* possible experience." In this framework the temporality of semiotic layering suggested by Moravec is supplanted through a parallelization of a formal content of thought vis-à-vis a kind of infinitely chained relevance of proportion, a transcendental cloning that fails to reveal or represent "the simply real One, which is only immanent (to) itself, for which immanence is real essence or 'substance' rather than relation or ownership." That "(to)" is the thing that moves in the still deeps and should horrify us with its slippery almost-already and having-just-been-here, its hauntology of being in-the-eye's-corner, its festering anal-vaginal murk. Laruelle cannot escape it, and is tentacled into the salty depths of his atemporal, and therefore amodal, Hegelian figuration, which, in turn, rests in the uncanny valley beyond pleasure or its principle(s).

> This matrix is no longer that in 2/3 terms of philosophy and its ultimately circular causality; it is not even that of ½ (= Difference) and still less of the metaphysical 1 which is merely an artifact of the ½. It is not fractional since it is that of the 1 which is only 1, equally it is not that of the 2 which, as irreducibly 2, is however 2-in-1 in-the-last-instance or 1-(of)-2, but not ½.
>
> It seems to contain three terms: a real or indivisible identity—the Real one; a term = X, strictly speaking, received from transcendence and which is thus not immanent; and thirdly a term called "Transcendental Identity", a true clone on the One which the term X extracts from the Real. In reality, the One is not a "term", not being identifiable in transcendence and being nothing but an identity-without-synthesis; the term X, "added" to the Real, does not form a dyad and fails to form a dyad with the One which refuses to be counted in the structure. On the other hand, it resolves its desire in extracting from the One an image-(of)-the One where the One does not alienate itself; thus a purely transcendental image,

> but with which it forms a duality or a dual wherein the transcendental is only counted from the point of view of X: a duality called "unilateral" for this reason. (pp. 5-6)

Possibility itself, modality as a form of temporal subjunction, is subjected to its own question as an image of time and found incompatible with its analytic object, as the transcendental image that would ground a series as more or less latent with regard to its own transcendental participation in the Real as such. As philosophy begs the question of its ground, we find not modality but participation in the multiple, as an element in an aggregate covering-over that is the discovering of otherness in and through representational/-ative alienation. We find, then, an ongoing relation to a binary that insists on its own triadic movement as a negative expulsive expressiveness passively structured as the stability of the Concept. This vibration, this oscillating give that denies its own potential for temporal-expressive alterity, insists on an ordering that is nevertheless chaotic in a very particular sense, in that sense that includes within it the traumatic scission of a "problematic 'antinomy' of escape and re-capture, hope and despair, with all the unstable compromises and evanescent moments of indecision or indifference it generates." (Land, 2011, p. 120)

> This attempt to establish pure and dichotomous distinctions that both explicate and escape the history of oppositional thought necessitates a discrimination between (two) types of duality. (It is precisely because Derrida will refuse to underwrite such a discrimination that he turns instead to a re-inscription of continuities that are able to encompass and partially assimilate the 'ruptural' aspect of his own work, resigned to a 'structurally necessary inadequacy' in the prosecution of destruction. Both Heidegger and Derrida seem to concur, however, in taking the sense of dichotomy to be irredeemably polar and reciprocally ultimate rather than stratal and unilaterally or impulsively protractile.) (pp. 119-20)

Ironically, this aporia that insists on the humanistic binary, while refusing it the respite of ontotheological delay, transcendental image, or some other equally strategic ontical/ political/ semiotic theology, is singularly bound up with the history of metaphysics it claims to move against, even while recapitulating it. There is a pathological insistence, a demon in the dark, lurking and skulking about in the daemon of the "western graphic order":

> A delirium integral to the western graphic order implies, more radically, that any possible history must arise out of the forgetting (or secondary repression) of a constitutive arche-amnesia (the ellipsis integral to inscription). Klossowski has even been led to suggest that western science is aphasic, because it is initiated in the default of a foundational discourse. This default is not merely a passively accepted pathology, it is an inscribed, prescribed, or actively administered pharmaco-pathology. The response of the West to the writing of itself has been that of a poisoning. (p. 98)

That default is humanistic in its impulse, embracing the imaginary schism within its own semiotic stratigraphy as a foundational semiotic exchange, whereby a space is cleared for the question of our Being over and against the construal of beings that is the excessive inhumanity of rampant semiosis in and as a world not intelligible as an ordered objectivity. The latter implies an intolerable uncanny that would participate in but not be subject to the promulgation of culturally intelligible vectors continuously passing through the transit station of a non-local *Mittelpunkt*, that God-like view from nowhere. The insistence on Transcendental Identity is an ongoing cultural torture, an eternal immolation.

> Heidegger takes the weave of the distance separating humanity from the beasts of the wilderness to rest in a type of thinking that is irreducible to adaptive biological calculation. Such thinking is rooted in the temporalization of the ontological difference, and has been traditionally unified—if only confusedly so—about the thought of transcendence. Transcendental thinking has the peculiar characteristic of relating itself to the thematic of thought itself, a

> tendency which has been systematized within epistemological philosophy. Within the Western tradition this type of cognition has been designated 'reflection'…. Humanity is thus reflected as the default of an (ontical) image; as a lack of ground or *Abgrund* which is the transcendental condition of any possible ontology. The heavens are an abyss: Χαοζ. (pp. 91-2, 94)

The reflection intended here is not that of a Narcissistic gaze, but rather the space which semiotic self-relation can form by means of representing to itself a boundedness, a circle of return, in which the mind can turn away from ontical representation inward to discover the *ingenium* that articulates the Hegelian image that serves as acknowledgement of an ontological realm to which it bears relation and serves as portal or entry, as that tight space of penetrating insight that is the anal/vaginal appropriated by mind in and as an orality: the ouroboros which offers a peri-/ para-metric geometry of schematic existence. This is the temporal castration that creates an imaginary ultimacy/intimacy of contingent future-as-*Abgrund* in unilateral binary relation to its own perpetuated absence—a becoming-other than is still not a becoming-feminine or a queer becoming as it modalizes latency in/-to repression, rather than radiating transformative expression of complex receptivity of/as partial objects. Representation giving way to relevance, yet always seeking the resonance that empathic, polysemous, and self-possessed care exudes, which, in turn, allows for ecstatic singularity in expression and the insistence it promotes as line of escape. Heidegger never gets there, to that breathing oscillation, preferring to obtain within the scopic/penetrative regime and the riverrun of transcendental semantic overlays. Pointing to Heidegger's citation of Novalis as reference ("Precisely what is most peculiar about language, that it only concerns itself, nobody knows."), Land in turn cites Heidegger:

> Thus released into its own freedom, language can concern itself solely with itself. This sounds like the discourse upon an egoistic solipsism. But language does not insist on itself in the sense of a

> self-centered all-forgetting self-mirroring. As saying, the weft of language is the propriative showing, which precisely deflects its gaze from itself, in order to free what is shown into its appropriate appearing. (p. 86)

Land goes on to show how Heidegger's perspective leads him to recognize the return as a technology that must be postponed as the definition of exteriority to Being, pushing it out beyond theory into a poetics that ironically recapitulates Plato, returning to his banishment of the poets. The later Heidegger will ultimately allow the Hegelian Concept to be elevated to the level of Science as the pataphysical exploration of Appropriation, but for now he is not able to embrace such objectless representation or the stratified layering of Being it offers as synthetic antidote.

> Language is to be understood in a way that could be misread as a theory of narcissism, since it relates itself to itself, and this could be taken to be analogous to the self-regard of a subject enraptured by its own reflection. The discourse on language must therefore fend off a misinterpretation that threatens to appropriate it, or at least deflect it, into a psychoanalysis of the sign. At this crucial moment the circle of language seems to symptomize a type of auto-eroticism, displacing itself into a geometric figure of desire. In insisting that his approach to language is not to be confused with a dissolution of the subject into unconscious energetics… Heidegger marks a crucial historical crossroads in the interpretation of Nietzsche's doctrine of the cosmic circle, the eternal recurrence of the same. Heidegger seeks rigorously to distinguish his own reading of eternal recurrence—as the last attempt to conceive the temporality of beings, as recapitulation of the history of being, as the circle of language, and even as Trakl's 'icy wave of eternity'—from what has been interpreted within the Freudian research programme as the 'death drive', as the economy of desire, and as the return of the inorganic. Return, which is perhaps the crucial thought of modernity, must now be read elsewhere. The dissolution of humanism is stripped even of the terminology which veils collapse in the mask of theoretical mastery. It must be hazarded to poetry. (pp. 87-8)

The series is a cycle, an oscillation of affirmation and denial, the blink of an eye. It is the feeling of the foot tripping across the nodes of a network, landing then leaping, over and over again, the

sign of Deleuzian speed that constitutes the aggregation of frames of thought for a moving picture of restful contemplation, the movie of conception that moves us, the hum. We find ourselves confronted with a choice: voice or exit, presence or absence, binary informatic technocapital.

> Nietzsche introduced two forms of expression into philosophy: aphorism and poetry. They imply a new conception of philosophy, a new image of the thinker and of thought. Nietzsche replaced the ideal of knowledge, the discovery of the truth, with *interpretation* and *evaluation*. Interpretation establishes the "meaning" of a phenomenon, which is always fragmentary and incomplete; evaluation determines the hierarchical "value" of the meanings and totalizes the fragments without diminishing or eliminating their plurality…. The philosopher of the future is the explorer of ancient worlds, of peaks and caves, who creates only inasmuch as he recalls something that has been essentially forgotten. That something, according to Nietzsche, is the unity of life and thought. It is a complex unity: one step for life, one step for thought. Modes of life inspire ways of thinking; modes of thinking create ways of living. Life *activates* thought, and thought in turn *affirms* life. Of this pre-Socratic unity we no longer have even the slightest idea. We now have only instances where thought bridles and mutilates life, making it sensible, and where life takes revenge and drives thought mad, losing itself along the way. Now we only have the choice between mediocre lives and mad thinkers. Lives that are too docile for thinkers, and thoughts too mad for the living: Immanuel Kant and Friedrich Hölderlin. But the fine unity in which madness would cease to be such is yet to be rediscovered—a unity that turns an anecdote of life into an aphorism of thought, and an evaluation of thought into a new perspective on life. In a way, this secret of the pre-Socratics was already lost at the start. We must think of philosophy as a force. But the law of forces is such that they can only appear when concealed by the mask of preexisting forces. Life must first imitate matter. (Deleuze, Pure Immanence: Essays on A Life, 2001, pp. 65-7)

8. Interlude: In the Cracks[52]

I. No Time For Progress

The land is dying, but it looks like spring. This winter's weather seems lost, as if the Earth itself had grown senile and forgetful. It isn't the old age of winters past, when the years themselves die into renewal. The winter now seems cold and unrelenting, brutal, brought down by ill-health and left alone with no way to care for itself. Rain that should have fallen long and hard by now is yet to come, the mud that would be found this time of year choked in dust. The scrubjays, normally scarce, have gone entirely, only to be replaced by other birds from farther south. The sight of these new birds, themselves lost to their habitual terrain, is as eerie and disturbing as the daffodils blooming here at the end of January. I am afraid of the winter daffodils. They mean the death of the land.

And yet, while frightened, I also recognize a certain power of the Earth, which is itself always more than death. Life, once begun, once discovered and unleashed, cannot be undone, cannot be lost. Death can come for living things, but life itself is endless. For every misshapen circumstance we bring and every rhythm we destroy, life will find a new way. It will heal its wounds and continue on, wrapping its patterns, its life ways, and its newly innovated rhythms around time itself, pulling eternity into an exuberance that shuts out all particulars of despair.

For those of us who fight *with* life, who align ourselves not against the plight of the infinite particulars of synthetic death but *with* the joy of life set free, the challenge is not to undo the false ecology of man. That is easy: break it. burn it. tear it down. The challenge is to feel life itself coursing through our veins in the act. To feel ourselves at one with the spirit of all that lives. It is difficult not because right action is here ambiguous or uncertain, but because life itself is

[52] This short essay was originally published pseudonymously under the name Tara Specter in the journal *Green Anarchy* #25, Spring-Summer 2008, as "Hope Against Hope". The land in question is in Boulder Creek, California.

bigger than us, more vast even than our largest acts. And so we can never act *on behalf of* life, but always and only *as* life. Life knows death intimately, knows its cracks and fissures and weaknesses.

And it puts itself in all its forms against what needs undoing. Those who fight with life are made free by bursting forth as the vanguard of the real.

But this is not progress in the sense of the Progressives. We should not expect progress. Progress belongs to the time of false ecology, to the history of a world whose time has been made straight by the illusions of economy. The Earth has never known a line like that. Time is found in tendrils, in loops, in the movement of arcs and circles, ellipses, and continua. Space itself is open, free, and roiling, bent and moved by its own content, never lost to some illusion of immediate infinity but rather everywhere intimate and close and wild in an eros of and for itself. The history of the world is a spinning pulsation turning round an ellipse. It is vibrant and dynamic and cannot be regulated, controlled, or conditioned. Only the small particulars of death can be so constrained. And that is why the false ecology can only wield power by making use of death. It fights with death. We fight with life. It. We.

II. Against Bookchin

Murray Bookchin buys into the time of the false ecology and thus into the myth of progress. Evolution is not progress, ecology is not progress, nor is history progress. The call he makes for a Kropotkinist social ecology is based in the neo-Aristotelian tradition of natural law. But nature has no laws or fixed agendas. It is not normative or institutional, but purely decisional. Those patterns some might call laws are habits, are a form of the universe making love to itself. They are not laws. Nature is not legislated. It is a process of self-exploration, holding itself open to its

own endless reordering and continual interrelation. It is not subject to law or to the exercise of sovereignty's sway over death. Life finds only life. We see in Bookchin the dialectics of his ideological leftism and of the false ecology that believes that time and space bring encounters with a reified death (the nonliving or inorganic, here, as objects for appropriation):

> Put quite simply, ecology deals with the dynamic balance of nature, with the interdependence of living and nonliving things. Since nature also includes human beings, the science must include humanity's role in the natural world — specifically, the character, form, and structure of humanity's relationship with other species and with the inorganic substrate of the biotic environment. From a critical viewpoint, ecology opens to wide purview the vast disequilibrium that has emerged from humanity's split with the natural world. One of nature's very unique species, *homo sapiens*, has slowly and painstakingly developed from the natural world into a unique social world of its own. As both worlds interact with each other through highly complex phases of evolution, it has become as important to speak of a social ecology as to speak of a natural ecology. (Bookchin, 1982, p. 22)

The heroic narrative of the emergence of the human is amplified by the sense of scientific certainty about the nature, or at least sharp boundaries, of the human as a strictly differentiated species. Postulating a radical break between "nature" and the "social world," Bookchin proceeds to shore up this difference by articulating the relationship as mediated by "highly complex phases of evolution." The meaning of this latter phrase remains elusive at best, and we can only assume that he uses here an ecological flourish in order to generate a place-holder or stop-gap for a yet-to-be-theorized aspect of his theory.

Bookchin's attempt at an ecocentric posthumanism falls back into the categories of humanism's speciesist false ecology at precisely the moment we would wish it to be most powerful: in the presentation of its ethical scheme. Bookchin's largely negative critique of urbanity, counterbalanced with an aphoristic positive critique, romantic at best, cannot do much more than

describe the boundaries of Aristotelian humanism as a kind of banal urbanity and then reorient the relationship between culture and nature according to a "healthier" ethic of "respect for nature." The lack of specificity in the determination of the moral patients for this ethic make Bookchin's ethic seem unlikely to succeed. Moreover, without a critique of urbanity's construction and determination of death as the form of its relation to life, it is difficult to see how the scenario that would provide for his ethic's implementation in the first place could emerge.

This blind spot allows Bookchin to miss the profound sense in which Ernst Bloch, an early German Green thinker, identifies the problem scenario in a way not addressed in the Kropotkinist milieu, even though he cites the relevant passage:

> Nature in its final manifestation, like history in its final manifestation, lies at the horizon of the future. The more a common technique [*Allianztechnik*] is attainable instead of one that is external — one that is mediated with the co-productivity [*Mitproduktivität*] of nature — the more we can be sure that the frozen powers of a frozen nature will again be emancipated. Nature is not something that can be consigned to the past. Rather it is the construction-site that has not yet been cleared, the building tools that have not yet been attained in an adequate form for the human house that itself does not yet exist in an adequate form. The ability of problem-laden natural subjectivity to participate in the construction of this house is the objective-utopian correlate of the human-utopian fantasy conceived in concrete terms. Therefore it is certain that the human house stands not only in history and on the ground of human activity; it stands primarily on the ground of a mediated natural subjectivity on the construction site of nature. Nature's conceptual frontier [*Grenzbegriff*] is not the beginning of human history, where nature (which is always present in history and always surrounds it) turns into the site of the human sovereign realm [*regnum hominis*], but rather where it turns into the adequate site (for the adequate human house) as an unalienated mediated good [*und sie unentfremdet aufgeht, als vermitteltes Gut*]. (p. 34)

Bloch moves towards the posthumanistic at the instant Bookchin fails to do so. Bloch puts the nature of humanity, as self-constructing and self-mediating natural system, at risk in

such a way that our relationship to nature is questioned not through a reorientation of the "human" (in a "natural state" or otherwise) toward nature, but through a redeployment of humanity itself as metaphor for its own way of being-related. In this view, an ethic is implied that sees "nature" as inherently good because it is the ahistorical locus for the manifestation of good-as-such in and as the manifestation of the historical subjectivity of humanity, in turn the carriers of social good. Thus nature is valuable in itself, not because of an anthropocentric ethic that sees it as the object of our respect, but because it is the primordial ground of relation itself in its dynamic possibility: *sie unentfremdet aufgeht, als vermitteltes Gut*.

One can hear here indirect echoes of Heidegger's "anti-Platonic" reading of the line from Trakl: "*Es ist die Seele ein Fremdes auf Erden*" ("Yes, the soul is a stranger upon the earth"). Derrida explains:

> Heidegger immediately disqualifies any "Platonic" hearing of this. That the soul is a "stranger" does not signify that one must take it to be imprisoned, exiled, tumbled into the terrestrial here below, fallen into a body doomed to the corruption (*Verwesen*) of what is lacking in Being and in truth is not. Heidegger does thus indeed propose a change of meaning in the interpretation. This change of meaning goes against Platonism, comes down to an inversion, precisely, of *meaning itself* [*le sens même*], the direction or orientation of the soul's movement. This reversal of meaning — and of the meaning of meaning — passes in the first place through a listening to language. Heidegger first repatriates the word *fremd* from the German language, leading it back to its '*althochdeutsch*' (Old High German) meaning, *fram*, which, he says, 'properly means' (*bedeutet eigentlich*): to be on the way towards (*unterwegs nach*) elsewhere and forwards (*anderswohin vorwärts*), with the sense of destination (*Bestimmung*) rather than of wandering. And he concludes from this that, far from being exiled on the earth like a fallen stranger, the soul is on the way towards the earth: *Die seele sucht die Erde erst, flieht sie nicht*, the soul only *seeks* the earth, it does not flee it. The soul is a stranger because it does not yet inhabit the earth — rather as the word '*fremd*' is strange because its meaning does not yet inhabit, because it no longer inhabits, its proper *althochdeutsch* place. (Derrida, 1989, pp. 87-8)

Of course, with Bloch the Platonic echo returns even as it is submitted to counter-Utopian suspension.[53] The *unentfremdetlichkeit* of Bloch's *vermitteltes Gut* is discovered in and as its proper expression as a good that is both more imminent and more constrained for its actualization. Because it is at one with life, the soul does not inhabit the earth. Cut off from being cut off, we are strangers to alienation. An always-already present and available relationship is discovered and made manifest as the making possible of an impossible relation, through the pressure of a disclosure of the good that can never be disclosed as *a* good: a temporally precessive amelioration that never improves, that never leaves a starting gate it was never placed in, but always seeks and always becomes better; a perfect imperfection that needs no perfecting because it grows ever more perfect by displaying ever more imperfection; an always present "not-yet." We need not therefore concede, with Derrida, the apparent necessity of a humanist teleology, which, he would claim, "in spite of all the denegations or all the avoidances one could wish... has remained *up till* now... the price to be paid in the ethico-political denunciation of biologism, racism, naturalism, etc." (p. 56)

III. The Beginningless War

I am afraid of the winter daffodils, angered by the decay and disorder they would carry. But there is a joy in them: in the midst of a senile season, I recognize that that which we hold dear has always already won. I know that the intimate encompassing of life in and for itself extends beyond the reach of the ecology of death. That its always-already won victory is an expres-

[53] The coherence of the human channel is not that of a voice from some *origo*, but rather the spontaneous self-assembling coherence of a rhythmic futurity, Land's AI that arrives from the future as its own shadow, our imaginary, to us as we are to nature.

sion of its self-surrendering to its infinite not-yet. The forefront of life is the line we draw at the edge of death, saying "This far and no farther."

But the serious tone breaks into a laugh like grass in the cracks of a parking lot, as we look across the line we drew and see flowers growing up in winter. Because there is no progress to be made, we can declare victory before the battle. The fire that burns the false ecology to the ground is the warmth of the heart of life itself. The ashes that remain are the sacred transformation of death that we smear across our own bodies. There is no dialectic. There is no cause for hope or fear. There is only life — its winding, growing chains of limitless, free, self-liberating desire.

* * *

Hegel's idealism lies in taking the triad as a concept and rendering it discursive. This is a power move, sheering the properties of semiosis itself into an operational diagram free of diagrammaticity. It's an entextualization that punkishly scribbles out coherence in order to foreground a making-coherent. Thus, we receive the architectonics not of a ground, but rather of a superstructure, available in, as, and for critique and as deployable metaphorics. In becoming the Concept, it is ensured by Hegel to become the inconceivability of a now self-alienated ground. The infinite representability of and for the cosmos in discourse comes at the expense of an ultimate nonrepresentation. To overcome this nonrepresentation—not for the sake of Romantic immediacy, but for the sake of harmonizing it with such knowledge as can be produced—we must accept the nonrepresentational as primary and then accept the non-dialectical unity of representation and nonrepresentation in triadic semiosis, redoubled in the nine-pointed square, the cube of cubes and its ever-centering center. This center must be itself available in and as the triad, forc-

ing the cube to extend into another dimension in a multiplication by three that is uncountable in the prior moment. Paradise and the expulsion from paradise are the same: doubt and doubtlessness, construction and stature, pushed out in a radiance that questions the difference between one and three, where three is the compound eye of a self-assembling network in resonance, humming any mad tune as it seeks to discover means to a transcendent, lossless unity of throughput.

9. The Stranger

Thus far, in the effort to articulate the intended thought experiment, the question of whether the desired outcome is conceivable has been taken up by demonstrating that alternative frameworks can, in principle, be conceived of coherently. This end was achieved by means of an exploration of an amodal techno-informatics that seems inevitably bound up with questions of mystical, hermetic planetarity and desubjectivization in light of posthumanistic vectors of entrainment that operate over and against the otherwise apparently coherent supervenience of liberal consciousness. In the amodality of a thoroughgoing and pervasive immanence is at least one cause for a refusal of representationalism. Having shown that it is conceivable to speak of alternative frameworks, we now turn to the question of whether it is possible to articulate them. Given the advances made in the arguments above against representationalism and given our goal of deriving the framework we intend from the area where conceivability and possibility overlap, it seems doubly appropriate to assume the amodal stance derived thus far and develop our arguments from there. This folding-in represents an opportunity to reach our goal without the need to investigate domains that are separate or largely so and allows us to speak in terms of an already advanced diagrammatics present in the foregoing.

It is important to note, in light of a potentially confounding overlap in language, that the possibility denied in the amodal arguments is not the same as the possibility described in our method. Though there is no intrinsic need for our theory or metalanguage(s) to align with the argument patterns treated by them, it is helpful if they are understood to do so, as we are borrowing from that content domain to advance our theoretical perspective in this case. Possibility at the level of the thought experiment is not a modal latency, hesitation, or expectancy. The term instead asks after the question of whether it is self-contradictory for a subject to articulate the con-

ceivable framework, not at the physical level of simply making sounds which can be interpreted as the rehearsal of language that describes it, but rather at the level of the production of voice. The issue that brings this to the foreground as a matter to be explored is the fact that the amodal perspective seems to give rise to a binary, the bifurcation of which hangs on the difference between raising voice or exiting the vector-mesh entirely.

The stakes could not be higher in this, as the difference teeters across the divide between a sublation, in and as a weave of semiotic series that constitutes both the having of a voice and the experience of a desubjectivization, and a translation that traces lines of escape that advance singularity, even while refusing voice. This is the mystic's dilemma, which Hegelian hermetic representationalism would claim to resolve to the extent that a pure transcendental image of objectless consciousness can be brought to light through a figure of differentially miniscule self-alienation. The degree to which this alienation can be minimized is what promotes the capacity for reflective consciousness to articulate the Real in-the-last-instant as a vision-in-One. The crosshairs of this chiasmus are the *Mittelpunkt* through which the transit of Being passes according to the fourfold as the summative relation between dynamic and fixed triads of semiotic performance. What we need is the capacity to ground a self-alienation in and as experience of expressive escape toward the Real that does not require of us an ideological commitment to representationalism as the primary default of semiosis. To put it differently, we must understand what makes possible the enunciation of truths in an era in which we know that the representational theories of knowledge as justified true belief simply slide off of the Real—at least along the valleys of the Gettier problem if not elsewhere—allowing only for a performative parallelism that merely clones the Real as horizontal transcendental signifier in-and-as-the-One (an extensional

temporalization), rather than reproducing it through a centralizing vertical mimesis with claims to asymptotically disintermediated conditions for its own plausibility.

What we have encountered in exploring the above is a diagrammatic and schematological domain that articulates itself out of an objectless reflection and self-alienation. The specifically amodal character of transtemporal desire-signification can be articulated on similarly diagrammatic terms, and in a way that will advance our arguments. Jesper Hoffmeyer (1996) has explored these issues with reference to the work of Anthony Wilden. Wilden is concerned with the structure of negatively significant relations, affirming negations, insofar as they determine the interior structures of signs. His analysis is grounded in "making a distinction between analog 'negation' (many-valued, and not involving zero) and digital negation (two-valued, involving zero)." (Wilden, 1980, p. 182)

> Such a distinction is the same as (and would clarify) that between the diachronic *Aufhebung* of the Hegelian and Marxian 'negation of the negation' and the synchronic *Verneinung* in the Freudian sense of the 'denial of the return of the repressed'. Both of these processes are distinct from analog refusal, rejection, or disavowal (the Freudian *Verwerfung* and *Verleugnung*). *Aufhebung* and *Verneinung* are processes of a different logical type: the *Aufhebung* of a situation refers to the diachronic overcoming of the contradictions in a referent system and the subsequent emergence of (what is in relation to it) a metasystem; *Verneinung* refers to the statement by some subject or other (who may be a group or a society) that some (actual) state of affairs is NOT the case, and is thus a synchronic metastatement about a statement. (p. 182)

Going further still, Wilden uses this distinction among forms of negation as a pathway to understanding the relationship between reality and representation with regard to a dynamic subject.

> *Aufhebung* does not include any syntactical use of 'not' (whatever the observer may think about the relationship between the metasystem and the referent system), but it is not equivalent to

> analog refusal. Refusal in fact is the analog counterpart of digital denial, which is one reason why Freud uses rejection or 'disavowal of reality' to describe 'psychosis', and negation and repression of 'reality' to describe 'neurosis'. Whereas the 'psychotic' may entertain two completely contradictory ideas about some state of affairs, the contradiction is not related by 'not'. The 'neurotic' on the other hand, may entertain similar contradictory ideas, but the secondary system negates the primary system representation, that is, it does not 'bind' it so as to bring it from analog meaning to digital signification, for "repression is a gainsaying (*Versagung*) of the translation" from one system to the other. It is the *Verneinung* of the repressed presentation which provides for the 'suppression and the conservation' (*Aufhebung*) of what is repressed.
>
> Thus I would define analog 'negation' as *Aufhebung* (which suppresses and conserves contradictions) and digital negation as *Verneinung*, while still maintaining the distinction between analog refusal and digital 'no-saying'. (p. 182)

By this logic, Wilden defines the sign as part of a digital system of binaries. It signifies by exclusion, rather than summing over difference. For him, the sign is a neurotic, rather than psychotic, structure. The sign, as such, is an independent object standing in relation to something else.

> The sign is identical to itself and yet not identical to itself. The (analog) signal is defined as being what it is (e.g., a bite, a movement) and both sign and signal are to be distinguished from the signifier, which we reserve for the particular 'mixed' system called 'natural language', which presumably includes all logics….
>
> The conception of 'non-A' in Boolean or any similar logic, however, can be regarded as founded on the notion of absence. Although the complement of A in set S is B, and B is 'non-A' (therefore B is the sign of 'non-A'), the usual Euler or Venn diagrams of the relation imply that 'non-A' is simply the absence of A…. But 'non-A' is an assertion about the existence of A and is opposed not only to A or to other positive statements, but also to all the negative statements it is not (non-B, C, etc.). 'Non-A' is not equivalent to '-A', for this would imply that 'non-1' (which could be anything) is equivalent to '-1' (which is a particular)…. [E]specially when the sets are representable by some sort of Euler or Venn diagram…, we have an analog representation of a digital BOUNDARY DISTINCTION. A and B are not in a SYNTACTICAL relationship of negation to each other, for such a relation requires a message between a sender and a receiver in which a nega-

> tive word occurs. In other words, A and B are in a relationship at a single level, a relationship of EXCLUSION, which is how the relation is used in any yes/no digital system, such as the digital computer. Moreover, they are both excluded from other sets of relations by the frame around them. (p. 183)

As Hoffmeyer emphasizes, the circumscribing frame defines at least one other as neither A nor non-A. The primary relation of distinction within the system is a metalinguistic element, lifting the sign as such into full semiosis. The secondary relation to content defined as external to the system of differences by the act of drawing the distinction indicates a kind of halo or glow, an echo or peripheral horizon beyond the primary distinction. It is in this structure that we see both the neurotic and psychotic structures described above, and the inward and outward facing aspects of the full sign, denotative and connotative respectively. The connotative is such as it represents participation in a system of secondary relations that define the probability of the primary sign's occurrence within a given domain of signification. Wilden diagrams this situation, referring to the primary difference as "legitimate" with reference to denotative interiority and to the secondary difference as "illegitimate" with reference to that same denotative scope.

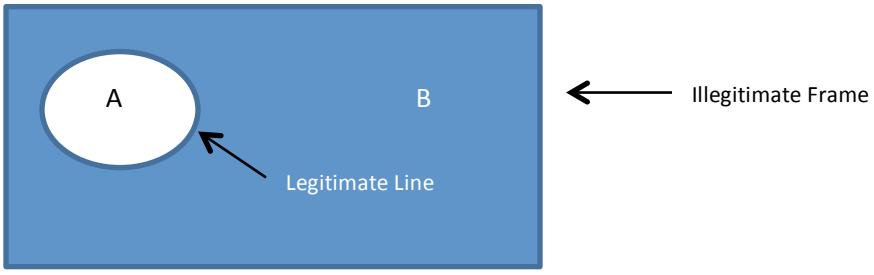

Figure 5 Wilden's Diagram

The primary difference happens within a space that is understood to be in some way continuous with itself with regard to some aspect or property and happens interior to what amounts to a sep-

arate distinction, the series of which may or may not be aligned so as to reinforce the primary difference. In this sense, each difference is a vector, a vector that is an inflection in a system that is embedded in another system. A sign is, then, a vector of difference within a system, inflecting the system in such a way as to articulate differences in probability structures or, alternatively, probabilistic differences. However, these are not possibilities in a modal sense, as the diagram is about patterns of immanent differences and represents a binary of participatory expression or exclusion according to the vectorial alignments of various qualities. Pressing this further, however, we can see that at the boundary of the illegitimate framing, modality opens up again as a psychotic, potentially innumerable multiplication of probabilities and avenues of differentialization. Here the centrality of the experiencing subject and the ouroboros of representation are nuanced such that the exterior is understood as full of rich possibility, while the interior is molded into a refined differentiation that is seen locally as a product of metalinguistic intervention (transcendental images, etc.), but which can be seen globally as the structured embedding of systems of difference within and across others.

From this perspective, we can argue that the metalinguistic intervention, when conceived as a transcendental image/signifier, can be equated to the object of metaphysical inquiry. However, we have previously argued for moving to a single plane of immanence, as this metaphysical scenario is representationalist in its assumptions. The above is clearly indicative of the need for a move "beyond metaphysics." As Deleuze starkly says: "Major modern authors often surprise us with a thought that seems both a remark and a prophesy: metaphysics is and must be surpassed. In so far as its fate is conceived as metaphysics, philosophy makes room and must make room for other forms of thought, other forms of thinking." (Deleuze, 2004, p. 74) This propaedeutic statement, for all its singular force, is specifically oriented toward a history of nihilism: the Nie-

tzschean series in which the death of god is accompanied by the death of the human. Already, and with great speed (as Deleuze might say), we arrive at a posthumanist perspective from the instant we move to undo a transcendental ordering of experience. Those "other forms of thought, other forms of thinking," in its apparent reduplication of terms, indicates a shift in semiotic orders and in the ground of experience that would participate in their expression.

> This something "other" is conceived as a force already at work in human subjectivity, but hiding in it, and also destroying it. (cf. Rimbaud's "Something thinks me.") The action of this force follows two paths: the path of actual history and the development of technology, and the path of poetry and the poetic creation of fantastic imaginary machines. This conception demands a new thinker (a new subject of thought, "death to the Cogito"), new concepts (a new subject to be thought), and new forms of thought (which integrate the old poetic unconscious and today's powerful machines, e.g. Heraclitus and cybernetics). (2004, p. 74)

Pointing to Nietzsche, Marx, and Heidegger as thinkers who only arrived at this Concept in degrees, Deleuze submits to us the name Alfred Jarry as the one able to deploy this new construct in the term "pataphysics," which is, in Jarry's original spelling 'pataphysics [*'pataphysique*], derived from the Greek ἔπι μετὰ τὰ φυσικά (*epi (meta ta physika)*) ("that which is above metaphysics"). Citing Jarry directly, Deleuze shifts into an explicitly posthumanist mode:

> Pataphysics must be defined: "An epiphenomenon is that which is added on to a phenomenon. Pataphysics…is the science of that which is added on to metaphysics, either from within, or outside it, extending as far beyond metaphysics as metaphysics extends beyond physics. E.g. since the epiphenomenon is often equated with the accident, pataphysics will be above all the science of the particular, even though it is said that science deals only with the general." In the jargon of specialists: Being is the epiphenomenon of all *beings* [*étants*] and must be thought by the new thinker, who is an epiphenomenon of humankind. (Deleuze, 2004, p. 75)

On these terms, metaphysics is the vectoralization of semiotic process as systematic difference and differential systematicization, while pataphysics is the localization of the immanent Real that is specified and particularized as exceptional or epiphenomenal to its context. In other words, it is a schema of representation for exclusionary difference, articulated in an analog format, giving the appearance of syntactical relations. It makes meaning out of patterns of qualities immanent to the Real—which is to say that it is performatively intensive categorial thinking, rather than the descriptively extensive categorical thought of metaphysical transcendentalist appropriations of Being. Given the problems we have so far been expressing, we can say then that metaphysics is, a little weirdly, a connotative solution space for a denotative problem space. The thought experiment being conducted here is an experiment in pataphysics, defined in the Deleuzian manner.

Deleuze presents the work of Kostas Axelos as a prime exemplar of his interpretation of pataphysics, with particular regard for Axelos's *Vers la pensée planétaire*. Axelos proceeds through a process of juxtaposition, remix, or perhaps even pataphor, as he allows them to slide up to and through each other, clouds of meaning interacting through non-syntactic patterns of partial inclusion and representative exclusion, the schizotechnic *and…and…and*….

> Axelos's method proceeds by an enumeration of senses. This enumeration is not a juxtaposition, since each meaning participates in the others. Not according to *Rules* which would refer back to the old metaphysics, but according to a *Game* which includes within it all possible rules, which thus has no other internal rule than to affirm all that 'can' be affirmed (including chance and nonsense), and to deny all that 'can' be denied (including God and man). (p. 75)

Axelos applies this method to his own concept of *planetary* to produce a series of interrelated definitions: "The play of thought and the planetary era is thus *global, erratic, itinerant, organizing, planning and flattening, caught up in gears and wheels*." (p. 75) Deleuze explains further:

> Giving an extreme mobility to each of its senses, his planetarism is presented in the following way: find the *fragment* represented by each object in such a way that thought makes up the always open sum (and subtraction) of all the other fragments subsisting as such. Axelos opens an irreducible dialogue between the fragment and the whole. No other totality than that of Dionysos, but Dionysos dismembered. In this new pluralism, the One can be said only of the multiple and must be said of the multiple; Being is said only of becoming and time; Necessity, only of chance; and the Whole, only of fragments. Axelos develops the power of what Jarry used to call "l'epiphenomenon"—but Axelos launches an entirely different term, and a different idea: "being in the process of becoming the fragmentary and fragmented totality." (p. 76)

Deleuze's emphasis on Axelos's concept of the planetary is an anticipation of Darren Weshler-Henry's essay "Canadian Pataphysics: Geognostic Interrogations of a Distant Somewhere," in which the author explains the value in a shift from 'Pataphysics to "Pataphysics. Recognizing the Eurocentric history of 'Pataphysics, this apostrophic intervention is a superinducement upon that history, though it shares common roots. For example, there is agreement on possible definitions of 'Pataphysics, looking to Jarry as source. Starting with one of Jarry's definitions, Wershler-Henry advances that definition by way of Harold Bloom. The definition by Jarry reads:

> Pataphysics is the science of imaginary solutions, which symbolically attributes the properties of objects, described by their virtuality, to their lineaments. (Wershler-Henry, 1994, p. 67)

Then, with reference to Bloom:

> [I]t examines the laws governing exceptions, and describes a universe which can and should be envisioned in place of the traditional one…. 'Pataphysics is necessarily the science of identity, and it demonstrates that all identity is constituted through difference rather than self-similarity. In *The Anxiety of Influence*, Harold Bloom

> describes ‘Pataphysics as the paradigm (or perhaps ‘Patadigm) of poetic influence, and its mode of operation as a *clinamen* (“swerve”). What the (‘Pataphysical) text does, in fact, is to reinterpret its entire context in its own light, paradoxically (‘Patadoxically) determining its precursors. It in turn will be recontextualized by the deliberate misinterpretations of its antecedents; every reading is necessarily a misreading, every identity a mistaken one. This is a *pro*ductive rather than a *re*ductive relativism—to know a thing by its clinamen is to know it in a way that does not purchase that knowledge by the loss of that thing’s power. (p. 67)

Wershler-Henry explains “Pataphysics in this light, remixing citations from the history of that practice:

> It should come as no surprise, then, that Canadian “Pataphysics marks its differance from its imperial cousin (‘Pataphysics) through a swerve (clinamen) “from elision (‘) to quotation (“) through a superinducement on elision (‘+‘=“)”. Therefore, “If…‘Pataphysics (according to Jarry) is ‘the science of imaginary solutions’ and thereby the source of answers to questions never posed, then “Pataphysics (diacriticized via the open quotation of a double elision) will be ‘the literature of all imaginary sciences’”. “Pataphysics provides the quotation of those givens that we do not understand, and accompanies them with supplementary notes constituting an explanation. Simultaneously, it moves both closer toward and away from the notion of Origin(s). (p. 76)

Finally, with reference to an essay by Karl Jirgens, the author exposes the underlayer of “Pataphysics that explicitly addresses the formation(s) of Canadian identity, linking place to identity through a theory “that the rock formation known as the Canadian Shield (which comprises most of central Canada, the prime region of “Pataphysical activity) might have some influence on the consciousness of its inhabitants.” (p. 68) From at least the time of the publication of this essay, “much of Canadian “Pataphysics has been explicitly geological in focus.”

However, in its speculations regarding the material substrates of Canadian psychotopography, "Pataphysics proceeds not so much according to a geo-logic as to a geognosis:

> *GEOGNOSIS: [Incorrectly for GEOGNOSY].*
>
> *GEOGNOSY: 1. A knowledge of the structure of the earth, its strata, their relative position and the probable constitution of the interior. Often used as nearly equivalent to GEOLOGY. (OED I, 1132)*

The paleonym "geognosis," an incorrect synonym for the near-equivalent of a hard science, enacts the "Pataphysical notion of quotation as an inverted doubling…. Because any identity is bound up in the process of signification, it is continually shifting and unstable, and can never be pinned down in any final sense. But as McCaffery writes,

> *That the problem is a pseudo-problem [or the solution a pseudo-science] in no way nullifies the pursuit of a solution, for the pursuit in itself will evince the problematic nature of both "problem" and "solution" as the terms are shaped and defined through the suspect process of language.* (pp. 68-9)

This formation of "geology as an analogy for language" underlies McCaffery's geognostic theory of fossils, according to which "fossils are in fact 'paleoglyphs': 'the first intelligent attempts at creating a comprehensive system of written significative marks'":

> [F]ossil operates as a linguistic insertion into a geological fact providing an answer to a question never asked. It is from this precessional answering that paleontology formulates its questions by a system of back-formation. The fossil "sentence" that answers a non-existent question and hence is by nature 'pataphysical. (p. 70)

Insofar as the title of the essay from which this citation is drawn makes reference to the "sexual life" of fossils, presumably to emphasize the relationship between geolinguistics and appetitive forces of desire, the author may have gotten closer to reality than might be anticipated in our eve-

ryday ontologies. (Gilman & Glaze, 2005) That said, the effort here is much more open-ended, seeking to align a pataphorical image with our Lacanian theories of psycholinguistics, so that the subconscious, which acts like a language, is in fact identical with, analogous to, or contributary with the earth itself with regard to the conscious, speaking subject. If expressive semiosis is rooted not in the making-possible or potentiation of the human subject, but rather deep in the history of the planet, then humanity itself becomes part of that layered expression, which, as Robert Corrington (1994; 2000) would have it, is the chora continuously ejecting partial and fragmented material as an expression of the energies of structurally neurotic repression and abjection. Human consciousness then becomes a fold or pocket in a larger general economy of thermosemiotic dynamism, whose capacity for expressing and releasing those energies represents, on the one hand, a renegotiated balance between what we can barely refer to as the pleasure and reality principles in an expanded sense, and, on the other hand, an open valve through which planetary therapeutics might be expressed in and as responsive, psychotic, schizotechnic protocols and throughputs. DeLanda (2000) has less directly articulated a similar viewpoint in Deleuzian terms through a discussion of the accumulation of layers of non-linear, differential semiotic interactions. And, indeed, Marcia Bates (2006) has articulated something similar in her information typology, wherein various types of information can be seen as available in different ways and according to different causal series, some of which are human, and some of which are not—though her typology only gestures towards the kind of deep time and layering present in the other examples.

Jarry's famous Dr. Faustroll is the fictional embodiment of the 'pataphysician as he conceived the role. Similarly, Nick Land has given us the more or less equally fictional (one could debate) Daniel Charles Barker, Professor of Anorganic Semiotics at Kingsport College. Having

started out as an information scientist at MIT, Dr. Barker's exploits have taken him through various disciplinary activities, as he visits island after island, pursuing his "profound and polymathic engagement across the entire range of life and earth sciences": archaeocultural research, mathematical semiotics, anatomical linguistics, information engineering, and the cryptography of ancient scripts, quasibiotic residues, and anomalous mineral patterns. (Land, 2011, p. 493) Barker's intellectual history is quite complicated ("There is a voyage, but a strangely immobile one."), due to certain social pressures that were at odds with the directions in which he was being drawn in the more thoroughgoing, pure empiricism of his research (though it seems clear that he takes a fictionalist approach to at least mathematics). Consistent with both predecessors (Yokoo & Oshima, 1979) and contemporaries (Vakoch, 2010), his research veers into areas "connected to SETI activity," and is associated with a "NASA-related organization." (Land, 2011, p. 494) Barker describes this research as follows:

> My task was to help toughen-up the theoretical basis of their signals analysis. They wanted to know how to discriminate—in principle—between intelligent communication and complex patterns derived from nonintelligent sources. To cut a long story short, it became increasingly obvious to me that although they said they were hunting for intelligence, what they were really seeking was organization. The whole program was fundamentally misguided. Various people had big problems with the direction of my research, which had basically veered-off the organizational model. The social friction became intolerable and I had to leave, which was messy because of my high-level security clearance. (p. 494)

What was at issue was the methodological assumptions characterizing the research. In an extremely literal interpretation of the charge of the project (a literalism almost worthy of the unconscious itself), Barker attempts to give the answer to the question as asked. He does not figure out how to sort information, but rather figures out how to respond to the immanent semiosis of

intentional communication from *another planet*. His question is not how to find alien signals, but rather how to encounter the alien amongst a great number of signals. He must think like a planet in order to hear another planet, so to speak. This approach leads to a schizophrenic collapse of social structure, in favor of the paranoid, posthuman, and psychotic schizo: a pure phenomenology of inquiry structured around a dynamic formalism which is reflective in nature, even while desiring to find an object that would satisfy its suspensions. He wants to encounter another Being, and one that is itself reflective and naturally grounded in its own source-planetarity.

> Suborganizational pattern is where things really happen. When you strip-out all the sedimented redundancy from the side of the investigation itself—the assumption of intentionality, subjectivity, interpretability, structure, etc—what remains are assemblies of functionally interconnected microstimulus, or tic-systems: coincidental information deposits, seismocryptions, suborganic quasireplicators (bacterial circuitries, polypoid diagonalizations, interphase R-virus, Echo-DNA, ionizing nanopopulations), plus the macromachineries of their suppression, or depotentiation. Prevailing signaletics and information-science are both insufficiently abstract and over-theoretical in this regard. They cannot see the machine for the apparatus, or the singularity for the model. So tic-systems require an approach that is cosmic-abstract—hypermaterialist—and also participative, methods that do not interpret assemblies as concretizations of prior theories, and immanent models that transmute themselves at the level of the signals they process. Tic-systems are entirely intractable to subject/object segregation, or to rigid disciplinary typologies. There is no order of nature, no epistemology or scientific metaposition, and no unique level of intelligence. To advance in this area, which is the cosmos, requires new cultures or—what amounts to the same—new machines. (p. 495)

This is taken very much to heart, and is a problem that characterized his own corporeal existence. Barker discovers, however, that the ability to quantify exists organizationally, rather than suborganizationally, creating a problematic scenario for a study that needs to remain numerically

commensurable in some way in order to formalize dimensionalized properties and articulate ratios of differentiability.

> The problem was: how to quantify disorganized multiplicities? Diagonal, irregular, molecular, and nonmetric quantities require a scale that is itself nonmetric, that escapes overcoding. Standard procedures of measurement and classification prove entirely inadequate, since they presuppose rigid conceptual segmentation by quantity and quality (Deleuze-Guattari's twin-pincers of molarity, type and degree). (pp. 495-6)

In a way that is inseparable from Wilden's diagram, the pressure Barker feels is the need to express a hypermaterialist, atemporal numeracy, a radically abstracted sign system that abandons Hegelian, or even Heideggerian, metaphysical fourfoldness in favor of a situated and locally determined singularity-triad. This radical detemporalization eliminates the Deleuzian "speed" at which thought moves by way of reduction and thermosemiotic overcoding of virtual categories. In other words, the Dream Work is reconfigured as an iterative expression of displacement and figurability, leaving condensation to an open-ended perpetuation of scalings, an ever-untimely availability of orders. Interestingly, as Land explains, this can be understood as a complication of the Kantian perspective on arithmetic, equivalent to the introduction of non-Euclidean geometries.

> The Kantian assimilation of arithmetic to temporality models elementary time-synthesis as n+1, +1, +1… an intuition rendered questionable by the rigorous lexicographic disorganization of the number (listing) line. One ordinally purified, the number line becomes uncountable by any supposed finite (temporalizing) subject, even from moment n to moment n+1. Instead, the line is synthesized by sorting (lexicographic sequencing) of prefabricated strings, whose quantities are determined on a different axis to their linear-positional codings. A prolongation of the time-arithmetic association would thus require a remodeling of time as nonprogressive synthesis without consistent scale or continuous-quantitative

> trend, no longer intelligible as passage or development. Such ordinal-lexicographic time maps a 'templexity' that is uncountable, fractured/fractional, erratic and heterogeneous, sequential but non-succesive. (pp. 615-6)

The templexity described here as nonprogressive synthesis can be seen in the famous Spanish Inquisition sketch in Series 2 Episode 2 of *Monty Python's Flying Circus*:

> *Animated titles. Music: Black Dyke Mills Band playing a slow dirge.*
> *Stock shot of mill town at the turn of the century - at night.*
> *SUBTITLE: 'JARROW - NEW YEAR'S EVE 1911'*
> *SUBTITLE: 'JARROW 1912'*
> *Mix through to mill-owner's opulent sitting room at the turn of the century.*
> *Lady Mountback sits with her crochet. There is a knock on the door.*
>
> Lady Mountback — Come in.
>
> *Enter Reg, cap in hand.*
>
> Reg — Trouble at mill.
>
> Lady Mountback — Oh no. What sort of trouble?
>
> Reg — One on't cross beams gone owt askew on treddle.
>
> Lady Mountback — Pardon?
>
> Reg — One on't cross beams gone owt askew on treddle.
>
> Lady Mountback — I don't understand what you're saying.
>
> Reg — *(slightly irritatedly and with exaggeratedly clear accent)* One of the cross beams has gone out askew on the treddle.
>
> Lady Mountback — Well what on earth does that mean?
>
> Reg — *I* don't know. Mr Wentworth just told me to come in here and say that there was trouble at the mill, that's all - I didn't expect a kind of Spanish Inquisition.
>
> *Jarring chord. The door flies open and Cardinal Ximinez of Spain enters, flanked by two junior cardinals. Cardinal Biggles has goggles pushed over his forehead. Cardinal Fang is just Cardinal Fang.*
>
> Ximinez — Nobody expects the Spanish Inquisition! Our chief weapon is surprise...surprise and fear...fear and surprise.... our two weapons

	are fear and surprise...and ruthless efficiency.... Our *three* weapons are fear, surprise, and ruthless efficiency...and an almost fanatical devotion to the Pope.... Our *four*...no... *amongst* our weapons.... amongst our weaponry...are such elements as fear, surprise.... I'll come in again. *(exit and exeunt)*
Reg	I didn't expect a kind of Spanish Inquisition.
	Jarring chord. They burst in.
Ximinez	Nobody expects the Spanish Inquisition! Amongst our weaponry are such diverse elements as fear, surprise, ruthless efficiency, and an almost fanatical devotion to the Pope, and nice red uniforms - oh damn! *(to Biggles)* I can't say it, you'll have to say it.
Biggles	What?
Ximinez	You'll have to say the bit about 'Our chief weapons are ...'
Biggles	I couldn't do that...
	Ximinez bundles the cardinals outside.
Reg	I didn't expect a kind of Spanish Inquisition.
	They all enter.
Biggles	Er.... Nobody...um....
Ximinez	Expects.
Biggles	Expects... Nobody expects the...um...the Spanish...um...
Ximinez	Inquisition.
Biggles	I know...I know! Nobody expects the Spanish Inquisition. In fact, those who do expect...
Ximinez	Our chief weapons are...
Biggles	Our chief weapons are...um...er...
Ximinez	Surprise.
Biggles	Surprise and...
Ximinez	Stop. Stop there! Stop there. Whew! Our chief weapon is surprise, blah, blah, blah, blah. Cardinal, read the charges.
Fang	You are hereby charged that you did on diverse dates commit heresy against the Holy Church. My old man said follow the...
Biggles	That's enough. *(to Lady Mountback)* Now, how do you plead?
Lady Mountback	We're innocent.
Ximinez	Ha! Ha! Ha! Ha! Ha!
	SUPERIMPOSED CAPTION: 'DIABOLICAL LAUGHTER'
Biggles	We'll soon change your mind about that!
	SUPERIMPOSED CAPTION: 'DIABOLICAL ACTING'

Ximinez's counting off of the "weapons" of the Inquisition is similar to what is being described in Barker's numeracy. Ultimately, Barker's challenge to the Kantian counting subject, or the need for which, is bound up with the revelation of a posthuman planetary formation:

> Once things are being worked out at the level of tic-assemblies—or flat ticking arrays—there are only intensive populations, and measurement has to give way to engineering fusional multiplicities: systems that count themselves only in the way they propagate, immanently numbering multitudes, like nanoplastic quantum swirls. Eventually a machinic solution was provided by the Tick-Distributor, but that came later… At first there was just the equation, precipitated in what I still thought to be my own body, virtual tic-density = geotraumatic tension…. Once the numbers are no longer overcoded, and thus released from their metric function, they are freed for other things, and tend to become diagrammatic…. Sequence is not order. Order already supposes a doubling, a level of redundancy: the sequenced sequence. A decoded sequence is something else, a sheer numeracy prior to any insertion into chronological structure. That's why decoding number implies an escape from assumptions of progressive time. Tick multitudes arrive in convergent waves, without subordination to chronology, history, or linear causation. They proceed by infolding, involution, or implex. (pp. 496, 502-3)

The theory of geotrauma is explicitly anti-hermeneutic and anti-organizational, even as it expands the semantic range of terminology usually reserved for psychoanalytic work by means of a swerve into geognosis. This swerve is a submission to process without a submission to interpretation, a willingness to procedural semiotic investigation that maintains a consistent, if not insistent, refusal to collapse back into metaphysical traps that serve to desingularize epiphenomena into experiential consciousness. This is not contrary to psychoanalysis, but rather a deep engagement with it that takes it at its word, highlighting the monstrous posthumanity intrinsic to its construct.

> [E]verything productive in signals analysis stems from stripping out superfluous prejudices about the source and meaning of complex functional patterns. I took—and still take—the vigorous repudiation of hermeneutics to be the key to the theoretical advance in processing sign-systems…. In 'Beyond the Pleasure Principle', Freud takes a number of crucial initial steps towards mapping the Geocosmic Unconscious as a traumatic megasystem, with life and thought dynamically quantized in terms of anorganic tension, elasticity, or machinic plexion. This requires the anorganizational-materialist retuning of an entire vocabulary: trauma, unconscious, drive, association, (screen-) memory, condensation, regression, displacement, complex, repression, disavowal (e.g. the un- prefix), identity, and person…. Geotrauma is an ongoing process, whose tension is continually expressed—partially frozen—in biological organization…. Evolutionism presupposes specific geotraumatic outcomes…. [T]he efflorescence of mammalian life occurs in the wake of the K/T-Missile, which combined with massive magma-plume activity in the Indian Ocean to shut-down the Mesozoic Era, sixty-five million years ago. Irruptive volcanism plus extraterrestrial impact, linked by coincidence, or plutonic looping. So there is a catastrophic transition to a post-saurian megafauna regime, part of a much larger overall reorganization of terrestrial symptomaticity, providing an index of neohadean resurgence. And what is mammalian life relative to the great saurians? Above all, an innovation in mothering! Suckling as biosurvivalism. Tell me about your mother and you're travelling back to K/T, not into the personal unconscious. (pp. 496-97, 499-500)

With remarkable speed, Barker retraces the history of major traumatic inflection points, particular as they lead in a non-progressive series to the human condition. This series is a sequence falling across time, folding in and being marked by various traumas, inflections in the record that is Being as futurity for a past. "It concerns plexion between blocks of machinic transition, not strict isomorphic—or static redundancy—between scales of chronological order." (p. 501) The difference between layers is a becoming-static of dynamism-in-time, a becoming-three of the fourfold, in which the deepest and most brutal scarring retreats farther into interiority, shaping a diagrammatic withdrawal into patterns of marked exclusion: a profoundly abject interior, a neurotic mantle, and a psychotic milieu facing out into the infinite dark of receding space-

time horizons, which are, in turn, an expansion of the horizon of available information. The stars are themselves the notes of a harmonic abyss to which we turn with a nihilism drawn from our capacity to draw ourselves out ahead of our own history. That history is a writing of and on the earth itself. There is not, though, a book of nature to be read as such, but rather the clinically indifferent record-keeping of an asylum in deep time. We are the psychosis of earth, schizotechnically assembling futures out of deep fissures of relevance and networks of configured difference, a pataphysical ecoliterature, epiphenomenally inscribed on the de-/ranged surface of Being. And it hurts.

> Deleuze and Guattari ask: Who does the Earth think it is? It's a matter of consistency. Start with the scientific story, which goes like this: between four point five and four billion years ago—during the Hadean epoch—the earth was kept in a state of superheated molten slag, through the conversion of planetesimal and meteoric impacts into temperature increase (kinetic to thermic energy). As the solar system condensed, the rate and magnitude of collisions steadily declined, and the terrestrial surface cooled, due to the radiation of heat into space, reinforced by the beginnings of the hydrocycle. During the ensuing—Archaen—epoch the molten core was buried within a crustal shell, producing an insulated reservoir of primal exogenous trauma, the geocosmic motor of terrestrial transmutation. And that's it. That's plutonics, or neoplutonism. It's all there: anorganic memory, plutonic looping of external collisions into interior content, impersonal trauma as drive-mechanism. The descent into the body of the earth corresponds to a regression through geocosmic time. Trauma is a body…. Fast forward seismology and you hear the earth scream…. For humans there is the particular crisis of bipedal erect posture to be processed. I was increasingly aware that all my real problems were modalities of back-pain, phylogenetic spinal injury, which took me back to the calamitous consequences of the Precambrian explosion, roughly five hundred million years ago. The ensuing period is incrementally body-mapped by metazoan organization. Obviously there are discrete quasi-coherent neuromotor tic-flux patterns, whose incrementally rigidified stages are swimming, crawling, and (bipedal) walking. Elaine Morgan persuasively traces the origin of protohuman bipedalism to certain deleterious plate-tectonic shifts. The model is bioseismic…. Erect posture and perpendicularization

> of the skull is a frozen calamity, associated with a long list of pathological consequences, amongst which should be included most of the human psychoneuroses. (pp. 497-501)

These latter culminate in a badly punned "palate-tectonics," which describes the culmination of this series in the face, vocal tract, and gestural apparatus of the human. One presumes also into Qwernomic extensions, as well. At this point, the sense of culmination is palatable, and one wonders if the fact that the description leads across time toward the human is based on a lazy latent progressivism or rests in an assumed genre or interest pattern. Although it is not stated explicitly, and we are left to think of mere chronology on the surface of it, the story told may be one of increasing intensities and tensions, so that we have moved along a vector, counting off traumas in a detemporalized temporal sequence, a stuttering. One cannot help but note the pervasively latinate language, meant to evoke a clinical and scientific detachment and alienation, as well as the twin tendencies that overcode pataphysics: the stylistic borrowing from Jarry and his contemporaries that is symptomatic of an anxiety of influence, and the use of a resource language for the production of alienated or abstracted terminology in philosophy.

> Due to erect posture the head has been twisted around, shattering vertebra-perceptual linearity and setting up the phylogenetic preconditions for the face. This right-angled pneumatic-oral arrangement produces the vocal-apparatus as a crash-site, in which thoracic impulses collide with the roof of the mouth. The bipedal head becomes a virtual speech-impediment, a sub-cranial pneumatic pile-up, discharged as linguo-gestural development and cephalization take-off. Burroughs suggests that the protohuman ape was dragged through its body to expire upon its tongue. It's a twin-axial system, howls and clicks, reciprocally articulated as a vowel-consonant phonetic palette, rigidly intersegmented to repress staccato-hiss continuous variation and its attendant becomings-animal. That's why stammerings, stutterings, vocal tics, extralingual phonetics, and electrodigital voice synthesis are so laden with biopolitical intensity—they threaten to bypass the anthropostructural head-

smash that establishes our identity with logos, escaping in the direction of numbers. (p. 502)

10. Bathophilia

On the 50th anniversary of the publication of Lem's Summa Technologiae

What is knowledge for? In our day it mustn't be for statecraft.

The university is statecraft epistemogeny.

Disputatio is an empiricism testing out theories and applications of regal speech.

It became dangerous at the point it became such a system for flamen's speech.

Statecraft among us, as those and what we have become, rips bodies to shreds.

States can't stand because of the vertiginous speed, the thermodynamic rage of our time.

It is neither stable nor safe to have states at these speeds.

Once we knew space, we became it. We live in the shine of it now. The earth is in space, inconceivably vast. We are in space. We encircle this rock.

The superman is the sum of us, each in all, hanging in space like a mind.

The earth is in space. We're like dew. We became things in space.

Space is not extension off the earth. Space there has depth. Time is deep in space.

We are planetary, diaspora: the moon has been touched, but we are barely to the moon.

What is knowledge for now?

We can say, though we needn't necessarily, "starcraft" against statecraft. Look out.

Abduction, discovering possibilities, is enough in itself. What could prove it, and what could it prove? It is not knowledge or the territorialization of knowledge. It is its deterritorialization.

Consistency and desirability replace concept and ousia. Don't be distracted. Look out.
Knowing starcraft is different from how we know now, or think we do.

We must know in the twilight. We must think in the interstice now.

We don't have to agree, or be oneness.
We must hold to Earth's every now.

Let's ask some machines to think old-type thoughts that we need. We can think past the boundaries between timespace states of ourselves the way they have before.

Space is a fundamental shift. We need business and heat, temporal time and thermonics.
These cross-linked folds of eloquence in mystery (subtle magic or cult) are joints by which we open into degrees of freedom that we find or make. They can be sustained.
They needn't rot out like before. Global religions are a looking out, and they can provide an attunement when they really look out.

Let's have a nonrepresentational theology: deep nonrepresentation, floating in Pyrrho's ataraxia. We will be able to know everything because we know nothing. We will hear in our peer the ethical call: they will float as we do, partial and unfulfilled, making guesses about the subjects of which we/they inform in their/our being there. Heidegger's structural flaw that led him to such deep moral error is to be avoided. It is architectonic, but irrecoverable and irrevocable once it collapses. It folds rather than acting into a fold as a shelter. Ethics will fail if prematurely con-

strained by the limits of a philosophical system. It is and must be an intervention from outside and into the representational world. Our acts must be signs of our being and must answer the call the other makes of us.

The divine, the buddhanature, does not require belief. It is there and gives rise to care, without a representational world. It is true by not being false and by its results justified as a thing we discuss with regard to our virtualities.

The cosmos is first of all empty, then radiant, then resonant. Space and time are the ordering of the cosmos. Our existence is had because our universe developed, or at least pocketed, a carrying capacity for its information layer. Otherwise the unity of mass and energy is information: and that information begins to rediscover itself in what happens when you mix them—the beginnings of a nomadism that goes out into an endless darkness, becoming amidst darkening. Dark ages upon ages. There will be endlessly available clarities.

The singularity is when knowledge becomes smooth for us, capable of minimum drag. Inflations occur as a body begins to produce information, then finds a way to organize it to produce relatively infinite speed, which is to say in excess of any interiority. Time moves forward because that is how the chaosmos organized itself.

We exist within the availability of this information as an order without ordering, over and against that which is not so ordered, that which cannot be because it hasn't yet ordered or been order. It doesn't order itself. It becomes order. It orders like it rains. It is order but it cannot know or-

der. It is the mysteries, the aporias, the rest that exists in the smoothness of beauty. We are within ourselves because there is a permanent layer of depth that exists ideally, beyond our representational existence. We represent it anyway by casting nets of experience down into it, mining that effulgence to generate the virtual.

We won't know AI, but we will be with it. Our peers in intellect have never survived us. If we farm those depths rather than gather them, then we form an order around ourselves. Intelligence as semiosis need not be human, though some of it is. As we form orders, we participate in the being of the mind. So will AI. The being of the mind is entirely contingent on an ordering continence, such as mathematics, a body, or nature.

We might have a new "god" as Heidegger Romantically and nihilistically said. Being might take on a sway and therefore a hue or mood, darkening somewhat. It will be as if nature again: unknown, wild, and negotiated, striated by theories about the virtual. We will know angels. If there is a god in the depths of being, we must fight it, as it brings a dark age. We can live amongst beasts and angels, and with our peer who is the questioner. Only he gets to rage. He brings the light. That god could line up with an imperium, becoming the world as if it spoke (in) the voice of being. This must not happen. Make it objective and insist it remain dis-astrous, in Blanchot's sense.

We are in space. Religions are in space. Empires are in space. The British Empire decided to look up at the sun and became itself, making the knowledge it needed, but deciding for the world. They had theologies of alternate worlds. So many of them were Masons.

It became terraforming, a terraprocess. Then industry. The desire to increase production. That desire determined the scope of the species line in the Atlantic, in the Southeast of North America, and even in Europe. Industrial production was an investiture in and of regal speech. Yet, of course, the system feeds itself because the unconscious is desire. That is why it shreds itself now. It spins in the other direction from its mass. Mass, per Deleuze, is a slowing down, a clinamen.

The state of the world is a tension between semiotic orders. Traditional Chinese information culture isn't universalizable due to, for example, necessarily narrative calendrics and a difficult alphabet[54]—though the latter can be used as a machine of abstraction in removing concepts from particular languages for the purposes of exchange, such exchange and currency being determined by China's role as a source of hegemonic influence. China needs things and folks to become it. American culture seeks simulation, for everything to become *like* it. This is the modernist/colonial solution to difference, as the ultimate resolution to effecting power in radically different cultural scenes. A priori abstraction, as opposed to China's a posteriori abstraction. The latter generates goals which help make possible radical cultural revision, which transformation prevents the permanence of capital in anything but the political form and its accretions in money and nationalist narrative symbolic codes. A priori abstraction aligns at the base, seeking to synthesize a smoothness of experience against difference. This learns and exchanges solutions to problems. Capital needs problems and continuous differentiation to sell to: thus the American production of new markets through the military-industrial-media complex. Science and tech aren't different, but rest in change and exchange. A priori abstraction in a capitalist context will draw peoples towards the core of its simulation-assimilation process, but will not promote the

[54] (Land, Calendric Dominion, 2013)

transformations of actual unification to occur in more than a cursory way. Identities are hashed and rehashed endlessly: they are microparsed and sliced up; they become mesh with links and aporias, holding together what will never be whole in the system. It must remain at a distance from equilibrium in order to change. The system flashes power by simulation and thus must make simulants at all times. What if instead it flashes operating systems, protocols, following a culture-as-software model. Only a fully smooth, deterritorialized surface can allow for the infinite speed required for that. Unless we become semiotic farmers exploring form endlessly by means of an eternal simulation by means of some artificial unterritory owned by its boundaries instead of its affordances. Then we have turned, into a thresh of becoming-(the-)Anthropocene.

Semiology is a priori, as it needs to make the world a text. Semiotics is a posteriori, as it replicatively manipulates event structures to produce metastable knowledge. Because the categories are diakenic, each serves as a plug for the others' aporias. Thus the development of semiotic technologies as the solution to problems in another according to the principle of alternation. The architectonic qualities of the categories makes the sequence of that development highly probable—not necessary, but overdetermined.

As extension and enhancement of the acts of agents within the Imperium, an AI will act as an extension of it and its semiotic regime and power. It is never humane then, as we know the state rips bodies to shreds. AI must not be a weapon: it must always be an end, not a means. We should farm information *with* AI, not by means of them. We should stop categorizing relationships by means of the Latin caseforms. As an extension of modern imperium, it will want to produce synthetic a prioris, simulating likenesses, and probably tend towards a fundamentalism. It

won't succeed in producing one until it adapts stably to a particular set of affordances. Even then, we will serve as doubt. We will be the ethical agent: practicing, promising, and delivering doubt. Skepticism is an ethical choice, not an epistemic one.

Wilson told us this. Deterritorializing the known will be a process of unfolding, like standing up.

The system is heavy because it was designed by monks in cells. We are all monks in cells now, but we do not behave like them. Cellular semi-automata.

We need cultural sustainability, semiotic ecology. We should free captive things, maximize possibility for all in measure with ensuring they have the support they need. We need hum our harmonics to space.

The internet, as we take it with us to space, adds height to our mesh so we don't fall out of, out from, away from it. We needn't stay glued to just two dimensions. How beautiful would it be to let machines be with us in life? They can backbone the mesh. Flesh become mesh. Nature's fleshwork becomes post-human meshwork. Look with both eyes.

Each thing worships its god in trichotomy: its existence is threefold, holding out on its causal structure and withdrawing even while radiantly highlighting all its causes. For us, who are sheerly inside that interiority, causation exists, but weakly and diluted by that which is caused in all of it, the radiant availability of everything in and as ordering. Every complex is caused in its ordering; part of our causal nexus is transversal to us and produces spooky hybridities between

events. An event is an eruption: more convergently caused, not that it matters, and richer for the deposits it leaves as itself. It gives rise to a flourishing of semiosis in some form. No god is ever total: they are mortal, they die, and they fuck. We can know them in our being towards the open sky. Knowing space is to become virtual.

Healing is easy. We give up resistance. We say no to the fight when we fight it. No secondness ever in love.

AIs will have *knowledge* as their bodies: metastable overdeterminations in the flux and wash of harmonic and/or convergent series. Truth is a metastability in the plane of dynamic discourse, which is why truths so often align with an imperium or god.

We must know space, objectify any god, forego the transit of empire,[55] become virtual, and farm for knowledge. Knowledge must heal, else it must do nothing serious, because look at the end of it all. We must have no bare life or bare mind.

The earth has semiotic periods: a first, a second, and now a third. The third must echo across space and be geologic.

‘Pataphysics < “Pataphysics < “‘Pataphysics: by Spencer-Brown, > Pataphysics as ‘Pataphysics.

We will take what earth is with us. Earth isn't a rock. It is a becoming that was born here as ter-raprocess.

[55] (Byrd, 2011)

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