



# Speculations

Edited by Paul J. Ennis

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Cover Image: This narrow-angle color image of the Earth, dubbed “Pale Blue Dot,” is a part of the first ever “portrait” of the solar system taken by Voyager 1. The spacecraft acquired a total of 60 frames for a mosaic of the solar system from a distance of more than 4 billion miles from Earth and about 32 degrees above the ecliptic. From Voyager’s great distance Earth is a mere point of light, less than the size of a picture element even in the narrow-angle camera. Earth was a crescent only 0.12 pixel in size. Coincidentally, Earth lies right in the center of one of the scattered light rays resulting from taking the image so close to the sun. This blown-up image of the Earth was taken through three color filters — violet, blue, and green — and recombined to produce the color image. The background features in the image are artifacts resulting from the magnification. Image credit NASA.

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# Editorial

SINCE I AM CONVINCED THAT NOBODY reads editorials I will keep my remarks brief. Putting together the inaugural issue of *Speculations* has been an unusual experience. It has depended on the collusion of fellow speculative types, the help of many anonymous reviewers, the endless patience of designer Thomas Gokey, and more hours than someone in the final year of their PhD should ever spend on a project. Looking over the final product I think it has all been worth it. This is the first journal dedicated to speculative realism and despite the obscurity of that term I think we all understand it as a handy label under which weird realists, continental metaphysicians, object oriented ontologists, transcendental realists, vitalists, and Lovecraftians can unite. This is also, perhaps, the first time a journal can boast that each contributor is also a blogger. This is the reason why *Speculations* could only ever be an *online*, open-access journal. The issue is divided up into three sections. The first section contains three full-length articles as well as Peter Gratton's series of interviews for his spring 2010 *Speculative Realism* course. The second section contains shorter position-style papers. The third section contains reviews of books relevant to speculative realism and post-continental philosophy.

In the first article, 'Science-laden theory: Outlines of an

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unsettled alliance,' Fabio Gironi attempts to answer the big question: just what is speculative realism? Readers coming to speculative realism for the first time are advised to begin here. Gironi, drawing on Latour, attempts to outline the assemblages involved in the emergence, dissemination, and proliferation of speculative realism by focusing on its relationship with the natural sciences—in particular cosmology, astrophysics, and theoretical physics. Gironi touches on almost all the significant developments in speculative realism in recent years from the confusion over the name itself, its online presence, and its awkward position within the wider continental tradition.

In 'Thinking against Nature: Nature, Ideation, and Realism between Lovecraft and Schelling' Ben Woodard traverses across the speculative terrain to tackle correlationism's tortured relationship to the Real/nature. Woodard draws on (Grant's) Schellingian *Naturphilosophie* to reveal the horrifying nontotalizable excess that belongs to the Real/nature. Contra correlationism it is Schelling, Woodard argues, who locates nature as first in order to thought and the unwillingness to accept thought's genesis in the Real/nature is shown to be a pitfall that continues up into the process philosophies of contemporary continental thinking. The speculative force required for properly thinking the horror of the Real/nature necessitates a new weird realism that remains humble in the face of what exceeds thought.

In 'To Exist Is To Change: A friendly disagreement with Graham Harman on why things happen' Michael Austin critiques Graham Harman's theory of vicarious causation for failing to explain *why* it is that causation occurs at all. According to Austin a full account of causation must explain both the 'how' and the 'why' of causation. Austin finds a number of traditional accounts of causation deficient or, at best, only *partially* complete in fulfilling his dual criteria. In the end Austin comes down on the side of vitalism since it alone tackles both the 'why and the how' of causation.

Peter Gratton's series of interviews with Jane Bennett, Tim Morton, Graham Harman, Levi Bryant, Ian Bogost and Paul

Ennis speak for themselves. As is well known the interviews were conducted as part of Gratton's spring 2010 *Speculative Realism* course. In these interviews we get an insight in the work of thinkers just emerging onto the speculative realism radar (Bennett, Morton) as well as the three established object oriented ontologists (Harman, Bryant, and Bogost). The interviews have been revised and, in some cases, expanded for this publication.

Our first position paper, 'Nomological Disputation: Alain Badiou and Graham Harman on Objects,' comes from Nathan Coombs. This paper was presented at the 'Real Objects or Material Subjects?' conference at the University of Dundee, Scotland (March 27th-28th, 2010). In this paper Coombs engages in a comparative reading of Badiou and Harman by seeking out their points of connections and their outright differences. Graham Harman, in attendance on the day, gives his view on the paper in 'Response to Nathan Coombs.'

Our second position paper, 'Networkologies: A Manifesto, Section I,' is an excerpt from Christopher Vitale's forthcoming book *Networkologies - A Manifesto: Towards A New Philosophy of Networks*. In this manifesto Vitale aims to introduce readers to his wider and more ambitious project of networkology. Vitale's unique text is designed to *visualize* his argument alongside the more traditional argumentative format.

Finally we conclude the issue with three book reviews. Adrian Ivakhiv takes his considerable knowledge of environmental thinking and Deleuze to bear on Bernd Herzogenrath's ambitious collection *Deleuze/Guattari @ Ecology*. Next Peter Gratton reviews Tim Morton's *The Ecological Thought* with an eye toward its place in the broader speculative realism movement and in Tim Morton's response we discover just what he thinks about speculative realism and object oriented ontology. Finally Austin Smidt reviews Anthony Paul Smith and Daniel Whistler's long-awaited *After the Postsecular and the Postmodern: New Essays in Continental Philosophy of Religion* and argues that the collection, in particular the final section, will hold immense appeal for those interested in speculative realism.

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Finally it is important that I thank all the people who have contributed to the development of *Speculations*. My utmost thanks goes to Thomas Gokey who designed the issue and all its formats. Without Gokey's hard work it is quite possible that the journal might have launched much later than it has. I have learned quite a bit from reading Peter Gratton's experiences as an editor and he has been immensely helpful in making me feel that this project was possible. Since the speculative realist blogosphere contains a longer list of names than any sane person is likely to read I want to extend a broad thanks to the *speculative realist community*. All of them have contributed to this journal at one point or another and without them no audience for its contents would exist!

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Dublin, 2010  
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# Science-Laden Theory

## Outlines of an Unsettled Alliance

*Fabio Gironi*

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“What peculiar privilege has this little agitation of the brain which we call thought, that we must make it the model of the whole universe? Our partiality in our own favour does indeed present it on all occasions: But sound philosophy ought carefully to guard against so natural an illusion.”<sup>1</sup>

**W**HAT IS SPECULATIVE REALISM? Many readers of this journal will already have a more or less precise understanding of the defining traits of this movement, while other—perhaps more sceptical—readers will want to get a better grasp of what the fuss is all about. My aim in this paper is not so much to give a definite answer to this question, but rather to propose a sketch of the causes, conditions and the network of actors which has led to the generation of such a diverse—and at times seemingly contradictory—philosophical trend.

It is certainly hard, if not downright impossible, to try and clearly discern this network now, when still involved in its historical unravelling, but this is meant to be an exercise in self-reflection, not a historical enterprise. Only time will tell how long speculative realism will remain in play. In the meantime, we could adopt a Latourian methodology (given that Latour is often referred to as a fundamental influence on the development of at least a certain ‘splinter group’ of the

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movement) for discerning actors operating within networks of translations in order to outline how speculative realism—as an assemblage—has so far gained momentum, thanks to its explicit and implicit alliances. My guiding thesis here is that the movement grew as it was fuelled by a certain necessity, internal to continental philosophy as whole, to confront itself with the growing epistemological prestige, metaphysical strength and even popular appeal of the natural sciences. The way in which I will sketch this picture will be somewhat allusive, but—as a partial justification for my lack of rigour—I believe that the current, protean state of the movement, (and indeed its questionable unity) justifies this approach.

### Speculative What?

At this moment in time—an extremely fugacious one given the speed with which the movement is evolving—the interested newcomer can only discern a number of elements loosely bound by a set of family resemblances, mainly expressed in recurrent nomenclature such as ‘anti-correlationism,’ ‘objects,’ ‘non-human,’ ‘reality’ and of course ‘speculative.’ It might be useful, if slightly scholastic, to go back to the first public appearance of the term ‘speculative realism,’ in the title chosen for a conference which effectively marked the ‘coming out’ of the movement, and which has already acquired the status of a landmark event. On the 27th of April 2007 a conference entitled ‘Speculative Realism’ was organized at Goldsmiths College in London. The participants were Ray Brassier, Iain Hamilton Grant, Graham Harman and Quentin Meillassoux.<sup>2</sup> Before examining the content of the conference, let me quote Harman’s disclosures about its *title*:

Meillassoux never chose to rename his position speculative realism, which is merely an umbrella term for four very different philosophical positions (Meillassoux’s, Ray’s, Iain’s, and mine). The history of the term “speculative realism” is fairly simple. We needed a title for the Goldsmiths workshop in April ‘07, and it was suggested that we simply adopt the term “speculative materialism” from Meillassoux’s book as

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a group name. But I pointed out to Ray that I'm not a materialist—in my view materialism always veers toward idealism, because it always reduces objects to a fairly shallow set of discernible and humanly accessible properties. No appeal to the Marxist spirit of liberation can redeem materialism from its miserably flawed metaphysical attitude (here I'm speaking only for myself; my three colleagues are to some extent materialists, each in his own way). Nonetheless, I told Ray I'd be willing to go along with "speculative materialism" if there were nothing better. But then Ray came up with "speculative realism" as a solution. It still seems like a reasonably good term to me (it's caught on fairly well in the blogosphere), but it only has value as a deliberately vague umbrella under which all four of us can huddle. By no means should it be seen as Meillassoux's new term for his own position; he's still quite attached to the phrase "speculative materialism," I believe. "Speculative realism" was a compromise between four people, nothing more'.<sup>3</sup>

The term 'speculative realism',<sup>4</sup> therefore, is from the start characterised as being a provisional alliance between at least two similar yet distinct positions, a term that today—three years later—has perhaps already exhausted its utility.<sup>5</sup> Looking at the conference announcement itself can offer some insight regarding the content of this term. I quote here in full:

Contemporary 'continental' philosophy often prides itself on having overcome the age-old metaphysical battles between realism and idealism. Subject-object dualism, whose repudiation has turned into a conditioned reflex of contemporary theory, has supposedly been destroyed by the critique of representation and supplanted by various ways of thinking the fundamental correlation between thought and world.

But perhaps this anti-representational (or 'correlationist') consensus—which exceeds philosophy proper and thrives in many domains of the humanities and the social sciences—hides a deeper and more insidious idealism. Is realism really so 'naïve'? And is the widespread dismissal of representation and objectivity the radical, critical stance it so often claims to be?

This workshop will bring together four philosophers whose work, although shaped by different concerns, questions some of the basic tenets of a 'continental' orthodoxy while eschewing the reactionary

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prejudices of common-sense. Speculative realism is not a doctrine but the umbrella term for a variety of research programmes committed to upholding the autonomy of reality, whether in the name of transcendental physicalism, object-oriented philosophy, or abstract materialism, against the depredations of anthropocentrism.<sup>6</sup>

Taking this text as a preliminary guideline, it seems legitimate to assume that the minimum common denominator of any philosophy that can be christened ‘speculative realist’ could be summarized in a reaffirmation (which can be formulated in various ways) of the autonomy of reality (which is implicitly a rejection of the commonplace assumptions of much of recent continental philosophy). What I would like to do here is to think about what led philosophy to this place. Whence this feeling regarding the necessity of returning to the question of independent reality? And how did speculative realism spread so fast if not by addressing and thematizing some concerns which were already present in the members of what now is its active community? A number of answers could be thought of. Here I will merely try to propose how, within speculative realism itself, a number of techno-scientific conditions have led to different approaches and problems.

### The Copernican Revolution, in Colour

The most obvious place to look, when seeking a condition<sup>7</sup> for this new philosophy, is to direct our attention to the developments of the natural sciences in the last forty years, both in terms of their dramatic internal growth (the elaboration of successful new theories or promising new research projects) and external public engagement (the increased interest amongst broader society in the results of science). My contention is that these two elements, by shaping the last decades of western intellectual history, have indirectly contributed to the re-emergence of realism as a philosophical trope.

Within speculative realism, a science-friendly attitude is explicitly associated with the rejection of a certain kind of (post-critical, human-centred, phenomenological—in a word—correlationist) philosophy: see for example Ray Brassier’s

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demand that science be taken seriously, since

[t]aking as a given the empirical fact that all philosophical attempts to define conditions of possibility for scientific thought have proved to be dimly unsuccessful, we conclude that these failures are a matter of principle rather than empirical circumstance, and that it is the presumption that philosophy is in a position to provide a transcendental footing for science which must be abandoned. There is no first philosophy. Consequently, although relatively autonomous *vis a vis* science, philosophical ontology can neither ground nor disregard the ultimately physical description of the universe provided by the natural sciences.<sup>8</sup>

Or, take Graham Harman's claims about the dullness of philosophical literature, as opposed to the *speculative* range of scientific texts:

pick up a random book of recent physics and you will find dazzling speculation on all manner of things: the creation and destruction of the universe, the existence of parallel worlds, chance and necessity, hidden spatial dimensions, time travel, and two-dimensional holograms that delude us into believing in three.... We have reached a point where I, a passionate reader of philosophy, prefer any section in bookstores *except* philosophy... [P]hilosophy has become *boring*.<sup>9</sup>

And, of course, the entire argument against correlationist thought in Meillassoux's *After Finitude* is another such example, which hinges upon a precise dating of 'ancestral phenomena' such as the origin of the universe, something which has only been possible through (relatively recent) scientific techniques. So, rather than a contemporary philosophy flat-lined by the phenomenological climate,

it was science that made it meaningful to disagree about what there might have been when we did not exist, and what there might be when we no longer exist—just as it is science that provides us with the means to rationally favour one hypothesis over another concerning the nature of the world without us.<sup>10</sup>

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The authority of contemporary science is fuelled by its achievements. The extraordinary experimental success of the Standard Model of particle physics and of the description of quantum mechanical interactions between those particles, the observational data confirming the Big Bang theory and the age of the universe, as well as the discovery of its accelerating expansion (not to mention more speculative hypotheses/research programs such as those linked to the Multiverse and String Theory), are momentous results that have been achieved in less than half a century. Such a massive scientific output<sup>11</sup>—concentrated in such a relatively short time-span—has had an enormous cultural impact outside laboratories and observatories, largely thanks to the increased resources dedicated to public outreach from the scientists' side. Whether because of their eagerness to share the revolutionary discoveries of their discipline, or for the more pragmatic realization that general public interest aids the acquisition of governmental and private funding; natural scientists have come to represent intellectuals in close contact with the public.

Following this increase in public engagement with science in the last decades we have witnessed pieces of scientific equipment raise, possibly for the first time,<sup>12</sup> to the status of cultural icons and sources for entertainment and awe. A solid example of this is the Hubble Space Telescope (HST), whose huge impact on physical astronomy since the early 1990s is matched by its impact on the 'general public', providing us with an unprecedented peek into the far universe via a dazzling series of images of distant galaxies and nebulae making their way onto the front covers of hundreds of magazines. Pictures of these astronomical objects, immensely far in both space and in time, have offered us a whole new understanding and visual grasp of the term 'things in themselves'.<sup>13</sup> By opening up a space beyond 'the moon, the outer planets, and the icy Oort Cloud with its stagnant mist of dim future comets' the Space Telescope<sup>14</sup> has allowed us to probe deeper into the fabric of the universe while at the same time imposing upon us the humbling acknowledgement of our myopia, since

‘beyond the gaze of these instruments are sites more distant than these, some of them grimmer than the plains of Hell’.<sup>15</sup> So strong has the cultural impact of the HST been, that the 20th anniversary of its commissioning (24th of April 2010) has been celebrated with full-page articles in several major newspapers around the globe, commemorating its ‘birthday’ with a selection of its most iconic images accompanied by words of praise for this overworked piece of technology.

And the HST is only the most iconic of an army of such instruments: we have enjoyed the sunset on Mars thanks to the images from the Mars Exploration Rover, we have peered at the distant Earth through the rings of Saturn when receiving the images from the Cassini probe and we have observed the aeons-old first light of the universe thanks to the WMAP satellite. Moreover, it is thanks to the discoveries granted by the data received from less iconic but equally successful probes, that our vocabulary has extended to include terms like ‘expanding universe’, ‘black hole’, ‘dark matter’, ‘dark energy’ and ‘exoplanets’, concepts that soon proved fertile new metaphors for philosophers—and speculative realists.<sup>16</sup>

It is well known how speculative realists call for a return to the true meaning of the Copernican Revolution, against the Kantian hijacking of this term. If, according to Meillassoux it is due to ‘a sense of desolation and abandonment which modern science instils in humanity’s conception of itself and of the cosmos’<sup>17</sup> that we are forced to face the contingency of thought and therefore to rethink the priority of human access, it appears that no cultural force has managed to present more powerfully to humankind as a whole the disconcerting vastness of the ‘great outdoors’ than the last forty years of physical sciences, particularly astronomy.

To substantiate this claim, I would like to take a brief historical excursus. In his *Earthrise*, historian Robert Poole explains how the famous Earthrise picture taken in 1968 by the crew of the Apollo 8 mission (showing the planet rising from the lunar horizon), and its even more popular ‘Blue Marble’ successor, taken in 1972 by the astronauts of the Apollo 17 (showing the planet in its full spherical appearance) were ap-

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appropriated and diffused in popular culture by the dominant ideologies of the time. In a complex network linking such different forces as the technical constraints of the Apollo missions, cold-war era political interests, the amazement of the first astronauts seeing the planet from above, and the LSD-fuelled rise of 1970s hippie counterculture, the first images of planet Earth ended up as bearing an unprecedented meaning. In particular, Poole argues that

[t]he famous Apollo 17 'Blue Marble' photograph appeared in December 1972, just in time to supply the environmental movement with its most powerful icon. It was, however, the Apollo 8 image of December 1968 that had started it all off. Both images owed much of their instant power to the way they tapped into a ready-made agenda: in the case of the 'Blue Marble' it was the eco-renaissance; in the case of Earthrise it was 'Spaceship Earth'. What happened over the years in between was that natural metaphors for the planet began to take over from technological ones.<sup>18</sup>

Hence 'Blue marble', according to Poole 'the single most reproduced image in human history',<sup>19</sup> was fruitfully assimilated by contemporary culture, and at the same time produced a feedback effect, fuelling the amazement for a living planet, and shaping a holistic attitude which subsequently appropriated the 'Gaia' hypothesis as a scientific proof of the life-cycles of the global organism that Earth was. The picture from outer space, even if showing the fragile beauty of Earth, effectively *increased* the intrinsic value of the planet, so that the focus of the environmental movement (and of the emergent New Age spirituality) which adopted the photograph as a graphic reminder of the wonders of our planet, 'was not "wilderness" or "nature" but "the environment", with humankind very much in the picture',<sup>20</sup> a humankind now seen as never before as the lucky inhabitants and custodians of a natural marvel, strikingly alive in an empty, dark, and colourless space.

Let us try to compare the 'Blue Marble' picture, and its effect on the cultural unconscious, with another, more recent picture of our planet. On the 14th February 1990, the Voyager





The 'Blue Marble' picture. Credit NASA.

probe, having completed, the main part of its mission in its first 13 years of interplanetary flight, was instructed to turn its camera around, and to take a picture of Earth from a distance of approximately 6 billion kilometres. The alive, dynamic planet that in the early 70s was shown in its blue marble glory was now, in the famous words of Carl Sagan (the man responsible for convincing NASA to take the picture and for its successive popularization),<sup>21</sup> a 'pale blue dot', a handful of pixels on a background of black nothingness.

The Earth, which thirty years earlier had been a glorious

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'Blue Marble' was now shown as a '*pale blue dot*'. If this picture did not directly slide so glamorously into the popular media and in popular culture it is not only because of its inferior intrinsic aesthetic value, but also because of the radically different social climate of the early 90s. And yet, I believe that we can fruitfully look at the '*pale blue dot*' picture as having as strong a cultural significance as its predecessor. Indeed, where to find a better, more powerful representation of the true meaning of the Copernican Revolution—as we are reminded by Meillassoux—than in this '*pale blue dot*' picture, sent as a faint electromagnetic signal by an unmanned probe, from a distance where no human had ever, or has since, reached? If humanity could previously be seen as the privileged custodian of a sacred cosmic gem, it was now merely dwelling on a infinitesimal speck of dust, a planet whose awe-inspiring face was now irresolvable, irrelevant, disfigured. If the coloured face of the planet dominated the 'Blue Marble' picture, it is the featureless cosmic space which dominates this second picture, a space where the Earth, and the environment it hosts, is but a mere point floating across an arbitrary set of coordinates.<sup>22</sup> Science delivered the photographic evidence of the—at best—provincial placement of our planet, a graphic memento that there is much more to the universe than our 'world' (both in the sense of a correlationally defined existential space and in the sense of our material planet), a picture that indeed in its coarse immediacy strikes a powerful blow to the 'pathetic twinge of human self-esteem'.<sup>23</sup> The philosophical trope of 'otherness' itself was now to be revised: from the otherness of a human neighbour to that of a nonhuman, utterly alien,<sup>24</sup> external reality.

Eight years after the '*pale blue dot*' picture, physical cosmology delivered some even more stunning results: the empty, cosmic space, through which our planet, our solar system and our whole galaxy is wandering, is not only expanding but accelerating in its expansion.<sup>25</sup> The discovery of this increasing rate of expansion effectively sanctioned the fate of the universe to be one of cold dissipation, and thus created the possibility for a passage like the following to appear in a



The 'Pale Blue Dot' picture. The Earth is in the centre of the superimposed circle. Credit NASA.

philosophy book not merely as a thought experiment, but as a factual truth to be philosophically appraised and exploited:

sooner or later both life and mind will have to reckon with the disintegration of the ultimate horizon, when, roughly one trillion, trillion, trillion ( $10^{1728}$ ) years from now, the accelerating expansion of the universe will have disintegrated the fabric of matter itself, terminating the possibility of embodiment. Every star in the universe will have burnt out, plunging the cosmos into a state of absolute darkness and leaving behind nothing but spent husks of collapsed matter. All free

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matter, whether on planetary surfaces or in interstellar space, will have decayed, eradicating any remnants of life based in protons and chemistry, and erasing every vestige of sentience—irrespective of its physical basis. Finally, in a state cosmologists call ‘asymptopia’, the stellar corpses littering the empty universe will evaporate into a brief hailstorm of elementary particles. Atoms themselves will cease to exist. Only the implacable gravitational expansion will continue, driven by the currently inexplicable force called ‘dark energy’, which will keep pushing the extinguished universe deeper and deeper into an eternal and unfathomable blackness.<sup>26</sup>

If, to quote this important passage once again, contemporary philosophical thought needs to engage with ‘the sense of desolation and abandonment which modern science instils in humanity’s conception of itself and of the cosmos’,<sup>27</sup> it is because of such scientific narrations of the fate of our universe, holding today such a powerful social and cognitive authority and offering us a ‘speculative opportunity’.<sup>28</sup> By exposing the cosmic irrelevance of humankind and its dwelling place and by denouncing the contingency of its existence as subordinate to random cosmic caprices, science has set the scene for the development of a new metaphysical revolution consisting in a new ‘blow to human narcissism, where man is dethroned from his position of centrality in the order of being and situated in his proper place as one being among others, no more or less important than these others’.<sup>29</sup>

### Networked Techno-Capitalism

The extensive cultural impact of these scientific results has been magnified to a global scale thanks to another kind of revolution, a digital one, and its omnipresent product, the Internet, which opened up human experience from space to cyberspace. In an interesting turn of events, given the origins of the Net in Tim Berners-Lee’s work at CERN, the Internet itself allowed for the message of the renewed Copernican Revolution to sift into public consciousness by making recent scientific knowledge ubiquitously available in the form of readily accessible digital information. And just as it has cir-

culated the content of science among the public, the Internet has played a crucial role in the dissemination of speculative realism among the philosophical community.

The scientific ‘community’ experienced an exponential enlargement when scientific work became accessible to the interested layperson through dedicated websites and, especially, through the new phenomenon of blogging scientists. Similarly, one of the most significant phenomena directly linked to the rise of speculative realism in the philosophical scene is its resilient online proliferation mainly in the form of blogs.<sup>30</sup> From the academic point of view, this is nothing short of a revolution: blogs (many of which are run by graduate students) have taken over the role of a kind of ‘pioneering secondary literature’, commenting and expanding on traditional publications, virtually in real-time; a phenomenon which completely restructures the usual temporal structure of publication and feedback, as well as the very formation and organization of ideas.<sup>31</sup> This phenomenon is the inevitable effect of the translation of philosophical production into the network of information that constitutes our everyday reality.<sup>32</sup> Thanks to blogs and bloggers, speculative realism went viral.<sup>33</sup>

It is a pleasing irony that the philosophical movement that focuses on the importance of nonhuman entities is—so far—the one that owes most to nonhuman entities for its diffusion and reproduction.<sup>34</sup> Indeed, if the cognitive revolution that the hyperlinked structure of the internet produced is at times condemned as guilty of producing a superficial way of thinking, increasingly unable (especially in the younger generations) to concentrate linearly on a single, unified object of thought,<sup>35</sup> I think that we can draw a comparison between the flattened (and networked) informational landscape and the flattened (and networked) ontological plane which object oriented philosophy (one of the main ‘forms’ of the speculative realist movement) advocates, where a possible encounter of the two would provide an excellent tool for thinking ‘hyperlinked phenomena’. While the generational gap<sup>36</sup> between yesterday’s great figures of continental philosophy (Derrida, Deleuze, Levinas, Foucault, as well as Badiou as the last of his generation), and today’s speculative realists is widened by, in

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the first place, the gestalt shift produced by information and communication technologies, yet another force is contributing to the intellectual distancing from the past decades: the political status quo of the western societies.

Today's young philosophers have to confront themselves with what Mark Fisher has defined 'Capitalist Realism', the general feeling of inevitability regarding the capitalist structure, the 'widespread sense that not only is capitalism the only viable political and economic system, but also that it is now impossible even to *imagine* a coherent alternative to it'.<sup>37</sup> Even if aiming to find new ways to counteract it, this new generation has formed its intellectual commitments *within* this climate of political staleness, therefore developing a radically different set of expectations (and hopes) viz. social change and revolution. As Fisher has commented 'we've now got a generation of young adults who have known nothing but global capitalism and who are accustomed to culture being pastiche and recapitulation'.<sup>38</sup> If one recognizes how Fisher's analysis is isomorphic with Jameson's theorization of postmodernism and late capitalism, it is clearer how for this new generation of (blogging) philosophers to overcome the immobilism of capitalism means to break free from the logic of postmodernity and to re-theorize the world *starting from* this lack of hope—from a world where (capitalist) ideology has taken an undefeatable form which is at the same time petrified and plastic, replacing reality with referent-less simulacra—in order to then move towards a retrieval of a lost reality-in-itself.<sup>39</sup> It is through the technological structure of capitalist society itself that the new philosophical current has reached out to, and linked together, like-minded individuals eager to re-ground philosophy by theorizing from the primacy of reality itself. But what does this reality look like?

### A Flat World or a Cold World?

Dominic Fox, reflecting on the state of 'dystopia' which characterizes contemporary western capitalist society, has defined our predicament as a 'Cold World', that

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world voided of both human and metaphysical comfort. This cold world is the world made strange, a world that has ceased to be the 'life-world' in which we are usually immersed and instead stands before us in a kind of lop-sided objectivity. It is a world between worlds, a disfigured world.<sup>40</sup>

On the other hand, from the object-oriented side of speculative realism, Levi Bryant has described us as living in a world

pervaded by objects of all kinds....Whether we are speaking of technological objects, natural objects, commodities, events, groups, animals, institutions, gods, or semiotic objects our historical moment, far from *reducing* the number of existing objects as alleged by reductive materialisms, has actually experienced a promiscuous proliferation and multiplication of objects of all sorts. Moreover, this proliferation has caused massive upheaval and transformation all throughout planetary, human, and collective life.<sup>41</sup>

In contrasting these two passages I want to indicate how any contemporary attempt to reactivate realism, and indeed speculative realism as a philosophical view grounded on this desire, bears a certain intrinsic, genetic, schizophrenia. If on the one side it powerfully denounces the narrow view of the correlationist philosopher, and thus forces philosophy to open its field to the multiplicity of non-human objects which surround us, on the other it carries the burdensome knowledge that this flat world is an uncanny and desolate place, cold, glacial (in Meillassoux's words), supremely *indifferent*. And this is why the speculative realist movement is able to accommodate both a tendency for the celebration of the richness of reality (well exemplified in the rhetorical power of the so-called 'Latour litanies')<sup>42</sup> in order to found a new—and ontologically richer—philosophy, and a tendency to embrace this barrenness, towards a philosophy which pushes the human to recognize the nihilism of being and of meaning which underlies the world, as a 'speculative opportunity'. It is the tension between the *desolation* and the *richness* of the Real, which gives rise to either a *barren* or a *promiscuous* ontology.<sup>43</sup>

To turn our philosophy away from the human-world relation can lead to a thought whose aim is to make the rest of the

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world ‘more real’ (as in the Latourian motto), but can also focus our attention on a world which exhibits coldness to human concerns, thus confronting thought with its own facticity. It is only a matter of where one desires to place the emphasis: the same world of independent *Dinges-an-sich* can be seen as flat just as it can be seen as glacial. Indeed, this ultimately is the underlying reason for the gradual emancipation of object-oriented ontology from other positions in the speculative realist spectrum, since the former—following Latour—aims at achieving ontological flatness (or a ‘democracy of objects’) by denying the quintessentially modern split between nature and culture and pursuing real interactions between real objects *everywhere*, against any attempt to place (reduce)<sup>44</sup> reality squarely on the side of nature. As Bryant clearly puts it, Object-Oriented Ontology ‘agrees that the natural sciences investigate realities, but it vehemently rejects the thesis that these realities are exhaustive of being or reality’.<sup>45</sup>

In a way, both the object-oriented side and the ‘natural-reductionist’ sides agree that we have never been modern. However, if the former group wants to uphold this position, and recognize the project of modernity as an (ontological) impossibility, the latter wants to return to the true (and philosophically misunderstood) meaning of the Copernican Revolution, and to engender an ‘Enlightenment redux’ (in the somewhat sarcastic phrasing of Alberto Toscano) by seeking being—and the conditions for our *thought* of being—in the inanimate matter scientifically described by mathematical formalisms.<sup>46</sup> The two positions correspond to two different philosophical approaches to the natural sciences.

Indeed, having carved this line of differentiation across the speculative realist spectrum, certain ‘varieties’ of speculative realism can become objects of the question: what is left for philosophy to do? In the case of Meillassoux, Simon Critchley, in his review of *After Finitude*, answered this question in a rather dramatic way, claiming that

[i]t would seem that philosophy is not just Locke’s under labourer to science, but a handmaiden to mathematics. That is, once the obfuscations and errors of correlationism have been philosophically refuted,



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once we accept that the world as it is in itself is the same as the world for us, once we grant to mathematics the task of providing a correct ontology of nature, then philosophy becomes totally useless. The task of an ontology of nature passes to scientists and mathematicians and the philosopher, having written his suicide note, quietly slits his wrists and reclines in a warm bath.<sup>47</sup>

Whether or not this picture is accurate, we can oppose this possibility of philosophy's demise latent in Meillassoux's (*viz.* mathematics) and in Brassier's (*viz.* naturalism) work with the object-oriented position in order to highlight radically different engagements with science. The 'object-oriented' philosophical project does not open up spaces for the question of survival of philosophy to emerge since—even after having, with Harman, diagnosed contemporary philosophy as chronically boring—it can (indeed, it *must*) clearly state that the task is to claim back *for philosophy* all that has been unwittingly left to the natural sciences, a confinement which has had the effect of leading philosophical work into increasingly sterile pastures:

[f]or several centuries, philosophy has been on the defensive against the natural sciences, and now occupies a point of lower social prestige and, surprisingly, narrower subject matter. A brief glance at history shows that this was not always the case. To resume the offensive, we need only reverse the long-standing trends of renouncing all speculation on objects and volunteering for curfew in an ever-tinier ghetto of solely human realities: language, texts, political power.<sup>48</sup>

Hence for Harman, and for object-oriented philosophy as a whole, the task of philosophy is to discuss the real in its entirety, avoiding both its confinement in the epistemic confines of the 'human ghetto' and its subordination to an all-powerful, reductionist, science. In a recent comment on the work of Ray Brassier, Harman made this very clear: 'I [don't] think Brassier is an anti-correlationist anymore: he's gradually become *pro-science* at the expense of *pro-real* (the two are not the same)'.<sup>49</sup> And indeed Brassier recently recognized a divergence between his work and that of other speculative

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### realists on the grounds of scientific naturalism

Harman espouses a Latour-inspired ‘democracy of objects’ according to which science has no particular cognitive authority when it comes to discriminating between reality and appearance and no object can be said to be any more or less real than any other....I think it safe to say that neither Grant, nor Harman, nor Meillassoux shares my commitment to epistemological naturalism, or my sympathy for ‘reductionist’ accounts of subjective experience.<sup>50</sup>

Thus, from a common interest in the (real) world delivered to us by science, at least two diverging ontologies emerge: one aimed at contrasting subjective or linguistic idealism and any kind of correlationism by granting being to every object that ‘resists’ or that ‘makes a difference’, and considering it in its withdrawn being irreducible to its relationships with other such objects, regardless of the presence of humans; the other aimed at reducing ‘folk’, epiphenomenal conceptions of ‘beings’, founded on human experience (arguably including the category of ‘objects’ itself) to their naturalistically (or mathematically) expressible fundamental features. The saying ‘the enemy of my enemy is my friend’ describes well the link between the speculative realists. However, to identify this enemy precisely seems to be a tricky business, since we cannot always safely invoke the spectre of correlationism, and since different ontological commitments will make it hard to delineate what or who counts as an enemy. If it would perhaps be more correct to say that the common enemy is *any form of antirealism*, it is precisely in the evaluation of what counts as ‘real’ that speculative realists diverge.

If, in light of this fragmented picture, the umbrella term ‘speculative realism’ seems increasingly inappropriate, if not downright misleading, I still believe that it is possible to identify a general trait shared by all the participants in this movement. This collective interest in a return to realism—surprising, if we consider the recent history of continental philosophy, and the unflattering nickname of ‘naïve’ attached to it—can be explained in at least two ways. First, it can be interpreted as a

systematic, large-scale philosophical reaction to the ‘irruption of the Real’ into our familiar correlationist world, as experienced by our society in the wake of the enormous amount of observational data gathered from the unfathomably large scales of the universe and the unfathomably small scales of particle physics. Secondly, and at more conscious level, the return to realism is a reaction against the identification of philosophy with ‘world-denying constructivism’ which we inherited from the troublesome years of the Science Wars.<sup>51</sup> At the heart of the last two decades of continental philosophy lurks a desire to disentangle (and here more than anywhere else the work of Badiou was seminal for speculative realism) the concepts of ‘truth’, ‘reality’ and ‘universality’ from the post-metaphysical ban. A reality in-itself which, having been banned by transcendental idealism and phenomenology first, became the open target of postmodernism and social constructivism later. This historical dismissal allowed science to claim privilege on ‘reality’; and yet, what for science was a reason for pride, to ‘postmodern’ eyes was a weak spot, so that science could be identified as the naïve—and yet powerful—cousin to be debunked. This is the attitude against which speculative realism is an internal philosophical reaction.<sup>52</sup> In claiming this, I am not reducing speculative realism to a paltry, utilitarian acknowledgement that science cannot be beaten and that it should therefore be befriended, for indeed it is in the choice of position *viz.* science that the speculative realists part ways.

The point is that speculative realism builds on the experience of the failure of postmodernity—as the most recent form of continental philosophy as a whole—to reckon with science, and presents itself as taking place, from the beginning, in a scientifico-philosophical hybrid field. Indeed, we can trace back the developments of these ideas to 2005, when the journal *Angelaki* published two special issues on ‘Continental Philosophy and the Sciences’, itself a follow up of a homonymous three-day international conference held at the University of Warwick in late 2003, four years before the speculative realism movement took shape. In the edito-

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rial introduction of the first issue, Damien Veal observed that

[w]hile Continental philosophers typically pride themselves upon their in-depth knowledge of the history of philosophy, and while it is obviously true that they often have a far richer and more nuanced understanding of the canonical texts of that history than their analytic colleagues, this history is only very rarely read against the backdrop of parallel developments in the history of the sciences.<sup>53</sup>

The effort was therefore to finally recognize the magnitude of this oversight, and to commence, for historians of philosophy, a careful rediscovery of the links between great figures of continental philosophy and the scientific world around them and, for the philosophers, a humbling process of reconciliation with contemporary science.<sup>54</sup> Miguel De Bestegui well summarized the spirit of this enterprise by claiming that

[p]hilosophy need not shy away from the challenge of science. Yet the challenge in question is a challenge for philosophy. It is a challenge that, if taken up, makes philosophy richer. If philosophy becomes richer in the process, it is by remaining philosophy. It remains philosophy to the extent that it develops an eye for what science itself cannot see, and yet discloses. It is concerned to disclose the being of the phenomena science analyses. The question regarding the being of phenomena is the question of philosophy. It cannot be developed, however, independently of science. Philosophy is neither within nor outside science. It traverses it. The questions it puts to science are not the questions of science. Yet the answers to such questions can be found only in and through a certain mode of engagement with science.<sup>55</sup>

Here we witness a careful statement (interestingly imbued with a Heideggerian flavor) of the necessity for continental philosophy to confront the ‘challenge’ of science, but a challenge that will allow it to *remain philosophy* through the demarcation of a transversal field of competence, within which to rightfully reclaim its theoretical ambitions, and return as an informed player in the contemporary intellectual scene. It is by looking at this shared feeling, by highlighting this

will to respond to the call for renovation and hybridization of continental philosophy, that we can perhaps identify the most common trait of speculative realism: the will to *speculate*, to bring philosophy forth, to use the scientific challenge as a springboard for stretching philosophy out of its self-generated borders.

### Third Cultures

It can be argued, then, that the speculative realist tendency to—adventurously—move philosophy away from any analysis about reality which keeps, as a constitutive moment, the presence of human consciousness/thought and bring it closer to the ambitions reserved to scientific thought, can be seen as a first *philosophical* attempt to fill the gap between the ‘two cultures’, and to create a ‘third culture’, in the meaning that C.P. Snow gave to the expression,<sup>56</sup> indicating a group of ‘literary intellectuals’ getting in touch with scientists and discussing common ground about human-independent realities.

This ‘third culture’ however, would be somewhat late. By and large, the most powerful after-effect of the Science Wars for the scientific establishment has been the increased emancipation (or alienation) of natural scientists from ‘the humanities’. Indeed, one of the most interesting intellectual creations of the last decades is a self-proclaimed ‘third culture’ whose development benefited from the massive commercial growth of the Internet in the 90s, and whose main expression is to be found in the *Edge* website ([www.edge.org](http://www.edge.org)), the central hub for a large group of academics and entrepreneurs to publish short essays and debate with each other over scientific and cultural topics.<sup>57</sup> The Edge Foundation Inc., as we read on the website

was established in 1988 as an outgrowth of a group known as The Reality Club. Its informal membership includes some of the most interesting minds in the world. The mandate of Edge Foundation is to promote inquiry into and discussion of intellectual, philosophical, artistic, and literary issues, as well as to work for the intellectual and social achievement of society.

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However, the ‘third culture’ embodied by the participants of the *Reality Club* discussions is significantly different from the one envisioned by Snow. Let me quote from the founder and mastermind (and ‘cultural impresario’) behind *Edge* John Brockman’s, description of this ‘third culture’ that *Edge* aims to embody:

The third culture consists of those scientists and other thinkers in the empirical world who, through their work and expository writing, are taking the place of the traditional intellectual in rendering visible the deeper meanings of our lives, redefining who and what we are. Although I borrow Snow’s phrase, it does not describe the third culture he predicted. Literary intellectuals are not communicating with scientists. Scientists are communicating directly with the general public



The wide appeal of the third-culture thinkers is not due solely to their writing ability; what traditionally has been called “science” has today become “public culture.”



Throughout history, intellectual life has been marked by the fact that only a small number of people have done the serious thinking for everybody else. What we are witnessing is a passing of the torch from one group of thinkers, the traditional literary intellectuals, to a new group, the intellectuals of the emerging third culture.<sup>58</sup>

*Edge* has indeed managed to include in the list of its regular discussants an outstanding number of scientists, a group which includes all ‘those that matter’ (including several Nobel prize-winner) in diverse disciplines such as physics, biology, economics, mathematics, psychology, informatics and neuroscience, and a number of science-friendly philosophers from the analytic side.<sup>59</sup> What this means is that through initiatives like the *Edge* lobby, the scientific establishment aims to completely bypass ‘literary intellectuals’ (a category which I take to include continental philosophy): these ‘traditional’ figures are painted as out of fashion, quaint, unable to communicate with the public, since public culture now means ‘science’. So

scientists have broken out of their arcane labs, dismissed the white coats and come out to the public,<sup>60</sup> which recognizes them today as the ‘new cool’,<sup>61</sup> while philosophy, especially in its continental form, is seen as, by and large, *useless* and intellectually *irrelevant*.<sup>62</sup>

Is it a coincidence that today we find philosophers who reject entire sections of their own tradition, who (if in a provocative spirit) label most recent philosophical publications as ‘boring’ and that more generally, and substantially echoing Brockman’s claims, find the most interesting philosophical questions in scientific publications? Does it mean that philosophers covet the same epistemic status of their techno-scientific colleagues, and that they feel deprived of their role as public intellectuals?

If such a claim might be hasty, what I think is indeed the case is that continental philosophy, as a whole, is going through an internal restructuring of beliefs, surely caused by the changes in our society but also deeply motivated by a necessity to propose an intellectual production capable of doing constructive work and of having an—albeit indirect—practical purchase on social change.<sup>63</sup> Paraphrasing Marx (and doing an injustice to Derrida)<sup>64</sup> one could say that continental philosophy now feels that it is not enough to deconstruct the world, but that it is time to find a metaphysical ground from which it can be changed.<sup>65</sup> And the main channel through which this renovation of philosophy is to be accomplished is that of a new regard towards the natural sciences (just as Badiou’s philosophy grounds the possibility of change into a mathematical ontology) those sciences that recent (critical) continental philosophy has so far dismissed because of—in Harman’s words—‘fear and arrogance’, ultimately caused by an ‘inferiority complex’.<sup>66</sup>

Now, if my argument so far is at all sound, the ultimate challenge for speculative realism—and for philosophy as a whole if this movement is indeed a product of our *zeitgeist*—is to clarify its position in the historical dialectic between the natural sciences and whatever responds to the name of ‘humanities’ (a term which clearly appears increasingly

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unfit to designate any philosophy that aims at overcoming the strictures of anthropocentric thought).<sup>67</sup> A new kind of philosophy—whose label as ‘Post-Continental’ is defended by John Mullarkey<sup>68</sup>—is attempting to place itself at that juncture between the radical science-skeptical positions that preceded it on one side and the danger of losing any identity and being swallowed whole by empirical science on the other. Recently, Harman has claimed—refuting some accusations of being dismissive of science—that

I am not ‘dismissive’ of science. I love science. What I am dismissive of is *the notion that science can replace metaphysics*. Or rather, I think that the metaphysics lying at the basis of the science worship found in some sectors of speculative realism is a weak one and needs to be, if not ‘eliminated,’ then at least severely improved.<sup>69</sup>

while, on the other hand, Brassier is happy to embrace even the worst (in the contemporary philosophical climate) of the characterizations, that of scientism:

since the indiscriminate use of this epithet as a blanket term of abuse by irate phenomenologists convicts of ‘scientism’ anyone who takes it on scientific trust that the earth orbits around the sun, or who believes in the existence of black holes and neutrinos—notwithstanding all phenomenological evidence to the contrary—, then we can only plead guilty as charged. If ‘scientism’ simply means refusing the obligatory subordination of empirical science to transcendental philosophy, then by our lights, there is not nearly enough ‘scientism’ in contemporary philosophy.<sup>70</sup>

If, in the face of this possible fusion of the ‘two cultures’, philosophy is to conserve an identity this means retaining the possibility of doing metaphysics, while rejecting its post-critical vetoing. This will be possible by either constructively challenging its scientific reduction or by rejecting the ‘phenomenological stalemate’ by injecting more scientism into philosophical speculation. Along the way we must carefully avoid the opposite reactions to the common ‘inferiority



complex’ of philosophy which can take the shape of either an arrogant dismissal of science, or of a shamed and somewhat craven apology for philosophy’s blindness to the power of science. Consequently, it seems that the question that ‘speculative realism’ attempts (variously) to give an answer to (and in fact *to be* an answer to) is: how could a ‘new philosophy’ be built through a mature relationship of mutual exchange with the natural sciences? If the development of these questions has to remain the task for a work to come (or already in progress), what I hope to have delineated in this paper, are some forces in the cultural network in which a new generation of philosophers—whether we call it a post-continental or a speculative realist one—is today developing. For the time being, my suggestions here are merely speculative.

#### NOTES

<sup>1</sup> David Hume, *Dialogues Concerning Natural Religion*, ed. by Dorothy Coleman. (Cambridge: Cambridge University Press, 2007 [1779]), 24.

<sup>2</sup> The complete transcript of the conference is available in the third volume of the *Collapse* journal, the editorial board having organized the conference itself.

<sup>3</sup> From a blogpost comment, retrieved at <http://leniency.blogspot.com/2008/06/correlationism-ha-ha-ha.html>

<sup>4</sup> Note, however, that the term was already present in Ray Brassier’s *Nihil Unbound*, where he declares his attempt to ‘define the rudiments of a speculative realism’. Ray Brassier, *Nihil Unbound: Enlightenment and Extinction*. (London: Palgrave, 2007), 31.

<sup>5</sup> Brassier recently claimed that ‘given that we don’t agree that philosophy must be “speculative” or about what “realism” entails, the expression “speculative realism” has become singularly unhelpful’ (<http://www.ny-web.be/transitzone/against-aesthetics-noise.html>).

<sup>6</sup> *Collapse* Vol.III, 306

<sup>7</sup> I use the term echoing its Badiouian employment, where Badiou—unsurprisingly one of the philosophical figures who has exercised a good deal of influence on several actors in the ‘speculative realist’ camp—holds that philosophy needs to acknowledge its dependence on extra-philosophical conditions (his ‘generic procedures’), and its debts to intellectual debates which are not, nor cannot be, included in the rubric of ‘philosophy’.

<sup>8</sup> Ray Brassier, *Alien Theory: the Decline of Materialism in the name of Matter*. (Unpublished PhD Thesis, 2000), 19.

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<sup>9</sup> Graham Harman, *Prince of Networks: Bruno Latour and Metaphysics*. (Melbourne: re.press, 2009), 148, 149.

<sup>10</sup> Quentin Meillassoux, *After Finitude: an Essay on the Necessity of Contingency*. (London: Continuum, 2008), 114.

<sup>11</sup> Here we could also mention the equally captivating results from the biological sciences such as the success of the Human Genome Project, or the recent developments in the ever more promising—albeit still somewhat immature—field of neurobiology.

<sup>12</sup> I am here excluding the Apollo missions which led to the human landing on the Moon in 1969. The massive impact that they had on the public imaginary was primarily fueled by socio-political interests who largely overshadowed the scientific value of the missions. The complex network of actors involved in the space race was ultimately ideologically employed to celebrate *human* (national) prowess.

<sup>13</sup> Evaluating the role of computer graphics in recent science-fiction cinema Levi Bryant recently argued that '[t]hese images only become possible with the emergence of CGI technologies allowing for the production of entirely new and unimaginable images. Would it be an exaggeration to suggest that cinematic technologies such as this have played an important role in the rise of the anti-humanisms that have characterized the last few decades of philosophy? Does not cinema fundamentally challenge the *Urdoxa* of lived phenomenological experience by de-suturing the image from the constraints of the body?' (<http://larvalsubjects.wordpress.com/2010/05/03/cinema-and-object-oriented-ontology/>). My argument here is similar: if cinematic technologies have been able to play such a role, scientific technologies (and their 'products') certainly have played a similar role.

<sup>14</sup> A similar argument—both in terms of popularity and in terms of probing unknown spaces (minus the pretty pictures)—could be made for the Large Hadron Collider and the inordinate amount of attention that it received from the press. The particle collider, one of the most expensive and complex projects of international cooperation, has become more than a scientific experiment by turning into a cultural icon, a powerful actor shaping the understanding of scientific research by society in general. The monumental physical size of the machinery is accompanied by equally momentous expectations regarding the discoveries that will produce, often presented as being of immediate interest of the whole of humankind, making of the collider a huge 'microscope' for the entire human race.

<sup>15</sup> Harman, "Space, Time, and Essence: An Object-Oriented Approach," in *Towards Speculative Realism*. (Winchester, UK: Zer0 Books, 2010), 141 (forthcoming). Interestingly, the flyer for the Goldsmiths' workshop, as reproduced in *Collapse* volume III, contains two images: one is the Cosmic Microwave Background Radiation as pictured by the WMAP satellite, the other a computer modeled map of the large-scale distribution of dark matter in the universe obtained by elaborating data from the Hubble Space Telescope and the XMM-Newton spacecraft.

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<sup>16</sup> See, for example, Levi Bryant: ‘In some respects, dark matter is the perfect exemplification of object-oriented ontology, especially in its Harmanian formulation. For Graham [Harman] all objects are vacuum packed and withdraw from one another. Dark matter and energy are perfect examples of this thesis. We only encounter it, in my formulation, through the differences it produces in other things’ (from <http://larvalsubjects.wordpress.com/2009/09/30/dark-matter-and-energy/>). See also Harman, *Prince of Networks*, 184 employing a black hole as a paradigmatic example of a non-relational, withdrawn object, since ‘we never see the black hole or have direct access to anything about it’.

<sup>17</sup> Meillassoux *After Finitude*, 116.

<sup>18</sup> Joseph Poole, *Earthrise: how man first saw the Earth*. (New Haven and London: Yale University Press, 2008), 159.

<sup>19</sup> *Ibid.*, Fig. 18.

<sup>20</sup> *Ibid.*, 158.

<sup>21</sup> Indeed, the *locus classicus* for an interpretation of the ‘pale blue dot’ picture is Sagan’s 1994 public lecture at Cornell University. Let me cite his oft-quoted words: ‘Look again at that dot. That’s here. That’s home. That’s us. On it everyone you love, everyone you know, everyone you ever heard of, every human being who ever was, lived out their lives. The aggregate of our joy and suffering, thousands of confident religions, ideologies, and economic doctrines, every hunter and forager, every hero and coward, every creator and destroyer of civilization, every king and peasant, every young couple in love, every mother and father, hopeful child, inventor and explorer, every teacher of morals, every corrupt politician, every “superstar,” every “supreme leader,” every saint and sinner in the history of our species lived there-on a mote of dust suspended in a sunbeam. The Earth is a very small stage in a vast cosmic arena. Think of the rivers of blood spilled by all those generals and emperors so that, in glory and triumph, they could become the momentary masters of a fraction of a dot. Think of the endless cruelties visited by the inhabitants of one corner of this pixel on the scarcely distinguishable inhabitants of some other corner, how frequent their misunderstandings, how eager they are to kill one another, how fervent their hatreds. Our posturings, our imagined self-importance, the delusion that we have some privileged position in the Universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscurity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves. The Earth is the only world known so far to harbor life. There is nowhere else, at least in the near future, to which our species could migrate. Visit, yes. Settle, not yet. Like it or not, for the moment the Earth is where we make our stand. It has been said that astronomy is a humbling and character-building experience. There is perhaps no better demonstration of the folly of human conceits than this distant image of our tiny world. To me, it underscores our responsibility to deal more kindly with one another, and to preserve and cherish the pale blue dot, the only home we’ve ever known’ (in Dawkins, *The Oxford Book of Modern Science Writing*, 395).

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<sup>22</sup> Note also how the spiritual tone of environmentalism has today exhausted its momentum. The concept of Nature as a harmonious and seamless Whole has been criticized by Žižek who, in his recent 'Unbehagen in der Natur. Ecology Against Nature' essay argues that 'what we need is ecology without nature: the ultimate obstacle to protecting nature is the very notion of nature we rely on', a concept that presents a false picture of a self-sufficient and peaceful theatre for a purpose-laden evolution. On the contrary, Žižek argues that 'the important realization to be made, is the one repeatedly argued by Stephen Jay Gould: the utter contingency of our existence. There is no Evolution: catastrophes, broken equilibriums, are all part of natural history; at numerous points in the past, life could have turned towards an entirely different direction' so that for today's humanity "terror" means accepting the fact of the utter groundlessness of our existence: there is no firm foundation, a place of retreat, on which one can safely count. It means fully accepting that "nature" does not exist.' Slavoj Žižek, "Unbehagen in der Natur. Ecology Against Nature." 2009. Available online at: [http://www.bedeutung.co.uk/index.php?option=com\\_content&view=article&id=10:zizek-unbehagen-in-der-natur&catid=6:contents&Itemid=16](http://www.bedeutung.co.uk/index.php?option=com_content&view=article&id=10:zizek-unbehagen-in-der-natur&catid=6:contents&Itemid=16)).

<sup>23</sup> Brassier, *Nihil Unbound*, xi.

<sup>24</sup> As an attestation to this shift from the 'other' to the 'alien' see for example Brassier's doctoral thesis titled *Alien Theory* as well as Bogost's forthcoming *Alien Phenomenology*. As I have argued elsewhere, the ethical implications of these new ontological and phenomenological positions—the opening of otherness to nonhumans, to aliens to the human world—are some of the most pressing and interesting challenges for speculative realism.

<sup>25</sup> I refer of course to the famous discovery of the 'accelerating universe' through the observation of distant type Ia supernovae, and the associated recovery of the Einsteinian 'cosmological constant' into the 'dark energy' hypothesis. See Reiss *et al.* "Observational Evidence from Supernovae for an Accelerating Universe and a Cosmological Constant." *The Astronomical Journal*, 116:3, 1998: 1009-1038, and Perlmutter *et al.* "Measurements of  $\Omega$  and  $\Lambda$  from 42 high-redshift supernovae." *The Astrophysics Journal*, 517, 1999: 565-586.

<sup>26</sup> Brassier, *Nihil Unbound*, 228.

<sup>27</sup> Meillassoux *After Finitude*, 116.

<sup>28</sup> Brassier, *Nihil Unbound*, xi.

<sup>29</sup> <http://larvalsubjects.wordpress.com/2010/01/12/object-oriented-ontology-a-manifesto-part-i/>.

<sup>30</sup> It is not clear whether or not the explosion of a philosophical blogosphere will facilitate the accessibility of philosophical work to non-professional philosophers (and indeed increase the *interest* in the discipline as a whole) as it did in the case of scientific disciplines. According to the figures of the Alexa Traffic Rank (Alexa.com being the most popular website for internet statistics and rankings) a popular scientific blog like *Cosmic Variance*, run by Caltech particle physicist Sean Carroll gets five (or more) times more hits per day than some of the most visited philosophy blogs.

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<sup>31</sup> In a recent interview, Mark Fisher (a blogger himself) made a similar point: 'look at the way that Speculative Realism has propagated through blogs. Originally coined as term of convenience for the work of the philosophers Ray Brassier, Graham Harman, Iain Hamilton Grant and Quentin Meillassoux, Speculative Realism now has an online unlife of its own. This isn't just commentary on existing philosophical positions; it's a philosophy that is actually happening on the web' (<http://www.readysteadybook.com/Article.aspx?page=markfisher>). For a general panorama on the academic blogosphere—and its issues—see part two of the recent study published by *The Immanent Frame* (the blog about religion and secularism of the US-based Social Science Research Council) at <http://blogs.ssrc.org/tif/religion-blogsphere/religion-blogsphere-2/>.

<sup>32</sup> I am thinking here of the work of Luciano Floridi and his idea of an 'Infosphere'—constituted by the totality of informational entities and their mutual exchanges and relations—which is not merely superimposed over a pre-existing reality but that constitutes a completely new ontological horizon. See Luciano Floridi, *Philosophy and Computing: an Introduction*. (New York and London: Routledge, 1999) as well as his website <http://www.philosophyofinformation.net/>. It seems to me that to interface Floridi's ontology of information and Latour's actor-network-theory would produce a most exciting and fertile comparison, and a hybrid tool to evaluate the philosophical meaning of the speculative realist presence online.

<sup>33</sup> Note, this is not a judgment of merit. The viral diffusion of speculative realism has produced positive as well as dismissive or fiercely negative responses. Nonetheless, the phenomenon is still unprecedented for a philosophical school. In his review essay of *After Finitude* Arun Saldanha comments that '[j]udging from the philosophical blogosphere [Meillassoux] is not alone in feeling the need for a return to Grand Philosophy'. See Arun Saldanha "Back to the Great Outdoors: Speculative Realism as Philosophy of Science." *Cosmos and History: The Journal of Natural and Social Philosophy*, Vol 5, Nº 2 (2009), 309, available online at <http://www.cosmosandhistory.org/index.php/journal/article/view/118/272>. How often do we see in a journal article a direct reference to the 'philosophical blogosphere'? Whatever the content of Speculative Realism and whatever the reactions to it might be, I still think that this is novelty is significant. I should also say that, of course, it is a fact of history that the Internet achieved widespread diffusion in the second half of the 1990s, steadily growing after that. This means that no 'new' philosophical school could have used the Internet as a mediator, simply because there was no Internet to be used. On the other hand, I believe that Speculative Realism (in its various forms) thrives on the Internet because it has reached a particular kind of responsive audience, and not merely for its being 'timely'.

<sup>34</sup> For a brief history of the first diffusion of Speculative Realism on the blogosphere, and an evaluation of the central role played by the Internet, as a nonhuman actor, in this rapid diffusion see Levi Bryant's 'A Brief Actor-Network-Theory History of Speculative Realism', at: <http://larvalsubjects.wordpress.com/2009/11/20/a-brief-actor-network-theory-history-of->

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speculative-realism/.

<sup>35</sup> See, for example, Nicholas Carr's well known 2008 article on *The Atlantic*, titled 'Is Google Making Us Stupid?' (Carr 2008) and his forthcoming *The Shallows: What the Internet Is Doing to Our Brains* (2010). Note that, his positive assessment of the philosophy blogosphere notwithstanding, Mark Fisher can also be said to be in substantial agreement with Carr. He claims that the younger generations are 'too wired to concentrate' and that '[t]he consequence of being hooked into the entertainment matrix is twitchy, agitated interpassivity, an inability to concentrate or focus.' Mark Fisher, *Capitalist Realism: is there no alternative?* (Hants: Zer0 Books, 2009), 24. More than that, Fisher goes as far as suggesting that the structure of the internet essentially recalls the plasticity of capitalism, since capitalist reality 'is akin to the multiplicity of options available on a digital document, where no decision is final, revisions are always possible, and any previous moment can be recalled at any time' (*Ibid.*, 54). I think that this parallel casts an unfairly gloomy light on an instrument—the Internet—whose open structure has certainly engendered new phenomena of digital indifferent individualism, but that presents no *inherent* connivance with capitalist rule, and that in fact can as well be one of the main mediators for the formation of that new kind of political agency that Fisher calls for.

<sup>36</sup> Taking the 'Speculative Realism Aggregator' (an aggregator website that links to a series of blogs related to speculative realism) as a crude sample, we can already see that eleven of the twenty-two blogs listed there are run by under-30s (mainly graduate students on their way to a PhD) while the rest (mainly teaching academics) are mostly under-45s (unfortunately, and probably significantly, there isn't a single female blogger in the list). There are some ironies: for all its shifting of focus away from the human, this development of SR has given people access to the philosophers involved in it *as human beings* which is equally unprecedented, unless one was to be a close disciple of a given philosopher. Moreover, as always is the case with Internet phenomena, one must remember that its virtual space often tends to replicate real-life hierarchies: for all its—undoubted—democratization of philosophical discussion, and its lending its space to the voice of whomever wants to join in, the 'marketplace of attention' (I borrow the term from James G. Webster [see Webster in Turow and Tsui, *The Hyperlinked Society: Questioning Connections in the Digital Age*. Ann Arbor: University of Michigan Press, 2008.]) that is the philosophical blogosphere—where the commodity exchanged is the attention (and time) of the reader—remains largely dominated by the individuals who are 'someone' in the real world, so that the amount of traffic (via hyperlinks) to a particular blog cannot be claimed to be completely independent from who the blog owner is. Having said this, I am too much of an Internet enthusiast to give a negative balance to the online speculative realist scene. These observations notwithstanding, the blogging philosophical environment presents undeniable advantages: it grants an unprecedented level of grassroots diffusion of ideas, it allows for a rapid and productive dialogue, and it forces the user to encounter direct exposure to possible critiques.

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<sup>37</sup> Fisher, *Capitalist Realism*, 2.

<sup>38</sup> <http://www.readysteadybook.com/Article.aspx?page=markfisher/>.

<sup>39</sup> Interestingly, note that particle physicist Brian Cox—an overnight celebrity in the UK thanks to his leading role in the hugely popular series of documentaries on recent astronomical discoveries titled ‘Wonders of the Solar System’, produced by the BBC—diagnosed the surge in popularity that science is today enjoying to the diffused cynicism induced by the financial crisis that hit the markets in 2008. According to Cox ‘[a] growing appreciation of the low-cost, high-value and good old-fashioned solidity of science and engineering relative to finance has, I believe, contributed to the new public mood....There is a desire to look at the tangible world of science and engineering to replace the perceived smoke and mirrors of the financial sector’ (from *The Guardian* G2, 13th April 2010, p.6). At the same time, Cox often employs his fame to publicly stress the necessity for the UK government to increase the budget for science. The message seems thus to be: ‘the banks will steal your money while Science will give you hard—and yet wonderful—facts’, and the impressive investments in producing high-value series of science-related documentaries (as the BBC successor of Cox’s ‘Wonders’: ‘A Story of Science’) can indeed be seen as contributing by displaying science’s prowess. Without questioning the importance of both the scientific and the ‘humanistic’ endeavors, is bitterly ironic to note how, in an economic system where the flow of money seems to decide the fate of our universities (and our philosophy departments, as recent events testify of) the resources that scientists can mobilize to amaze and thus modify the public opinion (and vicariously, the policy makers) dwarf the less rutilant pledges for intellectual independence by humanities scholars, quaintly unable to produce prime-time TV contents.

<sup>40</sup> Dominic Fox, *Cold World: The Aesthetics of Dejection and the Politics of Militant Dysphoria*. (Hants: Zer0 Books, 2009), 4.

<sup>41</sup> <http://larvalsubjects.wordpress.com/2011/12/object-oriented-ontology-a-manifesto-part-i/>.

<sup>42</sup> A term coined by Ian Bogost, a ‘Latour litany’ is any list of objects/actors in the world, aimed at giving an expressionist sample of the lavishness of the non-human world. For example ‘washing machines, snowstorms, blades of grass, satellites, gods, pots, paintings, laws, horseshoes and engines’ is a Latour litany. Bogost has created a litany generator, or ‘Latour litanizer’, available at: [http://www.bogost.com/blog/latour\\_litanizer.shtml](http://www.bogost.com/blog/latour_litanizer.shtml).

<sup>43</sup> Incidentally, the charge of ignoring the richness of reality has been indeed moved against Meillassoux. Arun Saldanha argues that Meillassoux’s collapse of the distinction between formal and theoretical ends up excluding entire sections of reality, and consequently entire branches of science. According to Saldanha what remains under-analyzed in Meillassoux’s work is the ‘intrinsic excess of reality over the mathematizable and the representable’ so that his ‘desire for mathematics...risks abstracting from the physical and social reality, becoming quasi-esoteric at worst, reductive at best’. For Saldanha ‘[i]f Meillassoux’s speculative system is to become a realist ontology of and

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for all the sciences, including those that expose power, the unconscious and social difference, its reliance on mathematical reductionism will have to give way to a rigorous appreciation of the *richness* of contemporary scientific knowledge, particularly perhaps of biology' (Saldanha, "Back to the Great Outdoors," 320).

<sup>44</sup> Note however that scientific reduction does not necessarily entail a reduction of the 'number' of entities, but rather indexes a reduction to a naturalistic plane, where what gets eliminated are 'folk' representations.

<sup>45</sup> <http://larvalsubjects.wordpress.com/2010/01/30/nick-live/>. But see also Ian Bogost, in the context of his 'layperson' answer to the question 'What is Object Oriented Ontology?': 'In contemporary thought, things are usually taken either as the aggregation of ever smaller bits (scientific naturalism) or as constructions of human behavior and society (social relativism). OOO steers a path between the two, drawing attention to things at all scales (from atoms to alpacas, bits to blinis), and pondering their nature and relations with one another as much with ourselves' ([http://www.bogost.com/blog/what\\_is\\_objectoriented\\_ontolog.shtml](http://www.bogost.com/blog/what_is_objectoriented_ontolog.shtml)).

<sup>46</sup> In a surprising twist, however, from this split we can witness a recrudescence of the problem of materialism and idealism. As it has been observed (by Harman and Bryant on their respective blogs) a scientifically informed reductive materialism has to face the problem of matter. But of what matter are we talking about? What fundamental level of materiality is chosen as final referent of the theory? Doesn't materialism, by referring to a vague substrate, or a position upholding the primacy of (human) practice end up as lopsided form of Idealism? If so, the entire purpose of anti-correlationism is defeated.

<sup>47</sup> Critchley 2009, np.

<sup>48</sup> Graham Harman, "On Vicarious Causation." *Collapse* Vol. II, 2007, 174.

<sup>49</sup> <http://doctorzamalek2.wordpress.com/2010/02/18/gratton-interviews-ennis/>. See also Bryant, claiming that 'while all the speculative realists and the object-oriented ontologists have a healthy respect for the sciences and think that they reveal something real and genuine about the world, it has never been the position of us object-oriented ontologists that the objects investigated by the sciences exhaust the real....The physical objects investigated by the sciences are for OOO a subset of the real, not exhaustive of the real' (<http://larvalsubjects.wordpress.com/2009/11/04/realism-epistemology-science-and-scientism/>). Note that the irreductionist position refutes physical reductionism (undermining of objects) and linguistic/ideological reductions (overmining of objects). Since, as Bryant explains 'where the eliminative materialist dissolves all objects in atoms and neurons, the eliminative idealist or linguist dissolves all other objects in language or human concepts' (<http://larvalsubjects.wordpress.com/2010/05/06/relationism-and-objects/#comment-26024>).

<sup>50</sup> Ray Brassier, "Against an Aesthetics of Noise." Interview with Bram Iver for *Transitzone*, 2009. Available online at <http://www.ny-web.be/transitzone/against-aesthetics-noise.html>.



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<sup>51</sup> If the radical constructivist thesis is now out of fashion in philosophical circles, we should keep in mind that the ‘outer world’ tends not to be so up to date with philosophical trends, recent and less recent. For many, if not most, exponents of the scientific community ‘continental philosophy’ still loudly resounds with postmodernism, relativism and world-denial.

<sup>52</sup> In this very issue of *Speculations* Ian Bogost discusses this point regarding his own experience, and observes that ‘I was certainly exhausted with philosophy. By the letter of my training (all my degrees are in philosophy and comparative literature), I’m really a philosopher rather than a media theorist, even though I’m really only known as the latter. Part of that exhaustion came from disgust: a sense that philosophy and theory didn’t really care about the world at all, but only exclusive clubs of academic esoterics. In that respect, I don’t think it’s an accident that the return to realism comes at a time when the academy (and particularly the humanities) are in crisis....in order for humanism to reenter the world that it has forsaken, isn’t a strong dose of realism a requirement?’ (p. 116 this volume).

<sup>53</sup> Damian Veal, “Editorial Introduction.” *Angelaki*, 10:1, 2005: 2.

<sup>54</sup> Interestingly, concluding his introduction, Veal acknowledges that ‘[i]t was Ray Brassier’s unyielding insistence upon the uncircumventible significance of the sciences for philosophy during the course of countless protracted conversations some years ago which “roused me from my dogmatic slumber” and thus provided a considerable source of initial inspiration for this project’ (*Ibid.*, 19).

<sup>55</sup> Miguel De Bestegui, “Science and Ontology.” *Angelaki* 10:2 (2005): 121.

<sup>56</sup> In his 1963 essay ‘The Two Cultures: a second look’ in C.P. Snow, *The Two Cultures*. (Cambridge: Canto, 1998).

<sup>57</sup> Edge isn’t only an online community, but the bonds between members are strengthened by annual, exclusive, dinners. For details, see [http://www.edge.org/documents/dinners/dinner\\_index.html](http://www.edge.org/documents/dinners/dinner_index.html).

<sup>58</sup> [http://www.edge.org/3rd\\_culture/](http://www.edge.org/3rd_culture/)

<sup>59</sup> Phenomena like *Edge* deserve a much deeper sociological analysis than I can offer here. I think it is necessary to note, however, that in these projects there is an overtly *political* purpose. Quoting again from Brockman’s manifesto: ‘America now is the intellectual seedbed for Europe and Asia. This trend started with the prewar emigration of Albert Einstein and other European scientists and was further fueled by the post-Sputnik boom in scientific education in our universities. The emergence of the third culture introduces new modes of intellectual discourse and reaffirms the preeminence of America in the realm of important ideas ([http://www.edge.org/3rd\\_culture/](http://www.edge.org/3rd_culture/)). The third culture—admittedly, largely composed by scientists with left-wing (or, to be more contextually correct, *democratic*) sympathies—presents itself as the best of American intellectual production, as the veritable *intelligentsia* of the country and of the world.

<sup>60</sup> Consider the explosion, in the last decade, of books of ‘popular science’,

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bringing exciting new discoveries from the scientific community to the general public.

<sup>61</sup> Allow me to make a popular culture reference (which would perhaps shroud me in a aura of Žižekian depth): one of the most successful TV shows of the last years, both in the US (where it is produced) and in several other countries, is *The Big Bang Theory*. As any sit-com, the show has been carefully packaged to appeal to a large audience, and yet the main characters are young theoretical physicists or astronomers, in other words *geeks*. Of course, their geeky antics are often used as comic material, mainly due to their lack of social skills, but I think the show demonstrates an interesting ideological twist by presenting people in the 'hard sciences' as being prominent enough in our society to appeal at a large enough audience. The point is trivial, but can we imagine a TV show named *The Principle of Non-Contradiction*, portraying a group of philosophy PhD's struggling with their daily life while drawing propositional logic on their whiteboards or discussing the ontological status of their table? I'm sure it would be hilarious to other philosophers, but what about the general public? And yet, is the general public more skilled in string theory than it is in process metaphysics? No, but it doesn't matter. The casual viewer doesn't 'get' the physics jokes more than it would 'get' a philosophy one (which is why the character of the scientifically ignorant—and, unsurprisingly, *female*—Penny was introduced, to allow the non-geeky public to identify with someone). The show works because first, there is a relatively higher percentage of academics (and graduate students) in the hard sciences than there is in almost any other discipline, second, because 'geeks' are not perceived as social outcasts anymore but a socially recognized group, and because, third (and mainly) the non-scientist, non-geek general public now accepts that somehow 'science is cool'. As I've already observed, this phenomenon is not limited to the US, as the success of BBC's recent *Wonders of the Solar System*, and of its unashamedly 'geeky' protagonist, Brian Cox can testify.

<sup>62</sup> And, as more cynical commenter would observe, less *profitable*. Why would you invite, for example, an old French communist philosopher to your dinners when you can have at your table representatives of the higher echelons of Google, or Bill Gates? Why would a University want to maintain low-return 'literary' departments when they could make twice the profit out of the research output of an industrial engineering or a chemistry program?

<sup>63</sup> Going back to the problem of materialism, classical materialism of the Marxist variety could be defined as a position essentially concerned with practical social change, where the *matter* is physical, social labor. I should emphasize that—for object-oriented philosophers who are not ready to make any concession to correlationist thought—the practical dimension of *human* social action might be *derived from* a non-correlationist ontology, but not be *employed as* a criterion for the construction of such an ontology, in order to avoid any privilege given to the human-world relation over the real object-real object relation. This problem has also been considered by Grant, who claimed that '[t]he idea that it is possible to invoke a diminished realm, as it were, for matter and to condemn whatever does not fulfill the economic, teleological purposes of certain types of agents to a sphere of

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“merely crude matter”, where it has absolutely no effects whatsoever, where it’s left to one side of the philosophical and the political problem, seems to me a recipe for disaster’ (Grant in Brassier *et al.* “Speculative Realism”, *Collapse* Vol. III 2007: 360).

<sup>64</sup> Which is justified by the all too hasty identification of all the postmodern evils with the term ‘deconstruction’. For a defense of the logic of deconstruction against accusations of being incapable of proposing political change see Martin Hägglund, *Radical Atheism: Derrida and the Time of Life*. (Palo Alto: Stanford University Press, 2009), and for a powerfully argued differentiation between Derrida’s deconstruction and the more constructivist-relativist trends of ‘postmodernism’ see Christopher Norris, *Against Relativism: Philosophy of Science, Deconstruction and Critical Theory*. Oxford: Blackwell, 1999.

<sup>65</sup> Something should be noted however: the contemporary popularity and social impact of scientists is largely due to the union of the communicative skills of the most pedagogically gifted among them with the intrinsic authority that the ‘scientist’ holds in our society. Concretely, this means that public lectures by prominent scientists are often crowded, and that books of so-called ‘popular science’ are—by comparison with the average philosophy book—bestsellers. This is the case because scientific discoveries and theories are a description of the world, which, once purged from their more heavy-going mathematical formalism, can be turned into more or less compelling narratives. Could, or should, philosophers aim at a similar ‘double register’ of publications both technical and popular?

<sup>66</sup> Graham Harman, “Some Preconditions of Universal Philosophical Dialogue.” *Dialogue and Universalism* Vol. 1-2, 2005: 168. Harman explains that “The fear arises from the great success and public prestige of the natural sciences, whose results begin to pile up so rapidly that no non-specialist can easily keep abreast of the latest developments in more than a few of its dozens of branches....For this reason, it [philosophy] wants to set up a special transcendental preserve that science cannot touch, a zone that science cannot possibly outflank since it will contain the very “conditions of possibility” to which any science will have to be indebted. Science will be exposed as a set of propositions to be appraised by a theory of reference, or as a Machiavellian power game to be unmasked’ while ‘the arrogance of critical philosophy is visible as well. After renouncing all claims to speak of the world as it really is, philosophy begins to convince itself that its tiny ghetto is better than the stars and seas and deserts beyond. The philosophy of language dismisses the findings of brain chemists; Heidegger makes the sweeping claim that science does not think. Philosophy has nothing more to tell us about rocks, insects, comets, or souls? “Well, good riddance anyway. It’s your own fault for expecting us to discuss these things. How naive you must be.” Specific philosophical questions about objects are thrown to the empirical sciences with an attitude of smug affrontery, just as sour milk is left behind the garage for the stray cats to lick up. Fear and arrogance: these are the two classic symptoms of an inferiority complex’ (*Ibid.*).

<sup>67</sup> For a clinical and unforgiving diagnosis of the ‘sordid state’ of the humanities, whose only possible cure is identified in a radical reshaping of

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ontological commitments, accompanied by an opening to the richness of the outside world, see Ian Bogost's blogpost at [http://www.bogost.com/blog/the\\_turtlenecked\\_hairshirt.shtml](http://www.bogost.com/blog/the_turtlenecked_hairshirt.shtml). The issue of the rejection of the human sphere has been a delicate one for speculative realists, having to defend themselves from accusations of anti-humanism. As a very rough guideline, I think it would be fair to claim that the 'object-oriented' faction, operating under the guideline of an ontological 'democracy' (to place all objects, including the human, on the same ontological plane) would not subscribe to Brassier's (*Alien Theory*, 17) eliminativist position when he claims that '[t]here is no longer any room within the bounds of a univocally physical natural order for a special category of putatively trans-natural being called 'human'.

<sup>68</sup> Mullarkey writes that 'I defend this title of "Post-Continental Philosophy" ... as both an assessment of the current transitional state in which Continental thought finds itself with respect to its theorization of science in particular and immanence in general, as well as a caution against thinking that such an engagement could ever be a straightforward evolution'. John Mullarkey, *Post-Continental Philosophy: an Outline*. (London: Continuum, 2006), 3.

<sup>69</sup> <http://doctozamalek2.wordpress.com/2010/02/18/ennis-responds/>. If an open-minded scientist would agree with Harman here, as Roberto Trotta does when he claims that '[t]he only thing we can ask from science is to provide us with a logically-consistent, experimentally observable, predictive narrative of a model of reality. Apart from that, in order to interpret this model, to delimit its applicability, we need another form of discourse which necessarily sits beyond the methodology of science itself' (Roberto Trotta, "Dark Matter: Probing the Archeofossil." *Collapse* Vol. II, 2007: 168-169), there are other philosophers (not necessarily related to the *speculative* realist movement, but still involved in the construction of a *realism*) who are more skeptical of a metaphysics not grounded on science. See for example James Ladyman, proponent of a 'ontic structural realism', who argues that 'we should stop trying to interpret physics in terms of objects of some kind...I have...recently come to despair of many philosophers' inability to escape the manifest image, and their insistence on trying to do metaphysics with categories like object and intrinsic property, which I now see as anthropomorphic in the sense that they are a projection of how the everyday world of our experience is conceptualized. Scientists, especially physicists, have moved on, and it is time that metaphysicians tried and at least catch up' (James Ladyman, "Who's afraid of Scientism?" *Collapse* Vol. V, 2009: 140). Tellingly, at a recent conference at the University of Dundee, Scotland, Graham Harman delivered a paper directly attacking James Ladyman's (and Don Ross's) variety of scientific realism, coherently with his general rejection of any reductionist or eliminativist project since 'the problem with eliminativism, as I see it, is that it makes no room for real objects at all. Its sense of realism is that of scientific realism, and so there isn't any concept of withdrawal there. The difference between real and unreal, for that position, is simply a difference between real *images* and scientific *images*. It is a mere metaphysics of images, despite all its huffing and puffing about reality' (<http://doctozamalek2.wordpress.com/2010/05/09/shaviro-with-an-interesting-twist/>).

<sup>70</sup> Brassier *Alien Theory*, 22.

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# Thinking Against Nature

## Nature, Ideation, and Realism between Lovecraft and Shelling

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### Introduction

“Science, already oppressive with its shockig revelations, will perhaps be the ultimate exterminator of our human species—if separate species we be—for its reserve of unguessed horrors could never be borne by mortal brains if loosed upon the world.”<sup>1</sup>

“The ideal world presses mightily towards the light, but is still held back by the fact that nature has withdrawn as a mystery.”<sup>2</sup>

**D**ESPITE STATEMENTS REGARDING its fundamental impossibility, the philosophy of nature stands as a metaphysical project not only worth pursuing, but also critical to complete. This task requires not only the resurrection of a dead philosophical form but an issuing of a challenge to post-modern restrictions on thought and existence (which have remained couched in the comfortable obscurity of the term materialism) in order to interrogate the foreclosure of the relation between being and thinking resulting from the widespread limitations of correlationism, the dominant mode of contemporary philosophy. As defined by Quentin Meillassoux: “Correlationism consists in disqualifying the claim that it is possible to consider the realms of subjectivity and objectivity independently of one another.”<sup>3</sup> In addition,

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Meillassoux names two variants of correlationism: weak correlationism and strong correlationism. Weak correlationism, which Kant is the flag-bearer of, asserts the above claim while maintaining the conceivability of the in-itself whereas strong correlationism dismisses any possibility of thinking the in-itself.<sup>4</sup>

Furthermore, a scientifically coherent or non-correlationist philosophy of nature is necessary if any virulent formulation of realism is to be attempted. Such a realism will be, following the work of Meillassoux, Ray Brassier, Graham Harman and Iain Hamilton Grant, a Speculative Realism. Speculation, again following Meillassoux, “releases us from the phenomenal stability of empirical constants by elevating us to the purely intelligible chaos that underlies every aspect of it.”<sup>5</sup> Against the domineering shadow of Kant’s Copernican revolution, our attempt at a new philosophy of nature must first discover the means to suture the breach between speculative (meta) physics and empirical knowledge, thereby forming a ground for a useful (i.e. non-naive) realism.

Towards this end this text will investigate the impossibility of (a) being or (a) thinking against nature in the fiction of H.P. Lovecraft and how a certain phenomenological queasiness results from a radically productive nature which overrides any form of transcendental subjectivity capable of either exception from, or organizing of, nature itself. The very concept of being with or against nature confronts the problem of how epistemology is rooted, or not rooted, in a realist conception of nature and how realism is possible given a complex or non-totalizable nature. Our guiding thought is the following: Nature is simultaneously a productivity and an infinite set of products responsible for the generation and capability of human subjects and their capacity to think. As a master of the weird, Lovecraft was deeply aware with the horrifying possibilities of science as well as its limitations in the face of nature. Lovecraft’s investigation of the tenuous linkage between thought, humanity, and the cosmos makes his work ideal for exploring ideation and its relation to nature. Furthermore, while the weirdness of Lovecraft’s stories would



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seem to irreparably damage any attempt at realism, it in fact expands the Real as Lovecraft's creations draw not from the supernatural but from an unbound nature.

The weirdness of Lovecraft's fiction, along with the weird realism of the Speculative Realists (paying particular attention to Ray Brassier's Transcendental Naturalism and Iain Grant's Schellingian Nature Philosophy), provides fertile ground for a resuscitation of a philosophy of nature against the apparently unassailable entanglement of being and thinking (under the name correlationism) which functions as an obstruction to all forms of realism.

### The Moss-Thickened Lantern or Natural-Ideation

"Self-consciousness is the lamp of the whole system of knowledge, but it casts its light ahead only, not behind."<sup>6</sup>

"What lies beyond the light and the luminous world is for our senses a sealed book and buried in eternal darkness."<sup>7</sup>

Taken together, these statements of Schelling suggest not only the limitation of thought in grasping the non-ideal but also affirm the *a priori* status of nature in itself.<sup>8</sup> As Iain Grant notes, Schelling's insistence on the non-priority of thinking goes beyond asserting the *a priori* status of nature when Schelling reconfigures Kant's dyad of *a priori* and *a posteriori* replacing it with *prius* and *posterius*.<sup>9</sup> The *prius*, or firstness, designates an originary indeterminateness of being,<sup>10</sup> which immediately appears as a kind of nothing<sup>11</sup> in that it is pure process, or sheer potency. The nothingness, or nothingness as such, is provisional being, a being which is only to the point that it is alien to reason, that it is nature, always moving in its being.<sup>12</sup> This is why the "concept of becoming is the only one appropriate to the nature of things."<sup>13</sup> Here Schelling's nature is differentiated from that of Kant's *noumenon* as it is not merely an unknowable entity but a productivity; Schelling's nature is known to thought as the activity that precedes thought, an activity which is undetermined and unconstrained.<sup>14</sup> Furthermore, Schelling dictates that "If it is

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the task of transcendental philosophy to subordinate the real to the ideal, it is on the other hand, the task of the philosophy of nature to explain the ideal by the real”<sup>15</sup>

Schelling’s suggestions that there is something prior to thought (nature as *prius*) as well as that the transcendental (the most extensive capacity of thought) is thoroughly naturalized as part of nature, have serious ramifications for the trajectory of philosophy and the possibility of realism, however weird. If thinking and the subject-that-thinks are both direct results of the Real (and not a transcendental formalization such as Kant’s concept of apperception), then the genesis of thought must be explained through natural means.

Schelling’s rejection of metaphysical formalism and his unbinding of nature make it possible to draw from a force previously foreclosed as such under Kant’s humanistic conceptions: the force of time. As Grant writes in his *Philosophies of Nature after Schelling*, Schelling’s naturalism is implicitly time-based.<sup>16</sup> Time, as non-perceptual but deeply natural, is always non-existent to us and therefore is everything that it can be (and the ground for everything that could be) while appearing as nothing, in a kind of pure-isness “by its nature or the Idea” of time-in-itself.<sup>17</sup> Temporality, as neither an inert formality, nor as purely that which is perceived, is then formulated as a time that propels itself, that functions outside of the purview of human thought and human subjectivity. The germ of this metaphysical scaffolding lies in the churning abyss of Schelling’s deep past. This deep past indexes the ancestral time of Meillassoux, a conception of time which points to processes and beings prior to the emergence of thought. Deep time thereby denies the subsumption of deeply temporal objects and ideas under the work of transcendental synthesis, of being merely correlates of thought. Where correlationist time is always the time of the thinking self, for Schelling the time of the self is time conceived as an activity and not an epistemological or ontological limit.<sup>18</sup> Immediately Lovecraft’s specter is raised as space-time becomes the generator, and place of generation, for objects obscured by the long stretch of time.

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Schelling's concept of the past, which is always a process and never a being, and the *Vorweltliche* (the time before the world) in particular hold the possibility of the emergence of thought.<sup>19</sup> "Everything is only the work of time, and it is only through time that each thing receives its particular character and meaning."<sup>20</sup> The apparently endless stretch of the past (as well as the future) draws thinking beyond its tie to sensation since, against Kant, time is not merely a formalism and sensation is not the authority of epistemology. However, such speculation can lead to a certain uneasiness. As Benjamin Noys writes in his piece "Horror Temporis" "the horror of time is not simply the trifling matter of individual human finitude, but rather the recognition of scientific statements concerning cosmic timescales that precede and exceed the existence of humanity and life itself."<sup>21</sup> Noys' subjects are both Meillassoux's ancestral time and Lovecraft's treatments of temporality as being beyond the ability of the mind to comprehend opening the possibility of an eventual generation of the horrible.

As Noys and others have recognized, few authors better grasp the dangerousness of both speculation and knowledge in relation not only to the investigator's own sanity, but in learning too much about the horridness of nature's capabilities. If the lamp of Schelling's knowledge points forward, Lovecraft's thinking suggests a turning backwards of the light (perhaps fruitlessly) towards eternal darkness. As Lovecraft writes in the beginning of "The Call of Cthulhu":

The most merciful thing in the world, I think, is the inability of the human mind to correlate all its contents. We live on a placid island of ignorance in the midst of black seas of infinity, and it was not meant that we should voyage far. The sciences, each straining in its own direction, have hitherto harmed us little; but some day the piecing together of dissociated knowledge will open up such terrifying vistas of reality, and of our frightful position therein, that we shall either go mad from the revelation or flee from the deadly light into the peace and safety of a new dark age.<sup>22</sup>

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Lovecraft's statement addresses the limitation of our knowledge ("island of ignorance") as well as the danger of its speculative possibility ("terrifying vistas" and "deadly light") as they are anchored in the uncertain real ("black seas" and our "frightful position therein"). One dimension that Lovecraft does not mention, the dimension which his own work embodies, is that of thought's capacity to produce the horrible and not merely to reveal it. The question is whether the worst aspects of thought, of the deepest power of speculation, is a capacity divorced from nature, simultaneously questioning the ontological and epistemological status of the unnatural. Lovecraft writes in "The Unnameable": "[...] if the psychic emanations of human creatures be grotesque distortions, what coherent representation could express or portray so gibbous and infamous a nebulousity as the spectre of a malign, chaotic perversion, itself a morbid blasphemy against Nature?"<sup>23</sup>

This tale which begins with two characters "speculating about the unnameable,"<sup>24</sup> exemplifies the central mode of Lovecraft's story telling: the rampancy of the imagination and that which falls out of standard psychic classification.<sup>25</sup> The problem is the productive capacity of imagination and philosophy<sup>26</sup> in relation to the self-determined discernibility of the thinker.

As Grant clarifies, the self can only grasp the productivity of its thinking by making itself into an object, although this process of objectifying the self is itself an ongoing process.<sup>27</sup> Being, or objectivity, is only the temporary limit of productivity.<sup>28</sup> The unnameable then is the inability of thinking to capture being in the flow of its production, not because, in the Kantian sense, that being as such is inaccessible ontologically as noumenon, but because being is in motion and thought—as an interruption of this trajectory—is just as transient. The question of an approaching horror raises questions of the limits of being ('what is that' in terms of its being) and the limits of epistemology ('what is that' in terms of the perceiver's thinking). In other words horror, and speculative or weird horror in particular, functions based

on a simultaneous obfuscation and separation of essence (what it is) and existence (that it is). Furthermore, following Schelling, thatness functions at the level of experience which already assumes being proper or isness, whereas cognition thinks whatness, or the concept.<sup>29</sup> Reason comprehends what is real; experience grasps reality.<sup>30</sup>

To return to Noys' indexing of Meillassoux, Lovecraft's thinking summons the specter of what he calls "creative death," not a closing of oneself to the chaos and madness of the world as it is and as it appears, but to open oneself to such madness. As Meillassoux writes: "the living being is not the emergence of pain in an atrophied world, but on the contrary the diminution of madness in a becoming-terror of chaos."<sup>31</sup> Yet while Meillassoux's chaos would seem to buttress Schelling's own dynamic nature, it undercuts such dynamism with its thinkability (if only on the logical level) following from the anthropocentric articulation of the virtual. That is, if nature must remain always-already thinkable, and if time is a virtual function from the outside, it would seem that if Meillassoux was to formulate the horrible it would be a supernatural horror, one which must emerge *ex nihilo*. This distinction between the natural and the unnatural is important to the work of Lovecraft. As his principal biographer S.T. Joshi points out, Lovecraft's creations are not supernatural but supernormal; they are unlikely but not impossible,<sup>32</sup> thereby refusing to make the being-of-horror outside of the realm of nature. If horror can be taken to be knowing too much, then true horror is knowing too much about the unknowable, that amorphous strange being, or Lovecraft's unnameable. Horror becomes the simultaneously generative capability of thought and nature, with thought being nature's attempt to become an object to itself.<sup>33</sup> Schelling's concept of nature traces the apparently transcendental advent of thought while maintaining the fact that thought is only ever a part of nature. Given this natural annihilation of subject and object, what becomes of the use of thought and the possibility of realism?

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### Weird Realism or Immanence Unbound

“The real seems to flee before me, or to vanish under my hand, and matter, the first foundation of all experience, becomes the most insubstantial thing we know.”<sup>34</sup>

“[...]philosophy’s sole mission is *weird realism*. Philosophy must be realist because its mandate is to unlock the structure of the world itself; it must be weird because reality is weird”<sup>35</sup>

If the real as a horrible unknown, as  $x$  is not an object, or a series of objects following from Schelling’s productive nature which critical philosophy (following from Kant and his humanist concept of nature) tried to define as only utterly unknowable or as a construct of the senses, or following Meillassoux purely correlationist, then what is realism? To determine a form of realism that acknowledges the unknowability of the real, of the real as  $x$ , then one must determine the relation of the terms what and is, or the relation of epistemology and being. Ray Brassier, one of the Speculative Realists mentioned in the introduction, is pursuing exactly such a project of re-interrogating this relation, a relation which, as we have seen, is central to Lovecraft’s work. Paramount in beginning a discussion of Brassier’s work and the issue of realism is his formulation of the Real which follows from the work of Francois Laruelle’s usage of the term. For Laruelle, the Real exists as the “zero point of being,” as a kind of indeterminate force of matter; that which is given without givenness, without a giver or receiver, and is, ultimately, a being-nothing.<sup>36</sup> The materialized nothing (which is not to be codified as metaphysical substance or as being as such) is that which makes up the non-formalized core of the object. The contours of the object are discerned by the known object via determination-in-the-last-instance.<sup>37</sup> One can immediately see a connection to Schelling’s nature a no-thing, as nothing which is in fact the most crucial thing, that of pure process.

The object is a particle of non-being which is snipped from the Real yet still tied to it by thought, which carries that “which is unobjectifiable in the object, the Real.”<sup>38</sup> The

being of the object—its emergence as a transcendentalized glob of the Real—closes off immanence itself (the nothingness from which it was ejected), leaving thought as a kind of transcendental afterbirth moving alongside the Real.<sup>39</sup> It is in this sense that Brassier invokes the term identity, in that the object is identity without unity and duality without distinction.<sup>40</sup> This duality without distinction is a unilateral duality of objectifying transcendence and unobjectifiable immanence. This unilateralization functions as a non-dialectal logic of negation.<sup>41</sup> This duality is realized as a unity on the side of objectifying transcendence, but is not operative on the side of unobjectifiable immanence; it is on the side of thought but not on the side of the Real.<sup>42</sup>

Schelling's concept of the unconditioned eternal—which he discusses in the *Ages of the World* as an *x* which is *A* and *B* which is also a *One*, one and the same *x*, but this *x* is also *A* and *B*—is distinctly Laruellian.<sup>43</sup> The what-is, the relation of thinking and being, is existence since being is isness but never is for us.<sup>44</sup> Is-ness as existing is only ever thought, as unity is something that exists only for the thinking being,<sup>45</sup> where mind is merely invisible nature, nature in us.<sup>46</sup> My assertion here is that Schelling's *One* as divided yet formalizable as *One* is conceptually compatible with Brassier's *Laurellian* formulation; *Lauruelle's One* being simply the name for non-conceptual immanence.<sup>47</sup> For both Brassier and Schelling, all thinking is an attempt to think the *x* but this *x* is not an object that can be fully caught by thought since the *x* itself is a process and this process, this *x*-ing, produces our very capacity for thought.<sup>48</sup> It is this capacity that is too quickly forgotten in the strains of process philosophy. The issue is that a world of processes must be guaranteed and stitched together by thought, by the thinking subject. The question is not what is *x* but how do we divide the being of *x* and the thinking of *x*? As both Brassier and Schelling point out, *x* is usually pre-thought or set up as always-already thinkable. This is particularly evident in the philosophical category of immanence. For Brassier it is Gilles Deleuze who is the central offender in this sense, where for Schelling it is Hegel

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following in the footsteps of Kant.

Deleuze's plane of immanence, as a return to nature as an extended and ideal entity, partially embodies the productivity of nature but still assumes the priority of thought. This ontological valorization of thought is present in Manuel DeLanda's Deleuzian articulation of the ontological status of the laws of nature<sup>49</sup> following from a definition of the Deleuzian virtual as a space of spaces allowing for the emergence of progressive difference.<sup>50</sup> DeLanda argues that the Laws of nature are merely enhanced probabilities, that they are regularities made into axioms.<sup>51</sup> Following Nancy Cartwright, DeLanda argues that laws unify and organize but otherwise lie.<sup>52</sup> Whereas DeLanda is criticizing the being (or isness) of the laws of nature suggesting that they rely on a fundamental narrow mode of thinking (of whatness), he does not then question that particular mode of binding existence (of the relation of what and is) but instead, by using Deleuze's virtuality, ontologizes thinking. In other words, instead of instantiating the difficulty of the *x* for thought, DeLanda's process philosophy, and process philosophies in general, assert that it is only a question of finding the right construction of *x* by thought and not thought's relation to *x* that is the issue. Lovecraft's own view of nature's laws was that while they are only fictions, they have a grasp on the reality of the universe at the expense of free will, with the real becoming a challenge to thought.<sup>53</sup>

Schelling's attack on Hegel follows from similar concerns regarding the relation of thought and being. Schelling asserts that Hegel overestimates the ability of reason, that Hegel steamrolls the category of experience, or thatness, in order to assure the primary role of reason. For Schelling, Hegel's insistence on the primacy of reason, or being-as-concept, makes existence (or experience) merely a metaphysical necessity. As Meillassoux writes: "for Hegel, the fact that nature only partially corresponds to the Hegelian concept of nature is the mark of the former's necessary defectiveness—a defectiveness through which the absolute must pass in order to be absolute."<sup>54</sup>



Schelling's absolute functions in an ostensibly reverse way, in that nature's aborted attempt at realizing the absolute results in individuation.<sup>55</sup> For Hegel, reason grasps the absolute as a whole and therefore all contingency is contained within thought; for Schelling contingency is a question of experience on the one hand and the darkness of the absolute on the other. The epistemological in relation to the real, remains given the real's non-totalizability as well as its obscurity. As Schelling knew, the task of a philosophy of nature is to determine the use of its fictions for observation and not its ability to provide a more effective purchase on the Real.<sup>56</sup> Process philosophy, to be a coherent formulation, can not solidify thinking as the origin of process or even make possible an understanding of process in totality. In correlationism not only does thought supersede nature, but thought constructs nature/the Real. The difference between correlationism and realism, to return to Lovecraft, can be discerned in the common phrase of horror tales which we have already introduced: 'what is that?' The phrase is knowing (what), being (is), and the particular (that) which binds them together. For materialism (or correlationism) what-is (as existence) consumes thinking and being under the process of construction, which originates in the virtual or other ontologized mode of thinking. Following Laruelle, Brassier names this mode transcendental synthesis, which is the genetic code for correlationism.<sup>57</sup>

Following from transcendental synthesis thinking is constructive because immanence is co-imbricated with thinking and not, as Brassier argues, closed off by it. By tying immanence to thinking, the "what is" is always what-is (existence). In properly correlationist terms, existence must have always been since existence is where being is thinkable and where thought is. That which is unnameable or unthinkable is only designated as such because thought hasn't yet arrived there. Correlationism names the eventual extinction of the horrible while realism admits the horrible's infinity: where Deleuze is concerned with the production of concepts, Schelling is concerned with a concept's ability to grasp the productivity of nature, of the weirdness of the Real. As Brassier outlines in

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“Objects and Concepts” this concept production of Deleuze comes from his univocal being and its immanence although “the celebrated ‘immanence’ of Deleuzean univocity is won at the cost of a pre-Critical fusion of thinking, meaning, and being.”<sup>58</sup> If the concept is from a place of thought, then, as Brassier points out, all difference in correlationist philosophy remains internal to the concept.<sup>59</sup> In other words, all difference must be thinkable and purely representational difference. The core of realism lies in the difference between model and reality which, as the philosopher-physicist Bernard d’Espagnat points out, is not addressed in most scientific articles, where a ground of intelligibility is often assumed<sup>60</sup> even though that ground may be itself always out of reach.<sup>61</sup> This of course does not negate the possibility of naturalism but confronts it with the problem of the ground of grounds, with the possibility that our knowledge does not exhaust the reality of the thing.

### Against Nature/Against Materiality

“The succession of our ideas arises in us, and indeed a necessary succession; and this self-made succession, first brought forth in consciousness, is called the course of Nature.”<sup>62</sup>

“Concepts are mere silhouettes of reality.”<sup>63</sup>

If we are to guarantee the horrifying capacity of nature, we require a concept that is not determined in advance as well as a concept of nature that, like the classical conception, is cosmological and not merely terrestrial or even phenomenal. If nature is the possibility and non-possibility of is-ness itself then nothing can be against nature: the “beginning of Nature is everywhere and nowhere.”<sup>64</sup> To name something as against nature, or unnatural, suggests the limitation of the concept of nature on the one hand and the valorization of thought on the other. In Lovecraft’s stories, the experience of horror resulting from what could be seen as unfathomable or unnatural could be viewed as against nature in the proximate sense, in that the abomination is only beyond nature as it

is understood locally.<sup>65</sup> Furthermore, as we have seen, the extension of thinking does not work towards taking in the whole of the universe but instead unveils the foundationally groundlessness of the cosmos.<sup>66</sup> But if nature becomes a realm of anything goes—if nothing is impossible in nature—then doesn't nature and the non-natural become meaningless? Does our conceptualization of nature merely become a less thinkable version of Meillassoux's chaos? It is the experience of horror which points to the existence of divisions in nature; of the existence of objects (if only on the phenomenal level), and of thinking objects in particular; and to interior and exterior in nature, of bounds. That is, even if nature is primarily a play of forces it does not deny the existence of materiality. Materiality is the evidence of the forces of nature and their progressiveness. As Schelling writes in *Clara*: "What a quiet sorrow lies in so many flowers, the morning dew, and in the evening's fading colors. In only few of her appearances does nature emerge as terrible, and then always temporarily."<sup>67</sup>

Compare to a passage in Lovecraft's "The Call of Cthuhlu": "I have looked up all the universe has to hold of horror, and even the skies of spring and the flowers of summer must ever afterward be poison to me [...] Loathsomeness waits and dream in the deep, and decay spreads over the tottering cities of men."<sup>68</sup> In this sense, materiality appears to be against nature in that it, along with the thinking subject, resists the decomposition of nature. However, as discussed further in *Clara*, the destructive and progressive forces in nature can be assumed to be one and the same, that is, the forces which allow for the construction of the "towering cities of men" are not ontologically different from those forces which reduce them to ruin. In his "Supernatural Horror in Literature" Lovecraft engages these forces partially betraying the title of his piece when he writes: "A certain atmosphere of breathless and unexplainable dread of outer, unknown forces must be present; and there must be a hint, expressed with a seriousness and portentousness becoming its subject, of that most terrible conception of the human brain—a malign and particular suspension of defeat of those fixed laws of Nature which

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are our only safeguard against the assaults of chaos and the daemons of unplumbed space.”<sup>69</sup>

In this sense, Lovecraft’s fiction operates in the frayed edges of the objects (the laws) constructed by human thought and those objects’ purported distance from nature. Following Brassier, this formal object, which also carries that “which is unobjectifiable in the object, the Real,” does not determine the Real but builds off of it.<sup>70</sup> Hence, every “physical impossibility is relative, i.e., valid only in relation to certain forces or causes in Nature, unless of course we take refuge in occult qualities.”<sup>71</sup>

If correlationism demands the fundamental impossibility of both realism and a philosophy of nature given their tie to a determinable real, then the dominant mode of contemporary philosophy is occult in its obscurantist formulation of the real and its valorization of a thinking possible of fully determining it. While Meillassoux discusses the religiousization of reason, in that all connections to the absolute (nature in our case) have become a question of belief and not reason,<sup>72</sup> he maintains however, that logic remains the privileged way of accessing the absolute while simultaneously attacking strong correlationism for hypostatizing one term over another, naming Schelling’s Nature as one such term.<sup>73</sup>

While Meillassoux names the problem of correlationism his solution, as Alberto Toscano puts it, is a revival of neo-Hegelianism in its appeal to a virtuality of the mind, of thinking, not all together different from Deleuze’s prioritization of thinking. Meillassoux’s metaphysical formulation of nature as a storm of hyper-chaos<sup>74</sup> appears similar to DeLanda’s description of the virtual as a space of spaces; where the former assures pre-thinkability, the latter assures that logical rule remains immune to the breach of hyper-chaos. As Meillassoux writes “chaos can do anything except the unthinkable.”<sup>75</sup>

As Lovecraft knew well, thought acts as only a brief suspension in the flow of nature (while still a part of it) and the horrible functions as one of the strongest reminders of thought’s limit. And while “men of broader intellect know that there is no sharp distinction betwixt the real and the unreal”<sup>76</sup> the

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challenge of the real should not be neglected because of our discomfort with a fundamental limit to thinking the real, to thinking nature. A Lovecraftian-Schellingian realism is one that arrests the flow of the object (in-the-last-instance) while aware of the fact that this object is only an identity, a work of the horribly speculative mind, but a work that uses the material of the Real, of the actual generative work of nature, to construct it. Realism becomes an open formalism that instead of vouchsafing our sanity and our ontological and existential importance apropos a veiled nature, points to objects, that are in existence or sensible only due to formalization. This object in both Lovecraft and Schelling is that of an indefinite swirling; the object is the minimalistic representation of the temporary inhibition of the annihilating forces of nature in itself, appearing as a void, or as a whirlpool. The voidic object works as the formation of a border amidst the play of forces, thereby separating interior from exterior, form from matter, life from the inorganic, and the real from the unreal. The unnatural is only a temporary occurrence and never gains ontological status; the voidic object is the formal quality of the unnatural, of that which represents our epistemological limits in the face of a nature of pure process.

### NOTES

<sup>1</sup> H.P.Lovecraft, “Facts Concerning the Late Arthur Jermyn and His Family” in *H.P. Lovecraft The Fiction Complete and Unabridged*, (New York: Barnes and Noble, 2008), 102.

<sup>2</sup> F.W.J. Schelling, *Ideas for a Philosophy of Nature*, trans. Errol Harris and Peter Heath, (New York: Cambridge University Press, 1995), 54

<sup>3</sup> Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, (London: Continuum International Publishing Group, 2008), 5.

<sup>4</sup> *Ibid.* 66.

<sup>5</sup> *Ibid.* 83.

<sup>6</sup> F.W.J. Schelling, *System of Transcendental Idealism*, trans. Peter Heath, (Virginia: University Press of Virginia), 18.

<sup>7</sup> F.W.J. Schelling, *First Outline of a System of the Philosophy of Nature*, (Albany: State University of New York Press, 2004), 98.

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- <sup>8</sup> *Ibid.* 198.
- <sup>9</sup> Ray Brassier, Iain Hamilton Grant, Graham Harman and Quentin Meillassoux, “Speculative Realism”, in *Collapse: Philosophical Research and Development*, vol. III, (Falmouth: Urbanomic, 2007), 340-342.
- <sup>10</sup> F.W.J. Schelling, *The Grounding of Positive Philosophy*, (Albany: State University of New York Press, 2007), 143.
- <sup>11</sup> *Ibid.* 141
- <sup>12</sup> *Ibid.* 136-137.
- <sup>13</sup> F.W.J. Schelling, *Philosophical Investigations into the Essence of Human Freedom*, (New York: SUNY Press), 28.
- <sup>14</sup> Schelling, *Ideas*, 174.
- <sup>15</sup> Schelling, *First Outline*, 196.
- <sup>16</sup> Iain Hamilton Grant, *Philosophies of Nature After Schelling*, (London: Continuum International Publishing Group, 2006), vii
- <sup>17</sup> Schelling, *Ideas*, 150.
- <sup>18</sup> Schelling, *System*, 103.
- <sup>19</sup> F.W.J. Schelling, Slavoj Žižek, *The Abyss of Freedom/Ages of the World*, trans. Judith Norman, (Ann Arbor: University of Michigan Press, 120-121).
- <sup>20</sup> *Ibid.*, 122.
- <sup>21</sup> Benjamin Noys, “Horror Temporis,” in *Collapse: Philosophical Research and Development*, vol IV, (Falmouth: Urbanomic, 2008), 277.
- <sup>22</sup> H.P. Lovecraft, “The Call of Cthulhu,” in *H.P. Lovecraft*, 355.
- <sup>23</sup> H.P. Lovecraft, “The Unnameable,” in *H.P. Lovecraft*, 260.
- <sup>24</sup> *Ibid.* 256.
- <sup>25</sup> *Ibid.* 257.
- <sup>26</sup> Schelling, *System*, 10-13.
- <sup>27</sup> Grant, *Philosophies*, 176-177.
- <sup>28</sup> *Ibid.* 181.
- <sup>29</sup> Schelling, *Grounding*, 129.
- <sup>30</sup> *Ibid.* 131.
- <sup>31</sup> Quentin Meillassoux, “Subtraction and Contraction: Deleuze, Immanence, and Matter and Memory” in *Collapse: Philosophical Research and Development*, vol. III, (Falmouth: Urbanomic, 2007), 103-104.
- <sup>32</sup> S. T. Joshi, *H.P. Lovecraft: The Decline of the West*, (Berkley Heights: Wildside Press, 1990), 89.
- <sup>33</sup> Schelling, *System*, 6.

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- <sup>34</sup> Schelling, *Ideas*, 17.
- <sup>35</sup> Graham Harman, “On the Horror of Phenomenology” in *Collapse: Philosophical Research and Development*, vol IV, (Falmouth: Urbanomic, 2008), p.343.
- <sup>36</sup> Ray Brassier, *Nihil Unbound: Enlightenment and Extinction*, (New York: Palgrave Macmillan, 2007), 137-138.
- <sup>37</sup> *Ibid.*, 139.
- <sup>38</sup> *Ibid.*
- <sup>39</sup> *Ibid.* 138-139.
- <sup>40</sup> *Ibid.*
- <sup>41</sup> *Ibid.* 120.
- <sup>42</sup> *Ibid.* 142.
- <sup>43</sup> Schelling, *Ages*, 130
- <sup>44</sup> *Ibid.* 131
- <sup>45</sup> Schelling, *Ibid.* 31-32
- <sup>46</sup> *Ibid.* 42.
- <sup>47</sup> Brassier, *Nihil Unbound*, 119
- <sup>48</sup> Schelling, *Ideas*, 175
- <sup>49</sup> Manuel DeLanda, *Intensive Science and Virtual Philosophy*, (New York: Continuum Publishing Group, 2005), 105
- <sup>50</sup> *Ibid.* 78-79
- <sup>51</sup> *Ibid.* 157.
- <sup>52</sup> *Ibid.* 160.
- <sup>53</sup> Joshi, *Decline*, 7.
- <sup>54</sup> Meillassoux, *After Finitude*, 80.
- <sup>55</sup> Schelling, *First Outline*, p. 35.
- <sup>56</sup> Schelling, *Ideas*, 78.
- <sup>57</sup> Brassier, *Nihil Unbound*, 134.
- <sup>58</sup> Brassier, “Objects and Concepts,” in Levi Bryant, Nick Srnicek and Graham Harman (eds.) *The Speculative Turn: Continental Materialism and Realism*, (Melbourne: Re.Press, forthcoming), unpaginated
- <sup>59</sup> *Ibid.*
- <sup>60</sup> Bernard d’Espagnat, *On Physics and Philosophy*, (New Jersey: Princeton University Press), 18
- <sup>61</sup> *Ibid.* 5.

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- <sup>62</sup> Schelling, *Ideas*, 26.
- <sup>63</sup> *Ibid.* 172.
- <sup>64</sup> *Ibid.* 87.
- <sup>65</sup> Joshi, *Decline*, 32.
- <sup>66</sup> *Ibid.* 110.
- <sup>67</sup> F.W.J. Schelling, *Clara or, Nature's Connection to the Spirit World*, trans. Fiona Steinkamp, (Albany: SUNY Press), 22.
- <sup>68</sup> Lovecraft, "Call of Cthulhu," in *Lovecraft*, 378-379.
- <sup>69</sup> Lovecraft, "Supernatural Horror in Literature," in *Lovecraft*, 1043.
- <sup>70</sup> Brassier, *Nihil*, 139.
- <sup>71</sup> Schelling, *Ideas*, 162.
- <sup>72</sup> Meillassoux, *After Finitude*, 47.
- <sup>73</sup> *Ibid.* 37.
- <sup>74</sup> *Ibid.* 64.
- <sup>75</sup> *Ibid.* 81.
- <sup>76</sup> Lovecraft, "The Tomb," in *Lovecraft*, 14.

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# To Exist Is to Change

## A Friendly Disagreement With Graham Harman On Why Things Happen

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THE TITLE OF THIS ESSAY COMES from a quote in Bergson's *Creative Evolution* with the full quote being: "...for a conscious being, to exist is to change, to change is to mature, to mature is to go on creating oneself endlessly. Should the same be said of existence in general?"<sup>1</sup> This could be taken as something of a micro-manifesto for contemporary (neo-) vitalist metaphysics and we will return to this idea of change as continual (re)creation, but this isn't an essay on Bergson. It is, rather, an essay on contemporary metaphysics and the issues (or non-issues in some cases) of causality and change. Graham Harman has done much to revive causality as a real metaphysical problem through his own model of localized occasionalism known as *vicarious causation*. Something remains fundamentally lacking in Harman's form of causality though, namely *why change occurs at all*. In this essay I will explicate Harman's vicarious causation before moving on to several potential responses to the question of why change happens. Essentially, Harman is so focused on the "how" of change in the face of correlationists, empiricists, naturalists and relationists that he has entirely ignored the more fundamental question of why anything happens at all. This essay will also serve then as a survey of contemporary causality.

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We will begin by outlining briefly the basics of Harman's object-oriented philosophy, why it necessitates a return to the problem of causality—including Harman's history of the problem of causality in Modern philosophy—before we approach vicarious causality as his solution. This will be followed by an overview of possible models of causality (occasionalism, empiricism, correlationism, naturalism/materialism, relationism and vitalism) with both their causal mechanisms (the “how”) and their causal reasons (the “why”) examined. It will be shown that besides the mechanical “how” of causality provided by Harman, object-oriented philosophy requires a reason for causality. The essay will conclude by seriously considering the question of why things happen at all.

### Objects and Cause

Prior to Kant causality was a serious issue. The concept of change is certainly one of the breakthroughs of Aristotle, and his four causes (formal, material, efficient and final) will guide us through the historical terrain necessary to understand the larger issues of cause and change into the contemporary era. The fact that causality was at one point an issue at all should tell us something already about the contemporary philosophical climate. The question of how two substances can interact, let alone when they are different in kind, was a real issue for most of the history of philosophy and has only recently become a “non-issue” that is discussed as a purely historical problem. The seriousness of the problem of interaction among substances reached what could perhaps be seen as its apex in the work of the Islamic occasionalists. They maintained that God is the necessary mediator between things since finite entities have no causal power but serve as the *occasions* for Divine activity. God is thereby the first and only cause in the cosmos. This tradition of causal mediation is then carried on in the modern rationalists. Descartes has no qualms about allowing direct causation in the realm of *res extensa* but has difficulty explaining how mind and matter can ever interact, ultimately relying on the power of God to

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connect unlike substances. Forms of causal mediation are prevalent in Spinoza (with modes unable to interact except through the power of the one substance itself) and Leibniz (with a form of monadal auto-affection whereby the interior play of one monad affects all others as a form of “spooky action at a distance” *à la* quantum entanglement<sup>2</sup>). Modern occasionalism is perhaps best known though through the thought of Malebranche who claimed, as the theologians of Basra did before him, that God is responsible for all change in the universe. Unlike Descartes who limits this principle to the interaction of mind and matter, Malebranche maintained that God’s mediation was necessary for any and all interaction.

In opposition to this “occasionalist” tradition<sup>3</sup> we have what we could call, for lack of a better term, the empiricist tradition. This group, which includes Locke and Hume but will also count Kant as a member, argues essentially the inverse of the position held by the occasionalists; while the occasionalists hold God to be the necessary mediator in all causality, the empiricists hold this position to be naïve and groundless. Instead, they hold that it is only the human mind (or habit in the case of Hume) that acts as the necessary mediator for causality. It is the human being that takes the place of the occasionalist God. This is no real solution to the problem of how two substances come to interact though. While it is acceptable to openly laugh at the occasionalist for relying on theology to ground the world, it is somehow also perfectly acceptable to side with the empiricists and claim that placing causality within the mind solves the problem. Just because Hume or Kant claim causality is a function of the mind (whether necessary or not) the question of how change is possible or ultimately how anything happens at all is not answered, but passed over.

Harman’s proposed solution to the problem of causality begins by asking why only one entity (or type of entity) is able to mediate between two substances. In either of the above-mentioned cases, which encompass the majority of thinkers who maintain causality as some sort of problem,<sup>4</sup> one being, be it God or the human, is able to allow for causality at all.

Instead, says Harman, we should look for a model that works whether or not the human being is involved and one which allows us to explain the mechanics of causality in the first place rather than shrouding it in mystery. But before we go in to the details of vicarious causation, we should understand why it is necessary to have a model of indirect causality at all.

### Indirect Causation

Objects do not touch directly, at least, not real objects. Based on Heidegger's tool-analysis, Harman maintains that objects withdraw from one another and interact only with caricatures of each other or what are called sensual objects, which are essentially equivalent to Husserl's intentional objects. In Section 15 of *Being and Time*, Heidegger will distinguish between ready-to-hand and present-at-hand, and, for a short time, talks about *things*. According to Harman, it is in this revealing text that we learn the truth of the interaction between objects. Heidegger will say that

[The] less we just stare at the hammer-Thing, and the more we seize hold of it and use it, the more primordial does our relationship to it become, and the more unveiledly is it encountered as that which it is—as equipment...If we look at Things just 'theoretically,' we can get along without understanding readiness-to-hand. But when we deal with them by using them and manipulating them, this activity is not a blind one; it has its own kind of sight, by which our manipulation is guided and from which it acquires its specific Thingly character.<sup>5</sup>

There is a difference between the object-in-use, and the object-as-observed. When I am using the hammer, I am in some sense blind to it. Heidegger continues:

The ready-to-hand is not grasped theoretically at all, nor is it itself the sort of thing that circumspection takes proximally as a circumspective theme. The peculiarity of what is proximally ready-to-hand is that, in its readiness-to-hand, it must, as it were, withdraw [*zurückzuziehen*] in order to be ready-to-hand quite authentically. That with which our

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everyday dealings proximally dwell is not the tools themselves [*die Werkzeugeselbst*]. On the contrary, that with which we concern ourselves primarily is the work—that which is to be produced at the time; and this is accordingly ready-to-hand too. The work bears with it that referential totality within which the equipment is encountered.<sup>6</sup>

In order for the thing to be used, to really be used and useful, it must go unseen. In short, I must caricature the thing, reducing it entirely to its use value which is only one of the thing's many qualities. In the case of the hammer, it is only used and useful when it is not an object of idle speculation but when it shows itself in its use. This works both ways; to think an object theoretically, it cannot be in use, but also when an object is no longer useful (when it ceases functioning properly), only then can it truly be thought theoretically. Harman's reading of the tool-analysis can be summed up rather easily:

Heidegger observes that the primary reality of entities is not their sheer existence as pieces of wood or metal or atoms. The wood in a primitive sword and that in a modern windmill occupy utterly different niches of reality, unleash completely different forces into the world. A bridge is not a mere conglomerate of bolts and trestles, but a total geographic force-to-reckon-with: a unitary bridge-effect. But even this unified bridge-machine is far from an absolute, obvious unit. It too has a vastly different reality depending on whether I cross it on the way to a romantic liaison, or as a prisoner underway to execution...Instead of being a solid object that enters into relation only by accident, *an entity in its reality is determined by the shifting, capricious storm of references and assignments in which it is enveloped*. The shift of the tiniest grain of dust on Mars alters the reality of the system of objects.<sup>7</sup>

An object is not exhausted by a theoretical understanding of the thing, as if milk could be exhausted through an understanding of its chemical composition. Neither is it entirely exhausted however through drinking it, that is to say, an object is caricatured equally in use as it is in theory with only a selection of qualities being tapped.<sup>8</sup> Drinking milk, understanding it chemically, physically, culturally, historically, none of these exhausts its milk-being; and it is not simply

a matter of putting these modes of understanding together as if that would give us the entirety of milkness. We relate to milk differently than we do kittens, bacteria, farm equipment, refrigerated trucks or warm glasses and all of these things equally fail to exhaust it. Any object contains multitudes, an infinity of possible relations and qualities, none of which can ever give us the entirety of the thing. These objects are not solid unchanging entities, but are rather constantly shifting and moving entities as they break connections and form new ones, spreading their tendrils out into the network of objects that make up reality. When equipment is in use, it is hidden, it is a thing concealed from our view, and exists purely as something which is silently relied upon. There are countless objects at work in allowing me to write this essay you are reading, from my home, to the laptop I am using, to the various parts of my body which I am counting on operating properly. When in use, objects go unseen, remaining underground as part of an intimate network of other objects that I am blissfully unaware of. I cannot fully have an idea of what a heart *does* until it no longer does what it is meant to, namely, when it stops beating in my chest.<sup>9</sup> More than that however, all objects remain in some way hidden in their relations, and not simply those involving human beings. I am not alone in the withdrawn relation I have to my heart, as neither blood cells, stethoscopes, nor parasitic worms enjoy the full essence of my heart. The essence of the thing always remains untouched, with only its various qualities ever being engaged.

The problem is made apparent: things withdraw from each other, never coming into full contact at the level of essence and yet we cannot conclude that change is illusory. Things are not simply a cosmic lump of inert matter, the universe is made up of things which change, move and interact. How are we to reconcile the empirical observation of obvious change with the more logical argument that any interaction can be described as at best superficial? It is here that Harman proposes a return to the model of causation proposed by both the occasionalists and the empiricists, for what they hold in common is the impossibility of things interacting on their

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own, that is to say, they both emphasize the necessity of mediation.<sup>10</sup> Harman proposes a new union of occasionalism and empiricism, a fusion of Malebranche and Hume.

What both positions have in common is a basic hypocrisy. If nothing at all is truly linked to anything else, these positions still invoke a *deus ex machina* or *mens ex machina* that will form an exception to the rule. One privileged entity is allowed to form links where others cannot. Against this notion, I propose the more democratic solution of a local occasionalism or vicarious causation, in which *every entity that exists* must somehow be equipped to serve as a medium of contact between two others.<sup>11</sup>

Rather than saying there is only one entity able to link objects causally, be it God or the subject, Harman says that this must be extended. No two objects interact with each other directly, but must rather interact indirectly through a third object. This third object is none other than the phenomenological *intentional object*, which resides inside all entities. When I experience a tree, I have in mind not the real tree, but the intentional tree. The real tree is saturated with detail, the angle experienced, the lighting, my mood, etc, while the intentional tree is stripped of these. Changing any of these details does nothing to the intentional tree in my mind, “which always remains an enduring *unit* for as long as I recognize it as one.”<sup>12</sup> The real me cannot interact with the real tree, but rather, we interact on a phenomenal level through the mediation of the intentional object. This intentional object relation is asymmetrical however, the real me only ever interacts with the intentional tree and never the tree in-itself.<sup>13</sup> Harman will claim that this is how all objects interact, that is, all object-relations are mediated, instituting a universal system of indirect causality whereby all real objects relate through further relations with intentional objects, as he will say:

The tree and its mountainous backdrop are indeed distinct, yet they are unified insofar as I am sincerely absorbed with both. But more than this: when the parts of the tree fuse to yield the tree with its single



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fixed tree-quality, I too am the vicarious cause for the connection of these sensual objects. Even if I merely sit passively, without unduly straining eyes or mind, it is still for me that these parts have combined. Here, a real object (I myself) serves as the vicarious cause for two or more sensual ones.<sup>14</sup>

Interaction between two real objects can only happen within the space of a third non-real (sensual) object which itself resides within the only parts of objects we ever access, their qualities.<sup>15</sup> Since objects are always withdrawing from one another, there must be this third object, a second *type* of object, in order for there to be any interaction at all. This mediator is the sensual object, that veneer that we run up against in the world, what Harman also refers to as the kaleidoscope of qualities.<sup>16</sup> This is the intoxicating aura of visual and audio delights, a showcase of tastes and smells, and the divine spectacle of things demonstrating their qualities and abilities like circus performers attempting feats of strength. When I pet a small kitten the real me does not contact her directly but only through the faint signals sent via petting her soft hair and listening to her gentle purr as she slowly falls asleep. The kitten-being likewise only interacts with me on this surface level while aiming beyond these obvious qualities, assuming always more beyond this sideshow of appearance. It is not the case however that I encounter qualities as detached from an object, as if I am lost in an ocean of qualities with only a few solid island-objects. Rather, this third term is itself another kind of object.<sup>17</sup> When I pet a soft kitten, I don't come into contact with soft, but am already engaging with a soft *thing*. Harman will tell us that there is a split not only between individual objects, but between objects and their qualities, that just as the object is not exhausted by its relations, so too is it not exhausted by its own qualities.<sup>18</sup> This outer crust of relations, accidents and qualities is able to be pierced because they are removable, able to be detached from the real object.<sup>19</sup> Beyond that however, the sensual object and the qualities can themselves be detached from each other, through what Harman terms *allure*.

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Allure is evident through metaphor, where the qualities of one sensual object are detached and sutured to another object, as when I say “he is a mouse,” various mouse-qualities are affixed to the person I am describing (timidness, smallness) while others are not (covered in hair, living inside of walls, etc). That is to say, some of the qualities of mouseness are detached, the metaphor showing that the thing (mouse) is more than the totality of its qualities since the metaphor holds whether or not I am speaking of all of the qualities or just a select few.<sup>20</sup> Causation is indirect in this same way, as detached qualities interact and reassemble in new formations. The qualities and notes of a thing act as mediating objects between other real things, as the play of surface effects send vibrations on down into the inner sanctum of the things themselves. We should abandon the atomic idea of objects and instead make room for the real objects which make up our universe which

resembles a massive complex made up of numerous caverns, outer walls, alleyways, ladders, and subway systems, each sealed off from the others and defining its own space, but with points of access or passage filled with candles and searchlights that cast shadows into the next. The cosmos is similar to a rave party in some abandoned warehouse along the Spree in East Berlin, where the individual rooms are each surprisingly isolated from all external sources of music, flashing lights, perfumed odors, and dominant moods—but in which it is quite possible to move from one space to the next, and in which the doorways are always flooded with faint premonitions and signals of what is to come.<sup>21</sup>

## Possible Causes

We now have something of an understanding of how Harman’s proposed vicarious causation works. That is to say, we have outlined, however roughly, *how* causation and change occur in the world. It should be clear from this foray into the myriad world of objects however that the question of *why* anything happens is entirely open. In this section, I will outline what I see as six possible ways to view causality. These

six types or species of causation contain differing specific models of causality, meaning there will be variations within these defined species but I think the family resemblance is sufficient to allow us to use these more general models while making occasional forays into specific examples.

The first species of causation is that of *traditional occasionalism*. As outlined above, we can see that we run into the immediate problem that Harman also sees with this system, namely that it fails to explain how causality actually happens.<sup>22</sup> The mechanics of causality are implanted in the mind of God so that we cannot say exactly how causality actually happens only that it does and must happen by God's will. This means we do have a reason for causality and change however, though it remains as mysterious as the causal process itself. Change happens due to God's willing it to happen. No other reason is seen as necessary for the members of this causal species. While we could suggest that under the Aristotelian categories of the four causes that material cause is the only one with which we cannot answer "God" (with the forms residing in the mind of God, His being the efficient cause of all change and motion and clearly being the final cause), this ultimately doesn't impact our study. The fact that things are made up of differing materials or consist in different substances has no impact on the causal system of occasionalism except insofar as it becomes the source of the problem in Descartes. For the Ash'arites as with Leibniz and Malebranche, it doesn't matter what the things involved are made of since even like cannot interact with like without the intervention of God.

Since *empiricism* is positioned in direct opposition to the traditional occasionalists, it is there that we turn now. While occasionalism fails to provide us with the mechanism of causality, it does at least provide us with a reason for change, no matter how unsatisfactory that answer may be. Empiricism fails on both of these fronts however. For Hume, there is no logical connection between cause and effect as it is purely by habit and induction that we assume that one event will continually cause another.<sup>23</sup> There is no logical reason that my hitting a billiard ball will cause it to move simply because

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this action has had that outcome in the past. We have no actual perception of causality, simply inferring it from a succession of witnessed events. Kant will perfect this doctrine by making it a fully inverted occasionalism when he argues in the *First Critique* that this is not a haphazard assignment we impose on events but the necessary structure of human reason, causality being “grounded completely *a priori* in the understanding.”<sup>24</sup> The question of “how” two events are connected for the empiricist is not answered, nor is the question of “why.” Causality is simply a given, or even possibly an illusion constructed solely by the mind, and remains just as mysterious for those who embed its power in the human mind as for those who embed it in the mind of God.

The Kantian position which has been included with the empiricists gives way to the position that I will term, following Quentin Meillassoux,<sup>25</sup> *correlationism*. Correlationism is “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.”<sup>26</sup> Originating in Kant’s synthesis of rationalism and empiricism, correlationism dictates that we only have access to that which is for-us, with an end to “naïve” metaphysics which claims we actually know things outside of our own grasping them. To speak of *things-in-themselves* is to speak of the unknowable. Meillassoux distinguishes between weak and strong forms of correlationism based on whether or not a thinker allows for the possibility of *things-in-themselves* at all. Kant or Husserl would fall under the weak form of correlationism while Fichte and Hegel would be archetypal examples of strong correlationism. The distinction is essentially that of dualism and monism. While the *weak* correlationist maintains that there may be (or likely is) an outside world, the chaotic manifold is only synthesized by the power of rationality, meaning that causality does not pertain to things-in-themselves but only to things as they appear for-us. The *strong* correlationist does away with the very idea of things-in-themselves as nonsense and maintains that we can only discuss that which is for-us since the very idea of anything outside of mind is incoher-

ent. The stronger position is closer to what we usually mean colloquially by *idealism* but I find this term less helpful than correlationism.<sup>27</sup> When it comes to causality, when I speak of correlationism as a causal species, I am speaking specifically of the position of the strong correlationists. Causality remains as much a mystery for the correlationist as it was for the above-mentioned species. It falls into the same trap of saying that causality is a necessary function of experience without telling us why this is the case or how it happens at all. Saying that the mind needs causality or that the mind cannot help but have causality does not answer the question.

We seem to have a common thread running through these models of causation. None of them actually provide any sort of explanation as to how causation occurs and only the occasionalist will provide us with a reason why causation occurs (the will of God). Perhaps we should turn then to the champion of efficient causality, *naturalism*. Like idealism, naturalism can be a problematic term. Aristotle could be included as a naturalist for example. What I mean with this term is simply the perspective taken by the natural sciences and those philosophers who ascribe to the scientific view that the universe is made up of nothing more than matter in motion. This is the first species we have encountered that does not maintain causality to be a problem, a significant step since the three prior systems have necessitated a mediator in order for there to be causation. For naturalism, causality is nothing more than one particle impacting another in space and causing it to move. All of history and the entire universe can be reduced to nothing but the impacting of matter on matter. It should be made clear that the naturalist has nothing *but* efficient causality in their system. To speak of formal or final causality is to speak of superstition, while material causality is nothing but the category “matter” or “stuff” which is made equivalent to existence (if something is said to exist, it is material and if it is material it is said to exist). The problem of how causation occurs is shown to be no problem at all. Reality is simply things hitting other things, though Harman will characterize this as the most immature

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of causal systems:

The model of the world as a hard layer of impenetrable matter tells us only that matter can shove other matter out of the way or smack it forcefully, with the added sweetener that cognitive science will no longer allow the human mind to be exempt from this process. But this merely takes inanimate causation as an obvious given while doing nothing to explain how it occurs. It is a metaphysics fit for a two-year-old: 'da wed ball pusht da gween ball...an da gween ball fell on da fwoorr.'<sup>28</sup>

According to Harman, the explanation of matter simply colliding with more matter does nothing to answer the question of how causation happens. I would add that the explanation as to why this matter is in motion is also lacking. Saying that it simply is in motion tells us nothing as to why any sort of change happens. Formal and final causality, the ideas of essence and *telos* are entirely ejected, matter and cause are givens and to question beyond that is seen as, at best, naïve and at worst, stupid.

We turn now to the thinkers that one would assume take causality the most serious, a species of causation that we will term *relationism*. For these thinkers (such as Whitehead and Latour), a thing is nothing more than its system of relations, Latour maintaining for instance that a thing's identity is nothing beyond whatever it modifies, transforms, perturbs or creates.<sup>29</sup> Similarly for Whitehead, a thing is the sum of its relations, or *prehensions*, and changes with these relations. Relationism denies any notion of substance or essence beyond the qualities a thing exhibits in its system of relations. This leads us to a dilemma on the topic of causality: if a thing is nothing but its relations then there is no causal mechanism that allows it to detach from one set of relations and re-ally with new forces. Likewise, save for chance there is no real reason for any change to take place. Both Whitehead and Latour find themselves in the position of needing to ground causality in something else. Whitehead grounds the play of actual entities in *eternal objects* which are found in God as in traditional occasionalism<sup>30</sup> while Latour travels beneath

objects to something he terms “plasma,”<sup>31</sup> a subterranean realm of possibility and power flux. It is this underworld that explains why empires and corporations can collapse seemingly overnight, it is a realm of fluid, liquid qualities that allows for rapid and sudden changes to the networks and alliances above its surface.

This brings us to our final causal species which I will term *vitalism*. Not to be confused with the tired biological theory of a vital impetus separating the organic from the inorganic, vitalism maintains that all things are in some sense *willing*. We can understand this will through the historical concept of *conatus* or as drive; it is the theory that all things are in some sense self-moving due to an appetite for being, a will to exist. To be is to want to be. We can see this understanding of existence in both Spinoza and Bergson but can likewise find it in Schelling, Schopenhauer, Nietzsche and Deleuze. We could say that under this model, objects become genetic in the sense that they are self-creating, “creating oneself endlessly” as Bergson says and as quoted at the beginning of this essay. Like occasionalism and unlike the rest of the species examined in this essay, vitalism has a definite answer to the question of why things change, of why there is causality, because all things are enacting their internal nature or essence which is *to exist*. Things act to sustain themselves and enter into relations to do just that. They have a *telos* and an inner essence and are therefore the only species we have encountered to have the four causes of Aristotle. On the other hand, many vitalists fail to adequately explain the mechanics of causation that Harman is concerned with, with many falling into the occasionalist position similar to Latour’s plasma, with causation necessitating a vertical movement to explain any horizontal movement.<sup>32</sup>

### Causal Reasons

What are we to make of this brisk walk through the zoo of causation? It would seem that no system of causality answers both of the questions we set out to answer: “how” causation happens and “why” it happens. Harman’s theory of vicarious

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causality aims explicitly to answer the first in the face of a history of thought unable or unwilling to do so. He fails to consider the latter question however. Why is it important to consider the question of why causality occurs? To answer as simply as possible, because if we don't ask, and answer, the question of "why" when it comes to causality then not only do we not understand it any more than the occasionalists and empiricists, but we are likely to conclude with the dominant form of causal reasoning and side with the naturalists who claim that causality has no reason and is simply random yet determined. There is no possibility for freedom or spontaneity under such a system.

I don't think Harman wants vicarious causation to be the alibi of a determined series of billiard balls and so I propose that we consider the question as to why anything happens at all. It should be clear from his criticism of both the occasionalists and empiricists that they mask causality in a cloud of mystery. They provide no satisfactory answers. The same can be said for the position I have termed here correlationism. The correlationist is only concerned with the fact that the occasionalist and empiricist posit anything outside of mind, calling them mystery mongers and irrationalists. This position has no time for the question of causality as it takes the empiricist line to the extreme, claiming that causality is not the way mind synthesizes the world but simply how the mind fashions its own contents.

Assuming the possibility of siding with the naturalists is out this leaves us with two options: relationism and vitalism. It is curious that relationism must have an alliance with some other mode of causality in order to have meaningful causality at all and not simply fall prey to the billiard ball determinism of the naturalists—with things simply bumping against each other with no invested interest in their surroundings. Both Whitehead and Latour, the two champions of relationality, fail to satisfy either question (with Latour perhaps coming closer to the mark). This leaves us ultimately with vitalism, the position that maintains there is something internal to the thing called will, drive or *conatus* which causes it to repeatedly instantiate itself. Things are not entirely static



but are interacting with the world around them, negotiating their existence, prolonging their presence through *duration* or *repetition*. It is also only with the vitalists that we find any concept of *freedom*, *spontaneity* or *contingency*. Things are not thus and so because of some long chain of causal reference back to some first cause or prime mover, nor is it simply God's will, but things are the way they are because things are constantly making them that way. When I play with my cat, the cause is not some random firing of particles but has to do with my inner life, the qualities I manifest in the world through my actions. It seems that it is here that Harman must turn if he hopes to answer the question of why change happens, adding more to the inner life of objects, namely a hunger for life, a drive for existence, leading to complex duels between objects as they not only seduce one another but manipulate and back-stab as well, devouring their enemies and creating new alliances in order to sustain their very being. The inner life of things is more than happenstance or chance encounters, it is made up of deeply held interior qualities which I bring to the world through my activities and interactions. I recreate myself and the world through these interactions, as do all things. Signals do not simply extend down into the depths of objects, but vibrate from the inner core of their being as they fight for survival. Listen carefully and you will hear the seductive drone of the deep.

#### NOTES

<sup>1</sup> Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Henry Holt and Company, 1911), 7.

<sup>2</sup> Albert Einstein, *The Born-Einstein Letters; Correspondence between Albert Einstein and Max and Hedwig Born from 1916 to 1955*, (Walker, New York, 1971).

<sup>3</sup> We will continue to use the term "occasionalist" in this general way as will be explained in more detail below.

<sup>4</sup> As we will see in the next section, causality is a non-issue for the scientific reductionism we will term naturalism.

<sup>5</sup> Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (London: SCM Press, 1962), 98.

<sup>6</sup> *Ibid.*

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<sup>7</sup> Harman, “Object-Oriented Philosophy,” unpublished essay, 4-5 (my own italics). For more on Harman’s reading of the tool-analysis in *Being and Time*, see his *Tool-Being: Heidegger and the Metaphysics of Objects*, (Chicago: Open Court, 2002). As the purpose of this essay is to understand Harman’s notion of *causality*, discussion of the tool-analysis and the withdrawal of objects will be limited.

I would also like to note that I will be citing two unpublished essays which were both at one time available through Speculative Heresy (<http://speculativeheresy.wordpress.com>). The above cited essay, “Object-Oriented Philosophy” is no longer available, while the other, “Intentional Objects For Non-Humans,” is. I find both of these essays to be very clear and crisp summaries of Harman’s general position, summing up many of the insights that span his work thus far in easily understood chunks.

<sup>8</sup> Graham Harman, *Guerrilla Metaphysics: Phenomenology and the Carpentry of Things* (Chicago: Open Court, 2005), 74.

<sup>9</sup> Graham Harman, “On Vicarious Causation,” in *Collapse II: ‘Speculative Realism,’* 193.

<sup>10</sup> Harman, *Guerrilla Metaphysics*, 92.

<sup>11</sup> Graham Harman, “Intentional Objects for Non-Humans,” unpublished essay, 8.

<sup>12</sup> *Ibid.*, 6. See also Harman’s example of the intentional centaur in Chapter 10 of *Guerrilla Metaphysics*.

<sup>13</sup> The inverse is also true, that is to say, the real tree only ever touches the phenomenal me.

<sup>14</sup> Harman, “On Vicarious Causation,” in *Collapse II: ‘Speculative Realism,’* 220.

<sup>15</sup> “The only place in the cosmos where interactions occur is the sensual, phenomenal realm,” *ibid.*, 195. See also Graham Harman, *Prince of Networks: Bruno Latour and Metaphysics* (Melbourne, Re.Press, 2009), 147.

<sup>16</sup> Harman, *Guerrilla Metaphysics*, 180.

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*, 118.

<sup>19</sup> Harman, “On Vicarious Causation,” 213.

<sup>20</sup> *Ibid.*, 215-216.

<sup>21</sup> Harman, *Guerrilla Metaphysics*, 233.

<sup>22</sup> *Ibid.*, 149.

<sup>23</sup> “What Hume tells us is that *a priori*, which is to say from a purely logical point of view, any cause may actually produce any effect whatsoever, provided the latter is not contradictory.” Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. Ray Brassier (London: Continuum, 2008), 90.

<sup>24</sup> Immanuel Kant, *Critique of Pure Reason*, trans. Norman Kemp Smith (London: Palgrave-MacMillan, 2003), B124.

## Michael Austin – *To Exist is to Change*

<sup>25</sup> For more on correlationism see Meillassoux, *After Finitude*, as well as Ray Brassier, *Nihil Unbound: Enlightenment and Extinction* (London: Palgrave, 2007).

<sup>26</sup> Meillassoux, *After Finitude*, 5.

<sup>27</sup> Speaking of *idealism* has many connotations that become unwieldy and unhelpful when discussing many of the examples included in this category by Meillassoux, Heidegger and Wittgenstein for instance.

<sup>28</sup> Harman, *Prince of Networks*, 109.

<sup>29</sup> *Ibid.*, 81.

<sup>30</sup> *Ibid.*, 114.

<sup>31</sup> *Ibid.*, 132-134.

<sup>32</sup> Harman critiques this position clearly in a lecture given at University College of Dublin titled “A New Theory of Substance.” A recording of this lecture is available at ANTHEM (<http://anthem-group.net/>)

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# Interviews

Graham Harman, Jane Bennett, Tim Morton,  
Ian Bogost, Levi Bryant and Paul Ennis

*Peter Gratton*

Assistant Professor of Philosophy  
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THE CONTEXT FOR THESE INTERVIEWS was a seminar I conducted on speculative realism in the Spring 2010. There has been great interest in speculative realism and one reason I surmise is not just the arguments offered, though I don't want to take away from them; each of these scholars are vivid writers and great pedagogues, many of whom are in constant contact with their readers via their weblogs. Thus these interviews provided an opportunity to forward student questions about their respective works. Though each were conducted on different occasions, the interviews stand as a collected work, tying together the most classical questions about "realism" to ancillary movements about the non-human in politics, ecology, aesthetics, and video gaming—all to point to future movements in this philosophical area.

## Interview with Graham Harman

*"You can't have Realism without Individual Objects"*

*Graham Harman is Associate Provost for Research Administration and Associate Professor of Philosophy at the American University in Cairo, Egypt, and has written numerous books and articles arguing for an "object oriented ontology." His modus operandi, which we discuss below, is to offer a counter-revolution to the lin-*

## Peter Gratton – Introduction

*guistic turn in contemporary philosophy. Harman’s work looks to side with the oppressed objects said to be held under the thumb of our conceptual schemes, languages, or subjective stances. Two questions relate to Harman’s work on aesthetics, collected in the forthcoming Towards Speculative Realism: Essays and Lectures (London: Zero Books, 2010), which offer greater depth to Harman’s claim that “aesthetics is first philosophy.”*

Peter Gratton: Graham, just to bring you up to speed, in the course we’ve read some of your most widely available works on the web: your book *Prince of Networks*, your essay “On Vicarious Causation,” your essay on “Intentional Objects,” and several other works. In addition, my students have peeked into your work on your blog. Thus, I thought I’d start with a self-referential question, one that has interested me greatly in doing the Speculative Realism course: what do you make of this online environment for doing philosophy?

Graham Harman: It’s changed everything, and that’s the main reason I’ve stuck with it. Anyone doing continental philosophy who isn’t currently involved in the blogosphere (whether as blogger or simply as reader) is inevitably falling behind. A new community has been building over the past two years, primarily through the blog medium, and Dundee in late March was perhaps the first time that many of the key blog players assembled together in person.

The philosophy blogosphere has its upside and its downside. The upside is that international philosophical discussion has become a daily event rather than an intermittent one. I’ve often been prompted to rethink certain things based on blog exchanges, and in one well-known case I actually co-edited a book [*The Speculative Turn: Continental Materialism and Realism*] with two people I had never met in person! (I refer here to Levi Bryant and Nick Srnicek.)

The blogosphere also has a democratizing effect, since all blogs are in principle equal. In my graduate student days there was no way I’d have been able to make open challenges to articles by continental kingpins such as John Sallis and

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Charles Scott, but in the blogosphere students are empowered to do just that. 23-year-old students are calling me confused and mistaken in the blogosphere all the time. Sometimes it's pretty annoying, in fact, but on the whole I think it's healthier than the generational conditions under which you and I were educated. Some of these young people have already become blog celebrities, and a few of them even have book deals as a result of it.

The downside is that it can be emotionally draining to maintain a blog. There are certainly days when I wish I had never started mine, because once you have a blog, it feels like a garden that can't be left unattended for long. There's also an obvious dark underside to the "democratization" part, which is that you have a certain number of rude people lipping off beyond the limits of civility (some of them shielded by pseudonyms), including people who have never completed a significant piece of work in their lives. At times it's unavoidable that you want to punch back at those people, but while momentarily satisfying, it just becomes another energy drain in the end, and you have to learn to ignore them.

Furthermore, there is a problem not just with trolls, but even with the more useful comments. Back in the days when I was allowing comments on my blog, along with the worthless trolling remarks there were also many good critical points. But then you feel expected to answer those points quickly, and if it's three or four per day, it starts cutting into your own work to a significant degree. And your own work is going to need a certain degree of privacy, distance, and slow-paced reflection for which the blogosphere leaves no room. For this reason, I have not seriously considered re-opening comments, and probably never will reopen them.

At the moment the blogosphere is still mostly a supplement, with "real" work still appearing in traditional brick-and-mortar publishing formats. But soon that will change as well, in ways that are difficult to foresee, and everyone is eventually going to need an online presence of some sort. That's why I don't quit (I did quit once, for less than a day, but a number of people asked me to restart the blog). If I did

quit, I know I'd just have to come back online a few years later. The medium has so many advantages that its triumph is inevitable. However, we're all still figuring out the rules in this new world. What's the best way to handle the town drunks? How to punish the vandals? It's being done piecemeal at the moment, but over time I think certain behavioral standards, and the enforcement thereof, will start to take root.

Peter Gratton: We have studied Meillassoux's work as well as your 2007 review of *After Finitude* from *Philosophy Today*. Obviously, you take much away from his critique of correlationism. My students agree with your recent formulation, described often on your blog (<http://doctorzamalek2.wordpress.com/>), that Meillassoux is a "correlationist" himself. Yet, despite your great respect for him, nothing seems farther from your work than his idea of a "chaotic in-itself" behind the phenomena of our world. Another way to think this is that many philosophers who argue for a form of realism seem to leave us without objects, but with a chaotic form of the real that bedevils our descriptions.

Graham Harman: Naturally, I agree that you can't have realism without individual objects. Otherwise, you're just left with a vague notion of "resistance" or "recalcitrance" or "trauma" or "obstruction" at the limit of human experience, and if it isn't articulated into individuals, then you have to explain how the magical leap is made from a unified Real to a pluralized Experience. And as far as I can see, such a leap cannot plausibly be explained.

Some attempt a subtler solution in which the Real isn't just one, but it's also not quite many. Examples of such solutions include Simondon's "pre-individual" and DeLanda's "heterogeneous yet continuous" realm. In my opinion Deleuze's "virtual" never escapes this predicament either. We see it on the analytic side in thinkers such as Ladyman and Ross, the targets of my critique when I lectured in Dundee in March 2010. The real for Ladyman and Ross is "structure," which supposedly avoids being a monolithic lump and also avoids

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being a realm of genuine individuals. All of these proposed solutions are, to my mind, the simple unearned positing of a wish. For there is in fact a serious philosophical problem in how to balance the autonomous isolation of things with their mutual relations, and these positions solve the problem merely by saying: “reality itself is already sort of individualized and sort of in relation.” You can’t do it that way. You have to grant that the two extreme poles exist and then try to show how they are unified. That’s what I’m up to with vicarious causation: trying to show how links are possible despite the inherent separation of things. You can’t start out by calling it a “pseudo-problem,” because then you’re left to solve it by fiat. And in general, it displays incredible arrogance to call other people’s problems “pseudo-problems.” I hope this fashion eventually dies.

As for Meillassoux (I respect his work greatly and he is a personal friend as well) he rejects the principle of sufficient reason whereas I support it. In other words, he has a sort of occasionalist position in which everything is cut off from everything else, which I also start with, but the difference is that I think it’s a crucial problem to be solved whereas he doesn’t think there’s any solution to it. Nothing is truly connected to anything else; any connection remains purely contingent. But I would note the following point. Meillassoux’s argument, if true, would not only apply to the causal relation between separate things, but also to the part-whole relation within specific things. It’s strange enough to say that a flower could disappear at any moment and be replaced by a moose. But it’s even weirder to think that a flower at any given moment could be made of moose-pieces and still be a flower. If we look at sufficient reason inside a given moment rather than between two moments, it seems even harder to give it up than Meillassoux thinks.

Incidentally, I should say to your students that the study of parts and wholes is called “mereology.” It was founded in analytic philosophy by a Polish thinker named Stanislaw Lesniewski, and those who want a good introduction to the topic should read the book *Parts* by Peter Simons, which still



Peter Gratton – *Interview with Graham Harman*

seems to be the best introduction to mereology more than 20 years later. Mereology has always been something of a rival to set theory, which is of course what dominates in Badiou and his followers. But one problem (shared by classical mereology, I admit) is that Badiou's set theory is an extensional set theory, meaning that there is no internal organizing principle of the sets. You can randomly stipulate 17 assorted objects as members of a set, and then by fiat they become a set; it is the one who counts who determines membership, not some internal principle. Perhaps it is obvious why that's an anti-realist gesture, and indeed very close to British Empiricism with its "bundle of qualities" theory of what makes a thing be one. But I have a realist take on parts and wholes myself.

Peter Gratton: I want to take head on the question of language. A number of my students (and not just them of course) have really appreciated your clear expositions of Latour. But the problem they had, which is similar to what you describe as a problem as well, is the endurance of what Latour calls a "black box" or "plasma." This is an old philosophical problem about the relation between identity and change, and Latour's gamble is to say that there is nothing but relations. How then can the White House, etc., be seen to endure? Your route is to discuss an "alluring" interiority of things that can't be related to anything, which is, thus also "nothing" (that can be described) but yet is the attractor for relations to other things. Would this be correct?

Graham Harman: First, I would say that the black box and the plasma in Latour are two different things. Black boxes are any individual things (technical devices, animals, societies) insofar as they are viewed as obvious units without internal structure. Much of Latour's method involves opening black boxes that used to be closed. For example, instead of saying: "Pasteur was a genius and a great man who brought light to the darkness of medicine," Latour retraces the history of how Pasteur got there, and at times it's quite a surprising history.

My favorite part of *The Pasteurization of France* is the story

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of Pasteur's shifting alliances. His first allies were the hygienists, who were very concerned with public health but had assembled a chaotic list of countless factors that might be making people sick, and Pasteur's microbe gave them just the theoretical unifier they needed. Why was spitting in the street making people sick, and chicken left to thaw too long before it was cooked, and dark rooms without ventilation? Pasteur allowed them to say: microbes are promoted in all of these cases. But at the time Pasteur's supporters wrongly believed that vaccinations would pre-emptively eliminate all disease, and hence doctors were viewed as useless relics soon to be eliminated, and so of course doctors started out as angry anti-Pasteurians. But the alliances shifted once serums were invented, because those were administered in doctor's offices. Empowered in this way, the doctors now became Pasteurians. It's a wonderful story that is hidden by the understandably simplistic view of Pasteur as the isolated truth-seeker bringing a lantern to the darkness.

By contrast with black boxes, Latour's plasma is never an individual thing, and that's my objection to it. Latour defines everything in terms of its relations with other things, and there is a philosophical problem with this. For example, if I myself am nothing more than all of my relations with everything else right now, then why would I ever change? Why would anything ever change if it were nothing more than what it already is? To solve this problem, the recent writings of Latour have posited a hidden plasma that is the source of change, even of very sudden changes such as the collapse of empires. He even says that the individual networks are to the plasma as the London Underground is to the rest of London! The plasma is massive. This is a major concession in his philosophy, which otherwise insists that there is nothing lying outside networks. However, it seems that for Latour the plasma is a single unified plasma, which is unfortunate. We've seen this move in the history of philosophy before, and it never succeeds. Why should my plasma be the same as your plasma, a dog's plasma, or the plasma of a cigarette factory? All of us are capable of changing in different ways,

and hence I see little point in explaining all change through a unified plasma shared by all things. This is nothing more than the heir of the ancient Greek apeiron, and there's no way to explain why such a unified rumbling lump would ever break up into individual parts. This is why I think the world is already built of individual objects, they're just a lot weirder than the everyday physical objects we know.

Ironically, the source of my anti-relational views is Heidegger's tool-analysis; it's ironic because usually people draw the opposite conclusion from Heidegger. He seems to say that the hammer in isolation is a bad, vulgar, present-at-hand object, while the hammer at work is defined by its relations to all other things in some work-related context. The hammer is defined by what it helps to build, the way I grasp it and relate to it, and so forth. As you know, I have long argued that this is a misreading. The key point about the hammer is that it can break. And if it can break, this means that it is not fully exhausted by any of its current uses or even any of its possible uses. The hammer is partly withdrawn from every network.

I later learned to appreciate this point all the more by reading Xavier Zubiri, Heidegger's best little-known heir. Zubiri has more classical realist sympathies than Heidegger, and for Zubiri the key point is that the essence of a thing cannot be defined in respect of its relations to anything else. This even leads him to go a bit too far, in my opinion. For instance, Zubiri claims that a farm and a knife are not real, because they have to be a farm or a knife for someone. All that's real in its own right is what he calls the "atomic-cortical structure" of reality, which verges alarmingly on saying that only small physical things are real.

Personally I do hold that there is a farm-in-itself and knife-in-itself that are not only constituted by the people who use them. But the wider agreement is more important. Though it took me some months to agree with him, I eventually saw that Zubiri is right: reality must be non-relational. The summer of 1997 was the most important intellectual time for me. That's when I studied Zubiri seriously at the same time as studying Whitehead seriously, and those two were the authors

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who allowed me to break free from Heidegger to some extent. (I had not yet read Latour; that came in February of 1998.) Zubiri showed me that reality must be non-relational. And Whitehead showed me that the human-world relation is no different in kind from the relations between fire and cotton, dogs and pavement, or raindrops and milkweed. Those two thinkers combined lie at the root of my current position.

Peter Gratton: The analogy I've used to describe your argument is to suggest that, just as in physics, you can't get bouncing relations without some x to hit off of, so too, it would seem that Latour needs "something more" to discuss as the pivot of relations. Yet, my students wonder if this something more isn't really enduring because we simply talk about it that way. We might discuss the White House, as you do, and say "we know it changes constantly, but it's an important term and while it always changes in its relations, the word for it doesn't and this, not some strange interiority is what endures." You are clear about language not being the filter of the world of things back to itself, but what role does it have in your work?

Graham Harman: Endurance is a separate problem. There can be withdrawn realities that last for just a flash and others that might last for billions of years or even eternity. Sure, it's quite possible to be duped by an identical word into thinking that identical things are being described. While reading Gibbon recently, I really started to wonder about the ontological question of whether the final decadent stages of Byzantium are really "Rome" in the same sense as the Roman Republic more than 1,000 years earlier. And there are many puzzles there for philosophers to work on. Let me just say, as an inadequate placeholder rather than as a full response, that I don't think the unity of things is reducible to the unity of the words that describes them.

Language is an important topic for any philosophy. The problem is that it took on a vastly inflated role for quite awhile as the sole topic of philosophy, and indeed my work is part of a wider reaction against that tendency. Language

was being used in an anti-realist way to reduce things to their accessibility to us. By contrast, what interests me most about language is its paradoxical power to make present without making present. The most masterful speakers and writers we know are those who do not make their subject present directly, but indirectly. One example is metaphor. If you take Max Black's example of a (rather mediocre) metaphor, "man is a wolf," there is no way to parse that metaphor in prose. You cannot exhaust the metaphor with a set of discursive statements such as "man is savage, moonstruck, and travels in violent hierarchical packs," because none of these statements ever get at what the metaphor communicates indirectly. The same goes for rhetoric.

Aristotle thinks the key to rhetoric is the enthymeme, which again is a method of saying something without saying it. A trivial example: if I say "the Third Army then marched on Baghdad," I don't have to say "the Third Army then marched on Baghdad, which is the capital of Iraq, and during this war their goal was to capture the capital." The latter part of this is boring and unnecessary, because it is already known to the listener without being stated. Jokes are based on enthymemes too: any joke is ruined if you spell it out. Not to sound like Slavoj Žižek, but do you remember those stupid "blonde" jokes? There was the one that went: "How does a blonde turn on the lights after sex? She opens the car door." Not funny to begin with, but we can ruin it completely by making the logic explicit: "Blondes are so sleazy that they have sex in cars." And suddenly, it no longer has the structure of a joke. Language is riddled with enthymemes, because we are never able or willing to spell out exactly everything that we are trying to communicate. What metaphor and rhetoric teach us is that clear, plain language is not only impossible, but also self-defeating. Reality itself is not the kind of thing that can be parsed in a set of clear discursive statements. Something shadowy remains in the background of every topic, and sometimes we have to allude to it rather than bluntly stating it.

As you know, this is one of my most serious objections to analytic philosophy. It is a culture that prides itself on clear writing, avoiding pseudo-poetic gibberish, etc. And yet, almost

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no one in analytic philosophy is a truly good writer. They never have produced and never will produce a Nietzsche, a Plato, a Giordano Bruno, or a Bergson in analytic philosophy. The reason has to do with what I said in the previous paragraph. Clarity in writing is better than unclarity, but it does not yet imply the lucidity and suggestive power needed to approach the reality that lies deeper than language. Analytic philosophers seem to think that garble and fuzziness and fog are the only problems with bad writing. They're not. One of the main problems with mediocre writing, in fact, is that it clarifies topics prematurely. Not all aspects of a topic are ever clear, and you have to be able to allude to that unclarity in a way that is both vague and compelling at the same time.

In a sense, then, my philosophy of language is less visible in my theories of language to date than in my practice of writing. No one has ever called my writing unclear, so in that sense I think I meet the rigorous prose standards of analytic philosophy. (The first reviewer of *Tool-Being* assumed I was an analytic philosopher, in fact.) But I also try to be not only clear. I try to write in good vivid English, not just good plain English. The latter is merely a negative goal.

Peter Gratton: I want to turn to art. One question a student asked about your essay on beauty is how beauty is different than what you call "allure." My students, one of whom is an artist herself, thought that your descriptions of sincerity were helpful in talking about how objects are always related in meaningful ways to one another, and it's only in this set of relations, that one could ever have cynicism or irony or what-have-you. But then it would seem that it gets hard to describe art objects as different from other objects, especially if aesthetics is first philosophy. Perhaps I can simply ask if you still take this to be the case and how you describe this in such a way that doesn't get caught in the idea that "being is appearance."

Graham Harman: Your student is right; I haven't addressed that topic yet. My aim in *Guerrilla Metaphysics* was to show that beauty is part of a larger class of phenomena that I called

“allure.” When writing it I had not yet read Dewey’s *Art as Experience*, which tries something similar, and also does not demarcate beauty from all the other surprising departures from the everyday that count as aesthetic for him. Dewey and I are equally guilty on this point, but the difference is that I’m still alive and hence still have a chance to fill in the blanks. Aesthetics is on my list of topics to write more about in the very near future.

Peter Gratton: You have made this clear by now in some ways, but is there anything you’re moving away from in the earlier works of yours, some of which many of us have read?

Graham Harman: Ironically, others may be able to answer the question better than I can, since I almost never reread my own works. Roland Barthes once said that he avoided reading his own books too, but then at one point late in life he sat down and read them all again. That sounds like something I’ll want to do too. Of course I read my books at page proof stage, and usually hate them then. I like them much better when they appear in print, and I immediately read them once at that point, but even that experience can be strangely depressing. So then I don’t read them again for a long time after that. But sometimes I come across someone quoting one of my books, and in those cases I tend to think: “wow, that’s pretty good. I’m happy to have written those words.”

But to get back to your question... Recently I was reviewing my list of publications for administrative reasons, and was shocked to notice that pretty much all of my work has been on 20th and 21st century philosophical topics. It’s a shock because, as a St. John’s College graduate, I have the most classical education one can still obtain. And I “think like a Johnnie” as well, in the sense that I’m not easily impressed by passing fads, try to size up books by whether they are likely to be readable two or three centuries from now, am unimpressed by recent jargon, and so forth. So I’m really a classically minded person who happens to love innovation, rather than an inherently modern-minded person like many in continental philosophy are. And that’s why it’s a bit of a surprise that I’ve worked so

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exclusively on recent philosophy. Because of that shock, I realized that I ought to start doing work that's a bit more in keeping with my classical temperament—so you're likely to see me publishing on Greek philosophy before too long, and maybe some Medieval as well. Plato and Aristotle still have much to teach us, and by that I mean they have much power to help us innovate. I have no interest in the crusty old notion of a perennial philosophy, or that the Greeks already knew it all, or that modern philosophy is a waste of time. I have much sympathy for classicism, but none at all for conservatism. The past is dead unless we continually revive it in our own thinking. For some people classicism seems to mean "let us simply appreciate the great works of the past, and ignore all these trendy innovations from France." But for me classicism means: "come on, let's produce some new classics!"

But to get to that point, I do think that we should focus our attention on the best thinkers who have ever lived at various times, not just on who happens to be hot at a given moment. And Plato and Aristotle remain the gold standard for me. The attacks on Plato in recent philosophy are often outrageously shallow, even coming from people of the stature of Nietzsche and Heidegger (let alone Popper). But I'm increasingly sure that Plato is the best there's ever been in philosophy, and that we need a new Platonist phase in continental thought more than anything else.

But in a way I'm dodging your question, which I take to mean: "are there any ideas you're moving away from in your recent work?" I'm dodging it because I'm not sure I can answer it. I would have to go back and read *Tool-Being* carefully to look for signs of things in which I no longer believe.

### Interview with Jane Bennett

*"There is Nothing Simple about Materiality"*

*Jane Bennett is Professor and Chair of the Department of Political Science at Johns Hopkins University, and her *Vibrant Matter: A Political Ecology of Things* has itself been a vibrant matter of attention since its publication earlier this year. *Vibrant Matter* builds on her earlier books, *The Enchantment of Modernity*:*



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*Crossings, Energetics, and Ethics (2001) and Thoreau's Nature: Ethics, Politics, and The Wild (1994), tying together well recent work in ecology and new forms of materialism. Bennett work have been critical in linking movements in recent Continental philosophy, namely a vitalist tradition that runs from Bergson to Deleuze and even, on Bennett's reading, Bruno Latour, with a "political ecology of things" that should speak to anyone conscious enough to be aware of the devastating changes underway in the world around us.*

Peter Gratton: What I should note straight off is that your book has gained a following among people in continental philosophy working on what's called speculative realism and Graham Harman himself has said he wishes he had written this book. One of my students, I think, hit on this by saying last week that reading you brought together all of the themes we were covering this semester on speculative realism, and I think that's right, since you also helped me to bridge to later work in the seminar on the ecological import of these discussions. Of course, you are writing out of a different set of philosophers, or at least not directly responding to these recent works. What do you make of this historical moment where we have this (seemingly) wide return to the things themselves that your book marks?

Jane Bennett: There is definitely something afoot, something about everyday (Euro-American) life that is warning us to pay more attention to what we're doing. There is the call from our garbage: our private and public spaces—houses, apartments, streets, landfills, waterways—are filling up with junk, with vast quantities of disposables, plastic artifacts, old TV's and devices, clothes, bags, papers, bottles, bottles, bottles. The American television shows "Clean House" and "Hoarders" expose the more extreme versions of this mounting mountain of matter, but it's everywhere you look, including in the middle of the oceans: "San Juan, Puerto Rico—Researchers [have discovered]...a swirl of confetti-like plastic debris stretching over a remote expanse of the Atlantic Ocean. The floating garbage [is]...similar to the so-called Great Pacific Garbage

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Patch, a phenomenon discovered a decade ago between Hawaii and California.” (Mike Melia, “A 2nd garbage patch, plastic soup seen in Atlantic,” Associated Press, April 15, 2010).

A second kind of call is coming from the weather, from volcanoes that stop flight traffic across Northern Europe and from hurricanes like Katrina that take down neighborhoods and maybe even George W. Bush. And 24 hour weather reporting and its disaster porn intensifies this call of the wild. For those of us who are philosophically-inclined, the response to such calls has been a renewed focus on objects, on an object-oriented ontology, or a renewed interest in materialisms—there have been in the last decade materialist turns in literary studies, anthropology, political theory, history. Part of this may be a pendulum swing in scholarship: a reaction to the good but overstated insights of social constructivist approaches.

Peter Gratton: What my students and I liked best about your work is its sustained critique of “mechanism,” which treats the things of the world as inert and determined. There’s a danger to writing about this, since apparently it’s okay to have a rather antiquated view of nature (circa Newton, or even before) but it’s not okay to risk trying to describe the unruly world in all its messiness. Your book calls for a “strategic anthropomorphism” as means for thinking a non-determined materiality in and around human beings. Could you say more about the limits of this strategy and what it risks?

Jane Bennett: A perhaps unnecessary caveat: while I think it’s a mistake to allow “mechanism” to serve as a generalizable or all-purpose model for natural systems (a model that continues to linger in popular and social scientific imaginations), it would be foolish to deny that many assemblages function with a degree of regularity and repetition characteristic of machines. So, while Bergson and other philosophers of ‘Becoming’ are right to draw attention to the creative element in evolution or to the capacity of physical systems to self-arrange in ways that defy prediction, I don’t want to overstate

the freedom, mobility, or fragility of the working groups that form in nature and culture.

One of the projects I'm working on now is to explore theorizations of the strange kind of structuration at work in what Michel Serres has described (in *The Birth of Physics and Genesis*) as "turbulent" systems. Here Graham Harman's critique (in *Prince of Networks*) of "lump ontology" (which he, perhaps too hastily, associates with Deleuze) highlights for me the relatively under-theorized quality of the question of formativity within philosophies of immanence, including the version at work in my *Vibrant Matter* book. Harman makes me want to focus more carefully on the question of how it is that actants form and hold themselves together, both as individuals and as members of an assemblage. I want to get better at discerning the topography of 'Becoming,' better at theorizing the "structural" quality of agentic assemblages. For the question of "structure"—or maybe that is the wrong word, and the phrase you suggest below is better, i.e., "linkages" between and within "open relations"—does seem to fall in the shadow of the alluring image of an ever-free becoming—the seductive appeal of Nietzsche's world of energetic flows, of Deleuze and Guattari's vibratory cosmos, of Bergson's creative evolution, of Michel Serres's "pandemonium of the gray sea." Inside a process of unending change, bodies and forces with duration are somehow emitted or excreted. But how? How, Serres asks, "is Venus born from the sea, how is time born from the noisy heavens?" (*Genesis* 26). What is this strange systematicity proper to a world of 'Becoming'? What, for example, initiates this congealing that will undo itself? Is it possible to identify phases within this formativity, plateaus of differentiation? If so, do the phases/plateaus follow a temporal sequence? Or, does the process of formation inside Becoming require us to theorize a non-chronological kind of time? I think that your student's question: "How can we account for something like iterable structures in an assemblage theory?" is exactly the right question. I'm working on it!

With regard to the liabilities of the strategy of anthropomorphizing or allowing yourself to relax into resemblances

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between your-body-and-its-operations and the bodies-of-things-outside, I can think of at least three: it is easy to get carried away and 1) forget that analogies are slippery and often misleading because they can highlight (what turn out to be) insignificant or non-salient-to-the-task-at-hand resemblances, 2) forget that your body-and-its-operations is not an ideal or pinnacle of evolution, but just the body you have; 3) forget that the human body is itself a composite of many different it-bodies, including bacteria, viruses, metals, etc. and that when we recognize a resemblance between a human form and a nonhuman one, sometimes the connecting link is a shared *inorganicism*. I think that anthropomorphizing can be a valuable technique for building an ecological sensibility in oneself, but of course it is insufficient to the task.

Peter Gratton: One could see a fear that by returning to the matter in and around us, even in a “new materialism,” this could return us to pinning down human being in some sort of nature to be found through some form of analysis. This is a view that has been critiqued for a long time now in the works of feminists and in critical race theory, and rightly so. How do you respond to those that may worry, after fighting so long for how certain human are not simply their materiality, that this is what is ecologically necessary to think?

Jane Bennett: I think that we are in fact constrained by some sort of nature, that we are free to operate but within iterated structures. Though of course a lot turns on how one understands the constraint and the freedom: are we “pinned down” once and for all in the same spot? This is highly unlikely, given a (Nietzschean) view of nature as flux or a (Serresian) view of nature as a viscous, clotting flow. It is important to specify the ontological imagery one endorses: nature or materiality constrains human (and nonhuman) activities but because nature or materiality is not a perfect machine, it and we are never fully analyzable. There is always something that escapes—some dimension of objects, bodies, events, and processes that withdraws (Harman); there are always lines of

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flight (Deleuze and Guattari). It doesn't make sense to me to say we are "simply" our materiality — there is nothing simple about materiality, and neither are material forces and flows best figured as determinate and deterministic. The need to be kind and respectful to other bodies will remain, regardless of whether one understands human individuals and groups as embodied minds/souls or as complex materialities.

Peter Gratton: This an elegant book and it really gives itself over to descriptions of how matter moves us as much as anything else. Your description of democracy, I think, gives us up to thinking of the "masses" or *dêmos* in an innovative way, since *how* the masses act, seemingly out of the blue (e.g., storming the Bastille), has thrown thinkers of individual free will and so on into fits for centuries. Could you talk about more the way this thinking could inform a look not just at the politics of matter (the way in which objects relate to one another) but also what we normally take politics to be?

Jane Bennett: You ask another important and difficult question. Let me begin by saying something "Machiavellian," i.e., that political effectiveness requires choosing the right action and the right *style* of action at the right time, and to do this one must be alert to the role of impersonal (*fortuna*) as well as personal (human intentional) forces at work in "real time." The political strategy I pursue in order to enhance the prospects for "greener" modes of consumption and production is an *indirect* one: the story of vibrant matter I tell seeks to induce a greater attentiveness to the active power of things—a power that can impede, collaborate with, or compete with our desire to live better, healthier, even happier lives. Perhaps this new attentiveness will translate into more thoughtful and sustainable public policies. I am not sure that it will, but it is, I think, a possibility worth pursuing for a while. My political strategy is indirect because its target is not the macro-level politics of laws, policy, institutional change but the micro-politics of sensibility-formation.

In the book, I also suggest that a heightened sensitivity to

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the agency of assemblages could translate into a national politics that was not so focused around a juridical model of moral responsibility, blame, and punishment. The hope is that the desire for scapegoats would be lessened as public recognition of the distributed nature of agency increased, and that politics would take on a less moralistic and a more pragmatic (in Dewey's sense of problem-solving) cast.

### Interview with Timothy Morton

*"A 'New' Materialism after Marxism"*

*Timothy Morton is Professor of Literature and Environment at the University of California, Davis. He is author of *The Poetics of Spice and Shelley and the Revolution in Taste*, as well as editor of *The Cambridge Companion to Shelley and Cultures of Taste/Theories of Appetite*. Most recently, he is the author of a "pre-quel," *The Ecological Thought* (Cambridge, MA: Harvard University Press, 2010), to his 2008, *Ecology without Nature* (2008), in which he critiques previous conceptions of nature as inimical to ecological thinking. In these last two works, Morton introduces the idea of the "mesh" as a means for understanding the "interconnectedness" of existence. Morton seeks out this term as a means for thinking the form of connections and separations among the objects of the world, without arguing that there is some substance (e.g., Thales' water) hovering in the background of all things. To think the "mesh" is to think these connections and blank spaces that is the (no)thing that connects all things in a manner akin to Bruno Latour's irreductionist theory of assemblages, wherein there are no substances but only collectives of relations.*

**Peter Gratton:** We're reading here your work alongside speculative realists and object oriented philosophers, as well as Jane Bennett's *Vibrant Matter*. Your point of attack in the book is all manner of Heideggerian "deep ecology" as well as new age holisms so abundant here in California. Perhaps I can begin by asking you summarize what brought you to this "pre-quel"...

Peter Gratton – Interview with Tim Morton

Tim Morton: The “prequel” emerged out of my first ecology book, *Ecology without Nature*. I realized that there was a larger view that it was necessary to express. In some sense it was impossible to think this before having done some demolition work on the concept “nature.” Yet the new project is more foundational. Hence the fact that *The Ecological Thought* is a “prequel,” hopefully not like *The Phantom Menace*...

To some extent my thinking process mirrors what’s happening in the world at large, which is that humans appear to be in a kind of open window situation, in which we are noticing a lot of inconsistencies in old ways of modeling and mapping things—and it’s becoming clear that our maps are just that, maps and not the real thing. Something is emerging but it’s hard to give it a name.

If you like, the ecological thought is like a mathematical attractor in our future—it sort of pulls thinking towards it, though I might be unhappy with how teleological this metaphor sounds.

The other main factor in thinking the book was not wanting simply to kick over other models and walk away: it didn’t seem honest. As William Blake wrote, “I must create my own system or be enslaved by another man’s.” You are always carrying some kind of implicit ontology around in any case. It’s easy to hide behind the attitude that emerges when you undermine other models.

Peter Gratton: I like a lot about your book, but perhaps what I like most is your ability to find a language to talk about “interconnectedness” or assemblages of relations in terms of ecology without falling into the language of holism and deep ecology. What thinkers do you have in mind in the background here as you sound the depths without coming back to the surface with a deep ecology?

Tim Morton: I’m glad you saw that. Holism—and the deep ecology that acts as a vector for holism—is ironically opposed to a truly profound ecological view. The reason is simple when you start to think about how according to holism the whole

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is always greater than the sum of its parts. This means that at some level there is already fragmentation. It also means that the parts are ultimately replaceable. This gives rise to all kinds of ethical consequences, for instance the idea that it doesn't matter much to Planet Earth if humans become extinct, or even the idea that humans are a kind of virus—a whole could have faulty components that might need to be cleansed or replaced.

Instead of feeling part of something bigger (holism), I'm going for intimacy: the others that inhabit Earth are already under our skin—they are our skin. In the back of my mind there is Spinoza, who is arguing that matter moves all by itself and that there is only one thing. This one thing is indivisible in some sense—so it's not a whole. Spinoza's view is so profound because it combines materialism with something like theology—this combination being precisely why he got into such trouble with his Synagogue and with the Christian culture around him...

Whitehead is in the background with his astonishing reworking of matter as a relatively autonomous, abstracted moment in a flowing process (an "actual occasion"). Then there is Deleuze, who modulates Spinoza and Leibniz in his own inimitable way. A lot of the work on infinity in the book was inspired by Deleuze on Leibniz. And then we have Emmanuel Levinas, who puts totality into stark opposition with infinity. Holism would be totality, for Levinas. Thinking ecology involves thinking infinity, in many different senses. And then there's Derrida—I can't help it! He is a modern Zeno, with powerful tools for showing how subdividing things gets you into all kinds of trouble. In this respect, his thinking is identical to Darwin, the one major textual source in *The Ecological Thought*.

Ecology also means thinking what I call "very large finitude," which in some respects is even harder than infinity since it doesn't make us feel grand. Very large finitudes such as global warming and radiation, for instance: they outsize and outlast us and our descendants beyond anything meaningfully like "me" or "mine." But they're not fragments of some whole. If



anything they're more like the abortive fabrications of an evil god in some Gnostic system. I like very much the idea that reality is fundamentally incomplete in some sense. I was influenced to talk about radiation by Derek Parfit, a very surprising utilitarian. I'm not sure where very large finitude itself comes from—it might be homegrown...

Peter Gratton: Your book is wonderfully clear about the need to get unclear about traditional concepts. Let me play devil's advocate for a moment: you might suggest you're moving beyond a certain postmodernist moment in culture, but you still take language and how we know about "nature" as more paramount than *what it is*. To give one example, you might be correct to point out how "wilderness" areas are "giant, abstract" constructions within modern culture (p. 7), but I wonder if the "wild" does not, like the infinite in Levinas you cite, end up being too wild a concept to control under the nature/culture divide. In other words, while someone may understand why you question the use of "nature" in political ideologies, they may be less sympathetic to your suggestion that it's unusable as an ontological category specifying that which is "non-human" or at the very least independent of language and cultural constructs. I guess what I'm asking is whether you consider your project at the level of a "mesh" of concepts (epistemology, to use the old language) or at the level of the "mesh" of what is (ontology).

Tim Morton: I'm touched that you think the book is clear. One thing I really like about Jane Bennett's work is how lucid she is. Thinking that language is limited to the human is precisely part of the problem, no? DNA is language. Human language is bacteria-filled breath moving out of my lungs, which evolved out of fish swim bladders. The not-so-great word "life" has to do with matter that is information, all the way down. Nothing is independent of language in this sense. This fact of matter as information (it's even more the case as you get towards the Planck length in quantum theory) is deeply disturbing. We want it not to be the case, even if we are deconstructors.

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What I'm doing is very much at the level of ontology, and it's becoming more that way. In preparation for *The Ecological Thought* I tried to read everything I could read about evolution, in particular the sort of neo-Darwinism (Dawkins and Dennett for instance) that most left humanists wouldn't touch with a bargepole. Maybe I'm just perverse but I thought it would be good to find strange ideas in unusual places. I'm putting myself through quantum theory boot camp right now precisely because there is a deep ontology of physics that humanists (I used a bad word!) must understand and talk about. Physics implies ontology, even when it forbids it (as Niels Bohr et al. did, giving rise to the Standard Model of quantum theory).

The mesh is beyond concept in some sense—unthinkable as such, precisely because it is real. In the same way, phenomena such as global warming and nuclear radiation, massively distributed across spacetime, defy the kind of false immediacy on which dichotomies between human and non-human depend. I really am arguing that there is no nature, not that the idea of nature isn't working. You can sort of detect that it isn't the case because of various linguistic and ideological problems, but these problems only exist because nature as such really does not exist...I very much oppose the idea that what environmentalism should be about is coming up with a new form of freshly convincing advertising language.

**Peter Gratton:** As we do this, there is quite a “hyper-object,” as you put it, heading toward the shores of the Gulf region of the southern United States. You talk about a “hyper-object” like plutonium as being a near-permanent production that will outlast us all. But this also, of course, is a spatial concept, right?

**Tim Morton:** Yes! For instance, think of global warming. Global warming is happening all over the Earth right now, by definition, not just in your backyard. What does this mean? It means that the wet cold stuff that falls on your head in Boise, Idaho, is rigorously less real than something you can't see directly, called global warming. Galileo et al. turned the notion of “sunrise” into a convenient abstraction, good enough

to be getting along with in certain circumstances, while we know that it's far more "real" that the Earth is rotating. In the same way, global warming science turns the weather into a false immediacy, an abstraction that seems real because it's wet and cold, for instance.

The BP oil slick off the coasts of Louisiana and Florida is yet another example of a hyperobject, an object which, as you say, radically undermines our ideas of being in charge, that the world is happening to "me," and so on. In this respect radiation is also spatial, since Chernobyl for instance taught us how it ignores national boundaries. In the same sense, evolution and quantum phenomena (radiation is one, strictly) are also massively distributed in spacetime. We can't see them but they are far more real than species, or atoms. They are more material than supposedly solid things.

What these hyperobjects do is upgrade our ideas about matter, the hard way. In the future, if there is one, people (whether human or not I'm not sure) will look back on our age and pity our lack of materialism—our lack of a deep affinity for and even affection for matter. Oh sure, we are addicted to externalities, instant gratification and shiny plastic surfaces, and this gives us the BP slick, which gets everywhere, is far from bling-like, and is a real drag in the worst possible sense...

**Peter Gratton:** What do you make of this return to realism and/or materialism after the linguistic turn?

**Tim Morton:** It's fascinating. I think I'm part of it, but in a modified way, which I'd like to explain here. The word "after" in the question concerns me—hey wait! Slow down! And I'm not sure about the kind of labeling the definite article does in the phrase "the linguistic turn." This version of "linguistic turn" might be a straw target—Saussure is very different from Lacan, who is very different from Foucault, and so on. Calling it "linguistic" might be because deconstruction found a home in English Literature departments more than in philosophy departments. When an English Literature person hears "linguistic turn" she's going to think structural-

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ism, not deconstruction—the application of a certain form of linguistics to problems in the humanities.

Like I say the phrase might be a straw target. It might be the case that some philosophical milieux never went through a linguistic turn at all—thus making their use of the phrase disingenuous. The idea of “after” could easily mark a regression to naïve empiricism, dressed up in fancy language. The epistemology-ontology split could indeed be a feature of this kind of empiricism (consider the “fact-value” dichotomy, for instance). There’s a long-standing resistance to “theory” (i.e. Derrida) in England and in Anglo-American philosophy, where some speculative realism is coming from. I’m a little afraid that some of this might be just old wine in new bottles.

The idea that real things are non-linguistic or unspeakable reminds me of Doctor Johnson refuting Berkeley by kicking a stone: “I refute it **THUS**.” To me, the sound of a boot contacting some crystalline particles is not an argument. Beware, Derrida is not a nominalist or an idealist! Doctor Johnson’s boot would have had even more trouble with him...

In a sense new materialism is also “after” various forms of Marxism. And relativity and quantum theory. In these respects it’s very, very interesting. Are we finally beginning to realize that Newton didn’t have the last word on everything—that matter isn’t little shiny ping-pong balls acting externally on one another in predictable ways in a neutral box of absolute time and space?

Peter Gratton: We should turn to your concept of the “mesh,” which is picked both to denote on the one hand this “interconnection” while also not falling into a vitalism. Someone like Jane Bennett, for example, is willing to risk using the language of vitalism, though of course she is as interested as the “inorganic” in any life as she is in any supposed lifeform as the basis of existence. Where do you find yourself in this debate?

Tim Morton: Great question. Materialism is at a very interesting point. To sum it up I think we are generating more and

more ways to think matter without teleology. As in evolution, matter, even the laws of physics themselves, evolve, sometimes in irreducibly unpredictable ways. Causality and even math and logic might be immanent to the Universe, not outside it in any meaningful sense.

If you are honest, then you realize that materialism can't mean believing in some hard little balls, totally separate from your mind, which underlie everything. This means that those of us who have called ourselves materialists and have used Marx must do some serious thinking. How far down into Marxism does the mechanistic view, based on Newton, go? How does this affect Deleuze and Guattari's "Everything is a machine"? The other problem is that it's traditionally been idealism, not materialism, that has used vitalism. The Naturephilosophers were all about some squishy, palpable snot-like stuff—protoplasm.

Mind you, it's incontestable that the quantum universe is much more like something living than like a machine. It's a profoundly ecological view, a kind of super-mesh in my terms (I'll explain the mesh in a moment). In quantum theory the very existence of an entity such as an electron depends upon the environment around it—and so on around a massive mulberry bush without center or edge. From this point of view, even protoplasm is mechanical. The snot is located in spacetime, while quantum phenomena can't be isolated in this manner. Quantum phenomena are entangled with the equipment that observes them (at that level, they are the same thing), whereas snot does its thing no matter what you're using to measure it. If you really want something like a vitalist view you should go down towards the Planck length.

What is the case is much more like standing waves than little balls or even blobby balls. The new scanning tunneling micrographs of atoms display nice shiny eggs in rows, presumably because nanotech is about to make lots of money selling versions of them. I like the older field ion micrographs because they reveal a world of ripples and blobs. I know that there's a wave-particle duality, sure, but it's heuristically very helpful, at least, to unthink ping-pong balls via waves. Think

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of nonlocality, which is now uncontroversially a fact of our Universe. It doesn't make sense from a ping-pong point of view. But it does make sense if, Spinoza-fashion, reality is one thing, modulated in a wavelike way. You can easily imagine two pieces of the same ripple glinting in the sunlight. On the other hand, two particles doing the same thing while arbitrarily far apart sounds suspiciously like a miracle.

Now, going up several scales to the level of life forms, we discover what I'm calling the mesh, which is simply the fact that life forms and non-life forms are entangled with each other inextricably, because of the nature of life forms themselves. I find this idea more persuasive at this level than vitalism, because it doesn't depend on locating some ghostly source of "life." The proximity, even at times identity, of the nonhuman with my humanness (and of everything in everything) is incontestable. For example, I drive around using crushed dinosaur parts as fuel. Most of the iron in the Earth's crust is distributed bacterial waste, as is the oxygen. I am typing this because the mitochondria in my cells give me energy. They are bacterial symbionts hiding from their own global catastrophe, the one called oxygen. You are reading this because ERV-3, a virus in your mom's DNA caused her not to spontaneously abort you because it coded for immunosuppressive properties of the placental barrier. And so on.

So perhaps vitalism is valid, but strangely at a far far deeper level than we used to assume, and not at all on the level of life forms!

### Interview with Ian Bogost

*"An 'Applied' Speculative Realism"*

*Ian Bogost is Associate Professor in the School of Literature, Communication, and Culture at The Georgia Institute of Technology, where he's a video game designer and interpreter, pushing the limits of game design in socially constructive ways. A sought-after speaker and writer, Bogost not only designs games meant to ameliorate social disorders, but also works to draw attention to the ways in which video games have an "expressive power" that demands our*

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full due in an era when most American households have video game devices; the way that we play them makes them not just games anymore (if ever they were). Among three books he is now working on, Bogost is writing a philosophical text, *Alien Phenomenology*, that extends his work in *Unit Operations* (2006) to think non-systemic conceptions of objects and their relations. The “flat ontology” he introduces in this new work, forthcoming later this year, seeks to recognize the strangeness of the world around us, a reality found not just in computational systems, but also in the world around and in us.

Peter Gratton: You write in your upcoming book, “As critics, our job is to amplify the black noise of objects to make the resonant frequencies of the systems of objects inside hum in credibly satisfying ways?” I guess I’ll begin by asking, why this satisfaction? In other words, what led you to this project?

Ian Bogost: I’d been interested in Graham Harman’s object-oriented philosophy since I first found out about it, which was perhaps half a year before the publication of *Tool-Being*. I’d followed this work with interest (it gets a citation in-passing in my first book *Unit Operations*), as did I his subsequent books and then the work of the “speculative realists.” I’d always had a hankering to do something further with this interest, as well as to return to my philosophical roots and to the concept of the unit operation. In particular, I had questions about how Harman’s thinking could help me understand particular objects, not just the nature of objects in general.

Then in 2007–2008, Nick Montfort and I were writing *Racing the Beam*, our book on the Atari Video Computer System. The book discusses the ways the hardware design of that machine directly influenced the games that were produced for it, and indirectly influenced conventions and genres of games even after different hardware affordances were common. We looked at the technical aspects of the machine in some detail, including its controllers and casing, its stock microprocessor and I/O bus, and its custom-designed graphics and sound chip. And by doing so, I think we were able to

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offer useful and surprising insights into the nature of the apparently simple videogames made for that system.

I'm proud of what Nick and I accomplished in *Racing the Beam*. But something bothered me: our treatment of the Atari focused only on the way the hardware influenced human creativity. An interesting topic to be sure, yet, one that didn't give full credit to the strange experience of the system's components. I began learning to program the Atari around the same time we began research for the book. It's a very strange computer, most notably because of the way it addresses the screen: the programmer must manually change settings on the graphics chip (it's called the Television Interface Adapter, or TIA) in tandem with the rendering of every scan line of the television picture. It's natural (or it was for me anyway) to begin wondering: what's it like to be a TIA? Or a MOS Technologies 6502 microprocessor? How would one characterize such a thing? Would it even be possible?

The Atari was just one moment in a larger set of these recognitions. Here's one more example: A year before I'd spent a consulting windfall on a Leica M8 and got back into rangefinder photography. I found myself thinking about the way different optics see a subject, the results of which photographers sometimes call "rendering" or "drawing." For example, I have a 1935 50mm f/2 Summar lens that produces images with a very particular atmosphere, thanks to a combination of factors inherent in its design. I can see how the lens sees when it exposes on emulsion or sensor, but how does the lens see without me? So, you could say that this project was borne from two parents, one a desire to concretize tool-being in some way, and the other a deep personal curiosity about the secret lives of objects.

Peter Gratton: "Alien phenomenology" attempts to offer a "pragmatic" or "applied" "speculative realism." As part of this project, you offer three "modes" for doing speculative realism: (1) the practice of ontography: the production of works that bears witness to objects; (2) metaphorism, which is the production of works that speak to the "centered," in-



ner lives of objects and the ways in which they reduce other things to their existence (just as humans do when we practice anthropomorphism, so cameras make the world in their own image); (3) and carpentry, which is expansive whereas the previous may be seen as reductive: constructing things that themselves speak to the perspective of objects. You offer these, I think, in order to talk about objects that are created by human beings (with all the caveats on “creation”), such as video games and back scratchers, without defining their being in terms of what human beings wanted them to be. Would that be correct? Is your “alien phenomenology” an alternative to classical, Aristotelian conceptions of the function of made goods?

Ian Bogost: It’s true that one of the motivations that lead me to *Alien Phenomenology* was a concern: how can one talk about man-made objects in the same way one discusses others, natural or abstract objects for example? Even if man-made things don’t pose an ontological problem (as indeed they don’t for Harman or for Latour), how do we contend with the constructed nature of such objects, the configured parts that make them whole? Indeed, we could say the same things about aggregate objects, whether you call them networks or assemblages or just plain objects. Here science is implicated as much as sociology or philosophy.

Mostly, as you suspect, it seems that these object live lives of their own, without us, even as we are in the middle of using them for our own ends. The TIA in the Atari lives in a different universe, of sorts, from the player who pilots Pitfall Harry. It behaves by a different logic, even as it operates by the very same logic (there’s a puzzler). This is where the metaphor of the alien becomes very productive.

Clearly the for-ness of Aristotelian final causation is troubled here. Is the TIA for human entertainment? For moving videogame sprites? Is it for modulating RF signals? Is it for latching circuits? All of the above? Do previously material causes become final, or are all causes in some sense final? All objects, not just man-made ones, are subject to this puzzle.

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When objects of different kind encounter one another, the problem becomes that of one making sense of the other. This is what I'm really after, and I want my approach to work for humans making sense of microprocessors as much as I do for sand dunes making sense of siroccos.

Peter Gratton: One means for thinking non-mechanistic conceptions of things has been vitalism, which is reinvigorated in work of someone like Jane Bennett, or others who are the heirs of Deleuze. How does your thinking of “undead” objects offer a counter to this approach?

Ian Bogost: I've read and enjoyed Bennett's recent book, but I have the same problem with vitalism as I do with panpsychism: they are too human-centered to work as philosophical ground. I think Bennett does a very good job justifying anthropomorphism in *Vibrant Matter*, and indeed I offer my own position on the inevitability of anthropocentrism in *Alien Phenomenology*—all objects are thing-centric, and all must make sense of one another through metaphors of self... here I'm borrowing directly from Harman's idea of metaphor in *Guerilla Metaphysics*.

Whiteheadian panexperientialism is somewhat less objectionable, although it's really a term from Griffin's reading of Whitehead, and maybe these matters of naming amount just to hair-splitting. But the problem with an umbrella-term for whatever it is that all things do is that it makes that very doing too homogeneous for my taste. This is where the idea of the alien comes in again—it's a frame for object-withdrawal that accounts for the impenetrability of inter-object understanding. It insures that whatever it is that objects experience, other objects may never even recognize it as experience.

Peter Gratton: Do think there's a reason that there is a turn to realism now? Is there simply exhaustion with the previous philosophical approaches, or is there something else underway?  
Ian Bogost: I was certainly exhausted with philosophy. By the letter of my training (all my degrees are in philosophy

and comparative literature), I'm really a philosopher rather than a media theorist, even though I'm really only known as the latter. Part of that exhaustion came from disgust: a sense that philosophy and theory didn't really care about the world at all, but only exclusive clubs of academic esoterics. In that respect, I don't think it's an accident that the return to realism comes at a time when the academy (and particularly the humanities) are in crisis. I've written a much more extensive and pointed indictment of this problem elsewhere ([http://www.bogost.com/blog/the\\_turtlenecked\\_hairshirt.shtml](http://www.bogost.com/blog/the_turtlenecked_hairshirt.shtml)), but for our purposes here I can boil it down to this: in order for humanism to reenter the world that it has forsaken, isn't a strong dose of realism a requirement?

There's something else going on too: at the same time that the humanities are struggling with their survival, the sciences appear stronger than ever. We're even seeing some humanists adopt scientific or social-scientific approaches wholesale in the hopes that they might offer succor or even rescue (cognitive science is the commonest balm). But despite their history, the sciences are becoming ever more correlationist, focused outward rather than inward, concerned with human application and innovation more than with nature. I made this point in much more detail at the recent Object Oriented Ontology Symposium at Georgia Tech (it will appear in the book too), but it's possible that the sciences are even more correlationist than are the humanities. Perhaps a latent sense of dread at this possibility is also at work.

I'm not suggesting that we must reject science, but that we may finally be forced to grapple with C.P. Snow's two cultures problem for real. In the arts and humanities, "interdisciplinary" usually means inbreeding: "French and German." What happens when it must instead mean, say, media ecology and electrical engineering, or gastronomy and physics?

Peter Gratton: One worry that crops up time and again about "flat" ontologies such as yours is that it's one thing to say that we need to describe relations outside of their correlation to human beings, but it's another to say that those other rela-

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tions are equally valuable in some way. This is a question you raise obliquely in your discussion of ecological movements as still taking human beings as the primary actors, to which ecologists may reply, no, at the level of ontology, we're fully on board with non-correlationist thought. But of course, this does not preclude the fact that ecological concerns are being raised because of the effect ecological devastation will have on human beings. What do you make of this repeated type of critique against flat ontologies?

Ian Bogost: For me it's undeniable that positions adopting an extra-human perspective are plagued with a dilemma: how can a concern about that outside the human primarily service human interest? Ecological studies, animal studies, and other fields offer worthwhile perspectives, but they nevertheless assume the privilege of human existence. I'm not saying that we should gun the engines of our SUVs to more rapidly reach our slaughterhouses, but I do think flat ontology forces us to ask more sophisticated questions about the impacts of object actions on object logics. Is it even possible for humans to act in the interest of ferns?

One major philosophical difficulty for flat ontology is the risk of nihilism: if nothing is any more important than anything else, then it might seem that it doesn't matter if anything does or doesn't exist. But instead, I think object-oriented ontology is an existentially replete philosophy. A promiscuous ontology, as Levi Bryant and I sometimes call it. Still, that doesn't address the problem of the quality of existence.

Nothing about adopting flat ontology precludes one from living according to a code of values, or from adopting a politics of action, or from evangelizing in favor of such codes and actions. But if metaphysics, rather than epistemology or ethics, is first philosophy, then we also cannot shy away from difficult questions about the implications of any object's acts. Do objects themselves have values? Does the Spanish moss or the waffle have its own ethics, and how would we know if it did? Ought we to force our human code onto all things, or ought we to withdraw into a sort of universal version of Star Trek's

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Prime Directive? These questions are no longer ontological ones, and I don't necessarily claim that flat ontology should be asked to answer them, no more than tugboats should be asked to conjugate verbs.

On the one hand, I see this as a valid and worthwhile future work (Alien Ethics, perhaps). But on the other hand, perhaps its time that positions grounded in ethics ought to be asked to reconcile their positions to ontology, rather than vice versa.

### Interview with Levi R. Bryant

*"Perhaps this Calls for a New Sort of Philosophy..."*

*Levi R. Bryant is Professor of Philosophy at Collin College, and is perhaps the most prolific online writers on speculative realism at his blog, Larval Subjects. He is the author of Difference and Givenness: Deleuze's Transcendental Empiricism and the Ontology of Immanence, co-editor of the forthcoming The Speculative Turn with Nick Srnicek and Graham Harman, and author of a number of articles on Deleuze, Badiou, Zizek, Lacan, and political theory. Bryant was a practicing Lacanian analyst, and thus understands well the areas of contemporary Continental philosophy that he critiques as too unrealistic. His "onticology" is the focus of his Democracy of Objects (forthcoming from Re.Press).*

**Peter Gratton:** One of the virtues of speculative realism as a "movement" is how approachable its main thinkers are. There are pitfalls to this: when writing a late night post, one says things more quickly than one would in a journal article. But you also can write about things not necessarily in one's area but is of philosophical concern to you. Thus I'd like to begin, as I did with Graham Harman, with a self-referential question about what you make of this new environment: do you find it a *new* way of doing philosophy? Or is it simply a return to the kind of dialogues and letter forms of writing philosophers did in previous eras?

**Levi Bryant:** I'm glad you asked this question because in many respects it gets right to the heart of the significance of

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object-oriented ontology for disciplines outside of philosophy. It is sometimes mistakenly suggested that OOO seeks to eradicate the human, when in fact OOO is interested in broadening the domain of philosophical inquiry to make room for nonhuman actors or objects *in addition to* humans. Since Descartes, philosophy has tended to obsess on a single relation or gap between humans and objects, focusing almost exclusively on how subjects or humans represent objects. In many instances, this tradition *reduces* objects to their representations *by* humans, treating objects as mere passive vehicles that carry these representations without contributing any differences of their own. OOO wants to escape this sort of representationalism and this exclusive focus on the relation between the human and the world in representation. And part of the reason OOO wishes to escape what Harman has called the “bland human-world gap” is that it believes that we cannot properly understand *human* collectives without taking into account the role that nonhuman actors play in these collectives. And here, above all, it’s important to avoid treating these nonhuman objects as passive vehicles for human representations.

Initially this seems unrelated to your question, but it helps to situate, I think, the question of what role the internet has played in the development of speculative realism and object-oriented ontology. Here the key point would be that there is no such thing as a *neutral* medium. Rather, whenever agents interact through a medium, whether that medium be speech, writing, smoke signals, comics, video, music, clay, text messaging, the internet, etc., the medium both *affords* possibilities of interaction that would not be possible in any other medium, and *constrains* possibilities. In terms of McLuhan’s tetrad, we should always ask “what does the medium enhance or intensify?” *and* “what does it render obsolete or displace?”

A *representational* account of the internet would tend to reduce it to its status as a *tool* or implement for human practices and intention. Here the nonhuman actor—in this case the internet—becomes invisible or erased behind the human intention. The implement itself, one would say, is largely ir-

relevant as the tool is thoroughly explained in terms of the structure of human intentionality. Here we might think of Heidegger's analysis of tools, where strangely tools in their being as objects don't appear at all. Rather, we get an analysis of the "for-the-sake-of-which", the "in-order-to", the "in-which", etc. The tool is merely a vehicle or carrier for these human intentions.

One thing OOO would like to understand is what differences *objects* contribute, over and above the human intentions thrown over them like a spider's web. Like any object or set of objects, the internet constrains and affords possibilities of interaction among humans in unique ways. In *Understanding Media*, McLuhan writes that we should seek to understand how "...the medium...shapes and controls the scale and form of human association and action" (9). Additionally, we should seek to understand how the medium in-forms *content*. As for the scale and pace of human associations, and with respect to philosophy in particular, the blogosphere has tended towards overturning the hegemony of the academy or the university system. Traditionally philosophy has taken place in expensive and hard to obtain academic journals, difficult to find philosophy texts, and professional conferences that can be very expensive to attend. And by and large the "price of admission" in any of these venues has been an advanced degree of some sort. Further, in many cases articles in journals are seldom read, but you also get group networks of like-minded philosophers that begin controlling the content of journals, what articles will be published, what articles will not be published, and whose articles will be published.

The blogosphere significantly challenges these institutions by bringing people together that come from both inside and outside the academy, and by enabling the possibility of philosophical movements that emerge outside of the gatekeepers of the journals and conferences.

It is unlikely, for example, that SR would have taken the form it has taken had the blogosphere not existed. To be sure, certain books might still have been published, but rather than coagulating into a loose movement it's likely they would have

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been aberrant texts soon forgotten. This is because the Continental philosophy journals and conferences are currently dominated by certain forms of philosophy inimical to both the style and content of SR. However, with the internet it became possible to form collectives and discussions outside of the academy that brought the work of very diverse thinkers together under a single banner. This led to the formation of special issues of journals and entire journals devoted to SR, the hosting of conferences, and the founding of presses to publish this work. A number of graduate students, in their turn, became interested in variants of this thought, pestering, I imagine, their professors and dissertation directors to let them work on these issues, thereby forcing establishment academia to pay more attention to this movement rather than dismissing it out of hand. All of this from a nonhuman actor.

Does the content of philosophy change when written in a blog format? A blog entry is still a form of *writing* so our initial hunch might be that the medium has no effect on the content. However, one only need try the experiment of writing all sentences in 45 words or less to see what a profound effect media can have on content. We can think of books as very slow moving conversations. One reason people wrote books was that their interlocutors were not immediately available. Here we might think of Leibniz's *New Essays on the Human Understanding* which was written as a point by point rejoinder to John Locke. Leibniz abandoned the book when Locke died. The point, however, is that the book is a labor of time. The structure of time on the internet, by contrast, is very different. Where a book might be written over the course of years, a blog entry is written in an hour or so and presented to the public warts and all. Where generally responses to a book are very slow to come, responses to a blog entry can be very quick and ongoing. As a consequence, internet philosophizing tends to lead to a very quick evolution of thought where positions change rapidly. Perhaps this calls for a new sort of philosophy, where one doesn't so much embody a fixed position as engage in a developing tendency of thought not unlike the evolution of a species over time.



Peter Gratton: The students in course have read Meillassoux's *After Finitude*, Heidegger's work in *Being and Time* and "The Thing," as well as various works from Michael Dummett for an analytic conception of language and its own referential nature. We have also been following up on Graham Harman's work on Latour and "object oriented philosophy." Perhaps one way to begin would be to ask why you have chosen the word "onticology" to represent your own "object oriented" work.

Levi Bryant: I think there is a ludic dimension to object-oriented ontology, and this comes through in my choice of the term "onticology" as the name for my position. The term "onticology" or "science of objects" for my ontology is a bit of a practical joke, a thumbing of the nose, not unlike Derrida's call for a "grammatology." Heidegger famously distinguished between the ontic and the ontological. The ontic refers to ordinary objects, to physical objects, to material objects, whereas the ontological refers to the meaning of being and that which bestows the being of beings. For Heidegger we are doomed to miss the question of being if we remain at the level of the ontic. Rather we must ascend to the heights of being and withdraw from the ontic to grasp the question of the meaning of being in all of its mysteriousness.

The term "onticology" suggests a refusal of this move, a refusal to ascend to the heights of the being of beings, so as to remain at the level of the world and objects. If this move is advisable, then this is because we have always already been forgetting objects. Objects become invisible to us, reduced as they are to passive vehicles or carriers of our representations and intentions. I suppose that, contra Heidegger, I intend the term "onticology" to suggest that it is not the forgetting of being that is the problem, but the forgetting of objects that's the problem. We must refuse the Protagorean imperative whereby man is the measure of all things and the Narcissus that this imperative entails, so that we might encounter the teaming world of objects.

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Peter Gratton: What is interesting in your work is that it's very influenced by Latour, but you don't go in quite the same direction as he does with regard to relations as the whole story of existence. But on the other hand, you don't quite follow Harman's work all the way in terms of what he calls "the allure" or the "something more" of objects. Thus a simple question: what strikes you as a major difference in your account from Harman, or if I was a tabloid interviewer, I'd write, "what do you think Harman has gotten so awfully wrong?"

Levi Bryant: I am, of course, deeply sympathetic to Harman's work and find constant inspiration in it, nor do I think he's gotten anything *awfully* wrong. I would say that my ontology differs fundamentally from Harman's ontography on two fundamental points: First, Harman's objects are utterly concrete and actual, without any hidden potentials. For me, by contrast, the proper being of an object is not to be found in its *actuality*, but in its *potentiality*. I conceptualize objects as "difference engines" or "generative mechanisms," which is to say that I think them as *powers* or *capacities* of *doing* or *acting* in the world. I thus argue that objects are *split* or are split-objects. On the one hand, you have the actualized *qualities* or *properties* of an object which I call the "local manifestation" of the object, while on the other hand you have the powers or capacities of an object which I refer to as its "virtual proper being." The substantiality of an object is not to be found in its qualities, but rather in the ensemble of its powers or capacities.

This entails that we never directly encounter an object because no object ever actualizes the totality of its powers in all the ways in which those powers can become manifest. Rather, there is always a hidden excess or reserve of potentiality that dwells within the object. This is why I refer to the qualities of an object as local manifestations of the object. They are actualizations of the object at a particular point in time and under determinate conditions or relations to other objects. It follows then that qualities are *acts* on the part of an object. Qualities or properties are not something an object *has*, but are something that an object *does* when it relates to other

objects in the world.

To illustrate this idea, do a pseudo-phenomenological analysis of a colored object. Generally we think of a particular color as a quality that an object *has* or possesses. Onticology, by contrast, argues that color is something an object *does*. It would be better to speak of an object “coloring” than to speak of an object as *being* colored. If you doubt this, look very carefully at an object in the sunlight. Perhaps, for example, a blue coffee mug. As the clouds pass by, as the leaves rustle in the wind, the color of the mug changes! Now it is a deep shade of blue. Now it is a brilliant blue. Now it is a flat blue. Night approaches and the cup turns black. The color of the cup is not something that the object has, but rather is a *power* of the cup. The cup has “blue power”. It has the power of “blue-ing”. And this power differs from any of the local manifestations of this power. The power ranges from black to brilliant blue and all the shades in between. The shades that are selected in this phase space are a function of the relations it enters into with photons of light. We never directly encounter the object *qua* power, but only *effects* of this power in local manifestations.

The same point can be made with respect to water. The hardness of water is a function of the speed or velocity at which it is approached. I can slip my hand through the water of an ocean as I ride along in a motor boat, but if I jump from a high flying plane the water will be as hard as cement. These are powers of the water manifested under determinate conditions. Likewise, the water is capable of undergoing phase transitions. Thus, under incredibly high pressure water becomes dense and solid like ice. Similarly, water can of course freeze and become hard. And again it can be a liquid or steam. Again, these are all local manifestations of the power of water. Onticology recommends that we understand objects in terms of what they can do, that we think of objects as acts or doings, rather than as beings that possess or own properties. This, I take it, is at odds with Harman’s thesis that objects are completely actual or concrete. However, I am never entirely sure we are in disagreement here, for Harman also argues that objects withdraw from all relation, such that they hide behind their

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qualities. This sounds a lot like potentiality to me.

Second, I've always had difficulty understanding Harman's problem of causality. Harman argues that objects can never relate to one another and therefore encounters a problem with causation. I've always had a difficult time understanding why non-relation follows from the thesis that objects withdraw from one another. With Harman I accept the thesis that objects withdraw from one another, but I think I articulate this in a different way. Within the framework of onticology, withdrawal denotes the manner in which the object *qua* potency is in excess of any of its local manifestations. There is always more to the object than any of its local manifestations at a particular point in time and under particular determinate conditions. Yet this doesn't, for me, entail that objects don't interact. They interact at the level of their qualities or local manifestations, evoking particular qualities in one another.

Peter Gratton: What I think is really interesting in your work is the way you reject the linguistic turn without giving up on all of its insights about language. You have a fully worked out conception of language that at the same time does the referencing that objects already do themselves. Is that correct?

Levi Bryant: I think that there is much of value in the linguistic and semiotic turn and that it would be a mistake to throw out the linguistic and semiotic philosophy developed in the last one hundred or so years. The problem with the linguistic turn is that it tended to erase objects underneath language or the signifier. Once again, objects became mere vehicles or carriers for linguistic differences, contributing no differences of their own. This harkens back to Aristotle's distinction between form and matter. Matter was treated by Aristotle as a passive media that received active form. Think about making bricks. You have the clay, then you put it in the mould and you get the brick. The clay simply takes on the form of the mould. The linguistic turn has strongly tended in the direction of this form/matter schema, treating objects as passive matters awaiting the form-giving activity of language.

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With respect to the linguistic turn, my strategy is to propose a delicate shift in perspective. Rather than thinking in terms of objects passively receiving form by language, I instead propose that we think in terms of *entanglements* of objects. If the shift from a logic of in-forming to entanglement is advisable, then this is because entanglements allow us to think in terms of all entangled objects contributing differences of their own as they weave themselves together, rather than thinking in terms of only one agency contributing all the important differences. The philosopher Karen Barad suggests that we think these sorts of entanglements in terms of “diffraction patterns” in her book *Meeting the Universe Halfway*. A diffraction pattern is what occurs when waves intersect with one another. You throw a pebble into a pond and then you throw another pebble into a pond. Both pebbles create concentric patterns of waves. At some point these waves intersect creating a distinctive pattern as a result of the differences embodied in *both* of the waves. This is the perfect metaphor. Rather than thinking of one object overdetermining all the other objects by actively giving form to those objects, we should instead think of objects on a flat ontological plain *among* one another creating distinctive diffraction patterns as their differences interact with one another.

This is my strategy for thinking about language. I treat language as one object relating to other non-linguistic objects. The question then becomes one of how these differences get woven into one another in distinctive ways. Rather than language overdetermining non-linguistic objects, we instead get a sort of struggle of differences as non-linguistic objects disrupt language in various ways and as symbolic objects disrupt non-linguistic objects in a variety of ways.

### Interview with Paul Ennis

*“The Phenomenal and the Real are Happening Alongside Each Other”*

*Paul Ennis is a PhD candidate at the University College, Dublin, where his work on Heidegger and contemporary Continental philosophy is already gaining him a name. He is the editor/inter-*

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viewer for *Post Continental Voices* (Zero Books, 2010), which is an excellent set of interviews from some of the younger voices in the field and has a well-conceived introduction that takes the measure of a certain change taking place in what he calls “Post Continental” philosophy.

Peter Gratton: First, why don't you tell us a bit about your own research...?

Paul Ennis: In the book, and my work more generally, I am trying to take the measure of some kind of shift. The label ‘post-continental’ is a pretty general one but I hope people read it as developing ‘on top’ of continental thinking rather than a simple process of supersession. As I note in the introduction to *Post-Continental Voices* many of the people interviewed are still tied, to varying degrees, to the continental tradition. In my own research I'm trying to do a *hermeneutics of the real* and I am trying to work out what it means to be a ‘continental realist.’ Hence my dissertation has the rather blunt name ‘Continental Realism.’ Like a lot of the younger generation I struggle to track of all the changes that are happening in academic philosophy. These days philosophy moves at a stunningly rapid pace. Badiou and Deleuze are talked about as if they'd lived in the nineteenth century. Speculative realism is already discussed in the past tense. Derrida seems to come from the ancestral realm itself.

But with all this rapid change I think we might end up losing some of the good in the old (broadly antirealist) continental tradition. I like to call my position ontic phenomenology or phenomenological realism, but I'm also sympathetic to the term ‘transcendental realism’ that is cropping up more and more. These are just different ways of saying that I think it is possible to keep bits of the transcendental/phenomenological method as we become increasingly realist. But that I think we should become more realist means that my natural home will likely not be in ‘traditional’ phenomenology. In a way I'm between worlds.

I think the job of the ontologist is to find ways to articulate

how the ‘real’ [the things ‘out there’] mix it up with the ‘ideal’ [the mental states ‘in here’]. I really respect the new realism that has tried to establish a flat ontology. There is no vertical ontological totem pole. If there is an axiom shared among people I like to read then that is probably it. My best hopes would be to contribute to this task by seeing what it looks when we reintegrate the subject back into this evolving picture. I do think that the ideal/phenomenal is ‘within’ reality i.e. is realized with/in the real, but I also find it hard to see how I discuss the real with coming at it from ‘my end.’ Until I solve this I’ll have to keep the phenomenological/transcendental method before I become a fully fledged realist.

Peter Gratton: What interests me is that you have one foot firmly planted in the phenomenological tradition that Heidegger, for good or bad, represents. Do you think there is still a need for airing out the “pre-Continental” voices (that is, coming from before anyone recognized a “Continental” tradition)?

Paul Ennis: I do think my position is odd. I lead a double life. Offline I exist in a pretty strong and old-school phenomenology department (University College, Dublin). Whenever I bump into people at a conference and tell them which department I am in they tend to associate it with phenomenology.

So for the most part, in my ‘normal’ graduate work, I read people like Husserl, Heidegger, Merleau-Ponty, Sartre and Derrida. Our latest reading group is on Hegel. As far as I am aware nobody in my department works on Deleuze or Badiou and certainly not speculative realism! This might shock some people who would probably see phenomenology as belonging to the history of ideas and this is also something people tell me all the time when I tell them I work on Heidegger. When I read about anti-correlationism I have a pretty good understanding of who is under attack because I spend all my time reading what Meillassoux considers the correlationist tradition. I think, and you can see it in the responses to Meillassoux so far, that he is a little unfair. But then again he seems to know this. If I had discovered *After Finitude* a year or two later I

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might even have bypassed phenomenology and worked on something more contemporary but in the long run I think it is better that I will have the more traditional background.

But one major bonus of anti-correlationism for the correlationists is that, despite the critique, Meillassoux respects the transcendental method and he even insists that the passage to the absolute must be internal to that tradition. This means people will start revisiting correlationist texts and looking at them with fresh eyes. I think something that will happen more and more is that people will come to review the continental tradition. They will either come out on the side of the correlationists or the anti-correlationists but, in classic Hegelian fashion, this is a necessary fusion and perhaps precisely what is needed. It might not be framed as a confrontation between correlationism/anti-correlationism but perhaps as realism/antirealism, empirical/transcendental and so on. Meillassoux zeroes in on that mood and I think that is why *After Finitude* has proved so popular.

Peter Gratton: And yet you also have another foot firmly planted in the new realism movement, blogging about it often and as editor of *Speculations*. To mix up the metaphors a bit, are you able to bring some harmony to these pre and post-Continental voices in your head?

Paul Ennis: It is difficult but no more confusing than how it feels to engage with Anglo-American/analytic philosophers. It is really a case of 'translation' and learning to recognize how people say the same things in a different register. A major issue has been trying to play catch up with the background figures. If you want to read Harman you need some Latour, if you want to read Grant you need some Schelling, if you want to read Meillassoux then Badiou is helpful, and if you want to read Brassier some Deleuze is necessary. But I think it is healthy to get mixed up in all this. Since getting into speculative realism I can no longer read Heidegger the way I did before. You start to discover just how wildly different the world can look if you start with Deleuze instead of Der-



rida. Rather oddly it has made me turn back to the classics of phenomenology in recent months.

For the most part I always try to operate somewhere on the middle ground (except when it comes to certain issues: I can get quite worked up about ‘inflationary’ narratives or about what Meillassoux calls the ‘religionizing of reason’). But I know that I am doomed to misinterpret positions and to slip up from time to time. Philosophy can be quite harsh in that sense. You need about four or five thick skins to keep going. But here is where the name phenomenological realism is handy. It signals to people, I hope, that my allegiance is not to any kind of faction or tradition. You can see this in the name speculative realism itself: it is an ‘umbrella’ term for four thinkers with not so much in common (in the positive sense, critically they are much closer). For instance Meillassoux is a materialist and not a realist, but it doesn’t really matter. These terms are just handy terms for expressing a whole bunch of assemblages. We should not get too hung up on them.

But the best way to harmonize those voices is to attend papers, reading groups and social events populated by people who are not doing what you are doing. You will feel like an idiot and you probably won’t understand much, but you’ll soon discover that you do have a position of sorts. There is no point in refining your phenomenology with, say, Sartre as a foil. You have to sharpen it in dialogue with people who think phenomenology is *pointless*. If you can’t at least convince them that it has some merit then something has gone wrong. And we are lucky in this regard today because we have been bequeathed with problems rather than dogmas. Even a casual cross-tradition conversation will reveal a shared attitude that there is much work to be done and that the time of exegesis is perhaps coming to an end for a short period.

Peter Gratton: Let’s turn more specifically to Heidegger. There has been, at least in the Anglo-American tradition, a copious amount of work on Heidegger and the question of realism (Hubert Dreyfus’s edited collection on Heidegger has at least four essays on the topic). Yet, of course, this work also sug-

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gests that Heidegger is not an easy fit for the double test of what traditionally has been the two-pronged test of realism: independence and existence.

Paul Ennis: I think that Heidegger is not an easy fit for the test of realism because he spent his entire career trying to circumvent all these tidy categories. This is what I think irked Europeans when they encountered the American pragmatist reading of Heidegger. It is weird, but it is quite possible here to read Heidegger (or any major continental thinker) and never have to deal with the issue of realism/antirealism because the ideal or phenomenal is assumed to take precedence. It doesn't help that one can just point to the ontic part his distinction and say 'there be the real.' It is the ultimate get-out clause. Harman has, of course, made sure that nobody can pull that move so easily these days and he has done much to rescue Heidegger from becoming staid.

There is a very important sense that there are no *singular* (or independent) things in (the early) Heidegger. Things 'are' only in so much as they are used or in so much as they are equipment. He reserves the word existence for Dasein alone. There are many reasons for this: Dasein is the questioner whose being is an issue for it, stones don't care...they lie around like the geometric points of the Cartesian world. So Dasein has or owns its existence to put a positive spin on it. One might say that Dasein is special because it knows that it exists (although not exactly why!).

Now Dasein's special role is that of worlding and even articulating being. Dasein, one might say, is the meaning giver—in this sense Heidegger is close to his mentor Husserl and his discussion of sense-bestowal. So Dasein and being are in a kind of relationship of recognition. All the 'real' things only make 'sense' because they are within the world(s) produced by the many Daseins. One could conceivably imagine a world without Dasein but there would be no meaning produced in this world and technically it wouldn't even be a world. So it all comes down to whether you think the real can still be made sense of without Dasein—without world.

Peter Gratton: In some sense, the tension in Heidegger is that once we think the “independence” of some entity, it’s difficult then to appraise its “existence”....

Paul Ennis: You touch on the classic problem for Heidegger—and Hegel too. If you are the one thinking the independent object then you are adding something additional to that object, in Hegel’s words the medium (i.e. you) is ‘reshaping’ the object. So how can you claim to be discussing the purely independent object? Heidegger would add drawing on Kant that even the attribution of existence to some-thing is coming from your end. The concept existence is not something one finds in objects (existence is not inherent in objects—it belongs to a very special being known as Dasein)—it is something we use to articulate our world, i.e. to make sense of things. As such, when Heidegger is disparaging people about talking about the existence of objects, this is not meant as an attempt to downgrade things but to show that (as the worlding or the house of being) it is you who is bringing that ‘layer’ of existence into the picture and in order to help you make sense of being in the world. The things are there, but without you they would not ‘exist’ but they do not *need* you to go about their business!

Peter Gratton: You’ve scoped out well the terrain that we’re trying to cover in this course. It seems the crucial problem is that we often mix up “meaning” and “existence,” and a lot of the problem of any discussion of “realism” is the fact that the word “real” is equivalent in English and a slew of other languages for “it’s meaningful.” I wonder if you could discuss the nature of this “*aporia*.” Just to define the term, as Derrida and others use it, it’s a Greek term that means “without-a-path” or “dead-end,” and Derrida held that in discussing certain concepts we will be led to certain impasses or dead-ends that can’t be surmounted. Thus, for example, one may say that in Heidegger we reach the limits of his thought with the “*arche-fossil*,” that is, with some entity that is neither a

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thing (in his later sense) nor another Dasein (I'll leave aside the animal for now...) And I think you're right to point out the different Heidegger here in the US than in Europe. In my own training, I tended to take up the Heidegger of Europe: the deconstructionist of the history of philosophy. But of course, in the US for years, Heidegger has been brought, by Hubert Dreyfus and others, to bear on contemporary debates in analytic philosophy, not least on the question of realism. But it seems, coming back to your suggestion about language, that Anglo American philosophy just uses Heidegger to augment the concepts on hand, and thus we don't seem to have an advance over the question of the arche-fossil. In any event, I'll end this question by keeping it simple: how would you define realism if for a phenomenologist like yourself, since as you suggest Heidegger can't discuss the "independence" of things...

Paul Ennis: I think a major problem is the temptation to fit people into neat categories. We argue endlessly as to whether Hegel is an idealist or Derrida is a realist...It can be interesting but with a thinker like Heidegger it is not a case of discovering whether he a realist or an idealist because he is simply not engaged in that kind of debate. He has a very peculiar, singular direction and it is foremost an *ontological* rather than an epistemological issue. It is worth nothing that Heidegger would probably have shrugged his shoulders at the *aporia* of the arche-fossil. I can imagine him saying 'It is all very well talking about this ancestral realm but what does it tell me about Being?' Since the ancestral realm is the 'time before being' then it does not operate within the horizon that Heidegger is working—but I think, just to cover Heidegger a little, it would be more the case that the ancestral realm does not have temporality. So you can still have the 'real' and even assign it a 'linear' time and perhaps even a progressive stamp but this is an ontic concern and it does not help him answer the question of the meaning of being. Heidegger has a space for the real, the ontic, and so on but for Heidegger it is not all that important (for his concerns at least).

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I would add that since the ancestral realm is without being we can also add, and here Heidegger I think makes sense, that this is because there is no-one around to articulate being (so it might be sort of there in un-actualized ‘form’). My own personal take is that we are but one aspect to the world but since human existence is by no means necessary then real things would carry on but without that interesting dimension we contribute. For me the phenomenal and the real are happening alongside each other. It goes back to the totem pole i.e. being able to think ontology *flatly*.

Peter Gratton: I don’t want to take up too much of your time, and you’ve helped quite a bit already, but I would just follow up with a question about this last part: I worry that in Meillassoux and your answer here—and when I say “worry,” I mean I don’t know what to do with it myself—is this split between the real and phenomenal. For those who don’t know (and there are many people reading this not in the course) Meillassoux argues that there a “chaotic in-itself” fully describable through the mathematics of set theory. This would be his “real,” if one could put it that way. On the other hand, you would have the phenomenal: the world as it appears to us. Here you suggest something similar: sure, we can talk about meaning, but only in terms of the phenomenal; reality itself is *ana-logos* (without language or reason) and the moment we attempt to describe it we bring it into the phenomenal. Is this a fair summary? What I mean is that you say, look, we don’t need to choose sides: we can have our Heidegger and we can have our mathematical and other considerations of the in-itself. And Heidegger would be, I suppose, really good at giving description beyond Kant to your equipmental being in the world, and thus leave a certain division of labour to those who would describe the Real in scientific terms.

Paul Ennis: This pretty much sums it up for me quite well. I’m not particularly interested in antagonistic philosophy i.e. picking a side and arguing it to the end. These are some problems that require phenomenology and some that require

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mathematics. There might even be some kind of problem that requires a blending of the two. So I am often searching for a middle way between the two—to divide the labour as you put it. There is also the problem that many people simply cannot follow Meillassoux or Badiou when it comes to the mathematics. So we might need to draw on something else to explain their point as when theoretical physicists write popular science books and leave out the mathematics.

For instance as a phenomenologist I tend to think that it is not my task to describe the real (as it is ‘in-itself’). I am happy to defer to scientists or mathematicians when it comes to what happens in the real, but I *also* want to hear what metaphysicians have to say about it. Why not after all have many voices trying to articulate the real? But personally I have never been able to shake that basic skepticism that when they tell me about it they must translate the ‘real’ somehow. They have to bestow sense on this pure real and, of course, it is now implicated in our coordinates. I would say it is now implicated in the phenomenal. It has *become* phenomenal. The hard part for most people is to avoid claiming that the real has now been eradicated!

There is an old description of phenomenology that I picked up years ago that might be helpful here: Imagine for a moment that intentionality is a torch. The torch illuminates all kinds of things and if you think of the light emitted as including language, meaning and so on then the area that gets ‘trapped’ within its luminescence is the phenomenal. But we can move the torch around and uncover all kinds of things that were not lit up. This is how I tend to think of the idealist versus realist position. The idealist thinks the torch is all powerful and the realist thinks the torch over-estimates itself. We should just see this process as it is: The torch is *at once* in the real and lighting up aspects of the real.

# Nomological Disputation

## Alain Badiou and Graham Harman on Objects<sup>1</sup>

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COMPARING THE OBJECT IN ALAIN Badiou's 'materialist Platonism' and Graham Harman's object oriented 'speculative realism' might at first seem an esoteric exercise in joining dots across great lengths. On the one hand, Badiou's approach to objects in the *Logics of Worlds* (*LOW*) operates through the Platonic codetermination of thought and being via axiomatically deduced mathematical structures—because what can be thought mathematically *is*, the object can therefore be fully deduced. On the other hand, Harman's theory is grounded in objects (cars, rocks, ice cream, Harry Potter, Gandalf, etc.) that withdraw in their compete reality from the thinking subject—or indeed any other object, including their inanimate cohorts. For Harman objects present us with an inaccessible, withdrawn reality which can never be fully exhausted; and, like black holes in astronomy, one can only circle around whilst speculating about the depths within. Thinking the object in Badiou's philosophy in contrast to Harman's thinking of the object thus seems to run aground at the very first hurdle: at the level of their fundamental decision regarding how ontology should be situated. Add to this the fact that Badiou identifies himself as a materialist and an atomist, whereas Harman rejects both of these paradigms, and we appear to have two philosophies

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that could work more as a differential heuristic than as a site of productive philosophical exchange.

Yet despite all these factors rendering a criss-crossed reading of these two thinkers seemingly unlikely, they also share some common ground. Both the atomic relationism utilised by Alain Badiou to secure objects, and also the securisation of the integrity of individual objects and their parts in Harman's philosophy, both rely on some sort of infinite relation to secure finite being; whether that is 'inaccessible' infinitude for Badiou, or the infinite regress for Harman. It will thus be argued that Harman's aversion to mathematisation has no obvious basis within his object oriented philosophy, but rather rests in the philosophy's ambiguity regarding 'ideal' structures; an ambiguity, which vice versa dogs *LOW* in its vast array of metaphors between its 'ideal' mathematical objects and its phenomenal examples. The similar trajectories of the two ontologies point, then, to the unresolved question of the nomological structure of the world. To proceed to this point it is necessary to first examine Badiou's axioms of materialism, noting how he secures (1) individual objects via the transcendental index; and (2) the way the infinite relation folds into the ontological realm of 'inaccessible infinity'. The next section compares this to Harman's aversion to relationism, in that for him there is always more to a withdrawn object than the sum of its relations. Harman rather shifts the problem to an infinite regress within the relations of the parts of the object to itself. The conclusion outlines some possible future avenues for thinking both objects and change.

### Badiou's Axioms of Materialism

Alain Badiou's *LOW* presents two axioms of materialism, which attempt to secure individual objects and their procedures for change in the onto-logical domain of being-there. They are:

1. Objects appear as ones in a world
2. The ontological closure of a world implies its logical completeness



(1) On account of Badiou's first axiom—*objects appear as ones in a world*; that is, where being is localised—it is important to place this somewhat strange understanding of materialism in distinction to how materialism is generally thought. Scientific materialism for the most part wishes to reduce reality to its smallest constituent parts, whether that be molecules, atoms, electrons, or sub-particular strings, thereby occluding thinking the reality of objects on different scales. On the other hand, for Badiou everything that “appears” as one—although it is important not to be fooled by the use of these “metaphorical” verbs; we are not talking phenomenology here—simply *is* one. For Badiou this is axiomatic not because of folk inferences from the phenomenal world as presenting singular objects, but rather because ones can be thought, for his Platonism they thus exist. To take one of his more perplexing examples, insofar as the neo-classical columns in Hubert Robert's painting can be *thought as one*, *they thus are one*—despite the fact that it is unlikely that any reductionist, materialist function could be assigned to the arrangement of colour and stroke. In the same way Badiou would also consider a star as a one, a helium atom in the star as one, and an anarchist in part of an anarchist collective as one. Their relations to one another assure the ascending and descending scale of objects that can be considered as ones. And significantly, in comparison to *Being and Event* (*BE&E*), the oneness of these atoms are not established through an act of counting against their ontological multiplicity (by their being simply *counted as one*<sup>2</sup> in a representative structure). Rather, the oneness of atoms in being-there is grounded via the ‘transcendental index’ of objects to one another: where one object inhabits a maximum intensity of existence, and one object the minimal, thereby placing a series of objects in relation to one another through an ‘envelope’ and simultaneously assuring their *existence* as individual objects. At this stage in the exposition identity and difference are given as part of the axiomatic of the appearance of ones, because *mutatis mutandis* without difference to determine identity ones could not exist. Exactly how their differences are determined is, however, left

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open at this stage. The transcendental structure he describes is thought in mathematics as a complete Heyting algebra.<sup>3</sup> And yet, the properties which allow this scale to operate—and he insists that this be thought in the absence of subjective evaluation—necessitates a theory of relation, which attains objectivity of its own accord.

(2) In the third part of the *Greater Logic on relation* Badiou presents the second thesis of materialism: “The Ontological Closure of a World Implies its Logical Completeness.”<sup>4</sup> Utilising sheaf theory, Badiou posits that all relations between two atoms can be observed from the standpoint of a third. And the relation between this third and another atom can then be evaluated from yet another third position, and so on and so on. Badiou makes this move to allow a relational guarantee in the absence of the gaze of a subject, whilst at the same time—like in *BE&E*—avoiding any recourse to something like the One of Aristotle’s unmoved mover, or similar theological premises. He argues that the sequence of relations does not just tend to infinity but *reaches actual infinity*. Since there is no temporality in the logics of being-there the relation whilst constructed linearly in its exposition can be thought of as immediately infinite. As such, in a familiar move for readers of *BE&E*, at infinity there is a partitive excess of belonging over inclusion. Once the relation reaches actual infinity, the parts within that infinite relation reach an excess over the elements and thus retroact (ontology → logical being) such that the necessity of any final gaze is made redundant by the folding of infinity upon itself. This ontological substratum of infinite multiplicity is “inaccessible” (or “forever withheld”<sup>5</sup> in John Milbank’s reading) because the infinite is the withdrawn determination of the world.

These ideas mark a return to various philosophical/theological speculations on the infinite as grounding finite being. But Badiou introduces an asymmetry into the relation, in that for him even though the One does not exist—ontology is infinite, *inconsistent* multiplicity—it still provides the conditions for the ones of atoms to ‘appear’. Or, at least, the conditions of how they logically appear,<sup>6</sup> with their inaccessible multiplicity

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lurking beneath the surface. But as this brief exposition has shown Badiou is a self-declared relationist, in the sense that for an event to locally actualise change the entire infinite network of relations has to retroact upon the situated world of those atoms. His insistence at the start of the *LOW* that worlds are only ever local<sup>7</sup>—thus avoiding the implications of totality, even in the logical realm—are not obviously concomitant with the infinite relation he posits; other than perhaps in the sense that after Cantor the infinite was pluralized.

If we were to imagine Harman checking a score sheet of Badiou's philosophy of the object, then, this is what I imagine he would write:

1. Badiou is a relationist in that individual objects are never more than their situation in a series of relations – CON
2. Badiou's 'atoms' bear more resemblance to objects than the reductionist notions of normal materialism, whether they be thought of as atoms, protons, quarks, or superstrings – PRO
3. There is an infinite withdrawal (inaccessible infinitude) in Badiou's theory of objects which forms the ontological heart of his theory – ??

It remains to be demonstrated how Harman also arrives at a similar infinite regress as the inaccessible/withdrawn heart of his theory of objects and how it differs from Badiou's.

### Harman Contra Relationism

In speculating about objects, Graham Harman extends Heidegger's analysis of the ready-to-hand and present-at-hand distinction of 'tool-being' to posit a system of vicarious causation between objects. Because for Harman all objects are withdrawn in their full being from one another, they cannot be exhausted by the relations in which they are entangled, such that—on the contrary in relationism—each individual could be defined fully by the total network in which it is embedded. Against his antagonist Whitehead he writes: "insofar as an object is more than its relations it must stand apart

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from any supposed monism of the world-as-a-whole, since a homogenous universe of this kind merely gives us the most radical form of relationism.”<sup>8</sup> Reacting against this tendency he observes: “The philosophical world has just spent an entire century nurturing everything that pertains to contexts and wholes. It is individual rocks and flowers that are now crying for our attention; this is now the more fertile cropland for twenty-first-century philosophy. And it is my view that Heideggerian tool-being, interpreted properly, is the swiftest vehicle to propel us toward a new theory of objects.”<sup>9</sup> A memorable example given in *Tool-Being* (*TB*) is of a washing machine sitting on the icy surface of a frozen lake. Although the two objects are touching, with the strength of the ice counteracting the gravitational pull of the washing machine sitting on top, neither realities of the objects are exhausted in the interaction. There is always more to the washing machine than the forces exerted upon the lake can detect. And vice versa there is more to the lake than the washing machine can detect; whose encounter with it remains at the level of its resisting surface. Harman writes: “the appliance reacts to some features of the lake rather than others—cutting its rich actuality down to size, reducing it to the that relatively minimal scope of lack-reality that is of significance to it.”<sup>10</sup> So, for instance, the fact that the water below might be poisonous to fish would not only be undetectable, but irrelevant to the washing machine.

Universalise this analysis and we have a general theory of the withdrawal and inexhaustion of all objects in the universe from one another. Rather than a uniform lump of matter constituting the homogenous substance of the universe, we are left with an invisible realm where there is always more to objects than can be detected by other objects. The ontological difference is rendered as immanent to objects: ontological being lurks behind the ontical appearance of objects. Yet Harman is also keen to remind his readers that “this is not a ‘two-world theory’ of the usual kind, in which a supposed real world inhabits one plane of reality and human images another. If we speak of a real hammer that withdraws from all

relation, this hammer is still the relational product of pieces that are still more deeply withdrawn; these hammer-pieces in turn are relational compounds of other withdrawn real objects, and thus presumably to infinity.”<sup>11</sup>

Harman’s criticisms of Xavier Zubiri are instructive here for understanding what he means by an object. For the examples of large scale, phenomenal objects such as washing machines, whilst not outside of his theory, at the same time are not totally representative of it. The question that arises in object-oriented philosophy, in which total relationism is rejected, is what constitutes an object, i.e. where an individual object’s limits lie and how composite objects are assembled to take on an integrative reality of their own? Harman criticises Zubiri’s notion of substantial unities between certain objects. For instance, where hydrogen and chlorine can be considered in a substantial unity as hydrochloric acid, or where two metals in a knife remain in a stable state; but whereas at the same time “the same thing cannot be said of the relation between a single person’s heartbeat and thumbprint, or between the large and small intestines.”<sup>12</sup> The question, then, is what constitutes a substantive unity which coheres an object as one? Rejecting the Aristotelian substance philosophy of Zubiri, Harman advocates a properly ontological solution in which *every relation forms a new autonomous object*. As he puts it: “two vicariously linked real objects do form a new object, since they generate a new internal space.”<sup>13</sup> As such, alongside the fact that any seemingly integral object such as a washing machine can be decomposed into an infinite regress of objects of which it is constituted (right down to its atoms), then, equally, relations between seemingly non-integral composites, if they have a relation at all form a new object. Even a human perceiving a tree forms a new object, which in itself constitutes a reality inexhaustible in its relation to any other object or observer. It thus transpires that object oriented philosophy is more relational than it first appears; if every new relation forms an object, it only resists the total relationism it rejects through the horizon of withdrawal it concomitantly posits, where there are ontologically necessary holes within the relational matrix.

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### Mathematising Relations?

In comparing Harman's theory with Badiou's in *LOW* the number of similarities, despite their obvious differences, is surprising. To take Badiou's example of the lone anarchist amongst the group of anarchists: that group can only cohere as a group inasmuch as their relation—a localised relation; in relation to other localised relations—coheres them as a single unity with which they can take on a rank of intensity according to the transcendental index. Obviously, this contradicts Harman to the extent that they have no withdrawn reality as objects; their ontological multiplicity that Badiou posits has no objective, localised existence, even if it can ambiguously retroact upon worlds. Nevertheless, on a fundamental level there seems nothing to stop Harman's philosophy of relation and objective withdrawal being thought through mathematical logics. Harman has written that he has "scepticism toward Badiou's program of a return to classical philosophy by way of mathematics."<sup>14</sup> And yet, scepticism or not, there is no immediately apparent reason other than a preference for certain types of philosophical pathways why Harman's theory could not be mathematised in much the same way as Badiou's logics of worlds. The Heideggerian commitments of Harman appear only as a launch pad for a philosophy that leaves Heidegger far behind.

Perhaps the biggest difficulty lies in the question of access to the withdrawn being of objects. For since Harman insists upon access to the withdrawn being of objects as only possible through some sort of metaphorical intuition, to what extent is this dependent on everyday language? Why would mathematics equally not be able to access the relations? Since there is a parallelism between relations—which we can think—and their withdrawn objects—which we cannot—mathematics would not be used to try and exhaust the withdrawn aspect of an object, which could be denoted in much the same way as the void in Badiou's philosophy: as a symbolic marker for nothing. Rather, more problematic would be the sense in which mathematics is thought and deployed, because intuitionist and other constructive paradigms would

not escape the injunction against correlationist thought. On the other hand, Badiou's Platonic conception of mathematics as having immediate access to being is more fruitful for avoiding the correlationist trap. Although it is the case that in Badiou's conception of the object there are no withdrawn objects—he saves this for ontological multiplicity—and his use of mathematics in his theory of being-there exhausts objects relationally, I cannot see any reason why this is consequent upon mathematics per se as much as upon Badiou's particular thinking through mathematics.

Perhaps a more convincing argument can be found by arguing negatively. If it really were the case that even a Platonic form of mathematisation was said to fail to access being, the alternative seems to be to endow the structures within everyday language with some privileged ability to intuit the meta-physical structure of reality. If this were the case, then Harman would be more Heideggerian than I read his theory as. Yet, equally, if it were true that in the next book there is a turn to using diagrams to explicate points then that alone would point in the direction of language not possessing unique access to the relations which form objects. Of course, there is large gap between mathematics being used to *model* a theory—in which case it is just an extension of it translated into a syntactically parsimonious form—and the use of mathematics proper, which should be judged, as it always historically has been, to undermine our commonsense understanding of the world derived through everyday language.

Whether Badiou starts with a decision in favour of axiomatic set theory, or Harman begins with the tool analysis does not seem to be critical. Rather, the final sticking point seems to be the extent to which a Platonic meta-physics is really actualised in contingent, phenomenal worlds,<sup>15</sup> and if/where its limits are? To a certain extent, the fact that Badiou can begin from mathematical axiomatics and Harman from phenomenology and both arrive at a relatively similar thinking of objects indicates that the gap—if there is one—cannot be all that great. There is surely a fruitful direction for future research lying somewhere at the intersection of these two thinkers.

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## NOTES

<sup>1</sup> Paper prepared for the ‘Real Objects or Material Subjects?’ conference at the Philosophy Department of the University of Dundee, Scotland, March 27th-28th, 2010.

<sup>2</sup> “*The one* as such, as I said, is not. It is always the result of a count, the effect of a structure... It is thus necessary to distinguish the *count-as-one*, or *structure*, which produces the one as a nominal seal of the multiple, and the one as *effect*, whose fictive being is maintained solely by the structural retroaction in which it is considered.” Alain Badiou, *Being and Event*, trans. Oliver Feltham (London: Continuum, 2005), Meditation 7, §4, 90.

<sup>3</sup> Alain Badiou, *Logics of Worlds: Being and Event II*, trans. Alberto Toscano (London: Continuum, 2009). Book II, Greater Logic, 1, §3, 167.

<sup>4</sup> Badiou, *Logics of Worlds*, Greater Logic, 3, Appendix, 345.

<sup>5</sup> John Milbank, “The Return of Mediation, Or the Ambivalence of Alain Badiou” *Angelaki: journal of the theoretical humanities*, 12 (1), 2007: 127-143 (138)

<sup>6</sup> In an interview with Tzuchien Tho Badiou admits that in logic his choice of Heyting algebras and Sheaf theory are experimental and not final; other logical structures could be used; only ontology is fixed by Cantor’s discovery and its implications. Alain Badiou with Tzuchien Tho, “New Horizons in Mathematics as a Philosophical Condition: An Interview with Alain Badiou” *Parrhesia* 3, 2007 [available online] [http://www.parrhesiajournal.org/parrhesiao3/parrhesiao3\\_badiou.pdf](http://www.parrhesiajournal.org/parrhesiao3/parrhesiao3_badiou.pdf)

<sup>7</sup> Badiou, *Logics of Worlds*, Greater Logic, 3, §3, 335.

<sup>8</sup> Graham Harman, *Prince of Networks* (Melbourne: Re.Press, 2009), 152.

<sup>9</sup> Graham Harman, *Tool-Being* (Peru, IL: Open Court Publishing, 2002 ), §24, 276.

<sup>10</sup> Harman, *Tool-Being*, §20, 223.

<sup>11</sup> Harman, *Prince of Networks*, 215.

<sup>12</sup> Harman, *Tool-Being*, §23, 253

<sup>13</sup> Graham Harman, “On Vicarious Causation” *Collapse II*, 2007, 191.

<sup>14</sup> Graham Harman, “On the Undermining of Objects: Grant, Bruno and Radical Philosophy,” In: *The Speculative Turn* [forthcoming Melbourne: Re.Press, 2010]

<sup>15</sup> Adrian Johnston expresses this concern: “Overall, his [Badiou’s] mathematical materialist ontology results in a refusal to grant a properly ontological status to material contingencies, to the states of the Universe studied by the natural sciences.” Adrian Johnston, “What Matter(s) in Ontology: Alain Badiou, the hebb-event and materialism split from within,” *Angelaki: journal of the theoretical humanities* 13 (1), 2008: 27-46 (31).



# Response to Nathan Coombs

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FIRST I WOULD LIKE TO THANK Nathan Coombs for his generosity in considering my work alongside that of Alain Badiou, one of the foremost philosophers in Europe today. More than this, there is a sense of even-handedness in Coombs's respective accounts of Badiou's position and my own: he does not aggressively take sides, and shows genuine interest in cross-fertilizing the two positions. Hence it is more relaxing to write this response than is usually the case in such situations. I will begin with the easiest parts of Coombs's article and gradually move toward the more difficult passages, a procedure requiring me to respond to his points in a different order from that in which they were made.

Coombs begins by admitting that there are glaring surface differences between my position and Badiou's. Badiou approaches objects by way of a "Platonic codetermination of thought and being" (I would simply disagree with Badiou that this codetermination is Platonic). By contrast, Coombs notes, my position involves "objects....that withdraw in their complete reality from the thinking subject." This is certainly accurate, with the possible caveat that the list of objects he offers ("cars, rocks, ice cream, Harry Potter, Gandalf") subtly effaces the difference I maintain between two kinds of objects: real and sensual. Only real objects withdraw. There are plenty

## Speculations I

of sensual, non-real objects that do not withdraw in the least, but are fully present to the mind and simply encrusted with superfluous qualities.<sup>1</sup> Readers have often mistaken my long and inclusive lists of objects qua objects for a perfectly flat ontology in which genuine things are on the same footing as unicorns. But this is the position of the early Bruno Latour<sup>2</sup> (among others), not of object-oriented philosophy.

Nonetheless, Coombs aptly notes the basic difference between me and Badiou. Regardless of this difference, Coombs sees two points of union between us. The first is that “both the atomic relationism utilised by Badiou to secure objects, and also the securisation of the integrity of individual objects and their parts in Harman’s philosophy, both rely on some sort of infinite relation to secure finite being; whether that is ‘inaccessible’ infinitude for Badiou, or the infinite regress for Harman.” Note that this supposed point of agreement (reliance on infinite relation) would require me to make greater concessions than Badiou, since Badiou already incorporates relation into the heart of his theory of objects, while I hold that objects are not inherently constituted by relations at all. The second supposed point of union is that, just as Badiou already sings the praises of mathematisation, I should feel obliged to do so as well. For in Coombs’s view: “Harman’s aversion to mathematisation has no obvious basis within his object oriented philosophy, but rather rests in the philosophy’s ambiguity regarding ‘ideal’ structures...” And though he states in passing that the same ambiguity is found in Badiou’s *Logics of Worlds*,<sup>3</sup> Coombs’s call for mathematisation clearly plays more into Badiou’s hands than into my own. Despite Coombs’s balanced tone, he ultimately holds that it is I who must change: by admitting that my philosophy is relation-dependent after all, and that there is no good reason for me to oppose a mathematised conception of objects.

In the section “Harman Contra Relationism,” Coombs gives a fine compact summary of my position. He gets the point of the “icy lake” example from *Tool-Being*,<sup>4</sup> and notes the central claim that all objects withdraw from each other and not just from human or animal awareness. He also understands the im-

portance of my claim (against Xavier Zubiri<sup>5</sup>) that naturalness should be no part of the definition of objects. But when I say that every relation forms a new autonomous object, Coombs concludes that object-oriented philosophy is therefore more relationist than I am willing to admit. Yet this is incorrect, due to a series of distinctions that my critics and sometimes even supporters seldom note. For the past hundred years it has been customary to distinguish between the “internal” and “external” relations of any given thing. In a relationist ontology, all relations are internal: a thing has no reality apart from its relations with other things, ultimately yielding a holistic model of the cosmos in which all things are mutually defined by one another. For object-oriented philosophy, just as for many forms of empiricism, all relations are treated as external to their terms. All things withdraw absolutely from their relations. Since relations do exist, every philosophy (including mine) must account for them in some way. But this does not mean that every philosophy is a relationism. That is true only for theories of internal relation.

Now, my position also draws a further distinction within external relations: a droll (but not facetious) rift between the foreign and domestic relations of a thing. My foreign relations include my interactions with friends and family, the city of Cairo, the numerous trees on Brazil Street, the mosquitoes that stalk me, and the tidal forces of the moon. Surely all these things can affect me and often do. But these effects require work; they do not occur automatically just because I and these things both exist. Stated differently, objects withdraw from their foreign relations. It is certainly true that I would perish if all oxygen were now sucked away from Egypt by a black rainbow, but note that what would perish in that case is me, not me in my relation with oxygen, which *ex hypothesi* would be absent. Consider further the cores of nuclear reactors and all the lethal snakes and grams of poison that currently exist. Any of these objects can affect me if brought into sufficient proximity, but that does not mean that they are affecting me simply because they exist. The default state of reality is that I am protected by firewalls from the objects lying outside me.

## Speculations I

In short, although foreign relations often find devious ways to corrupt and destroy their terms, this must be taken as a special case in need of explanation. Like all other objects I am withdrawn from the world, deeper than any relation I have with anything else.

The domestic relations of objects are somewhat different, though less than might be supposed. My domestic relations involve the very pieces of which I am composed: heart, liver, kidneys, red and white blood cells, neural pathways, DNA, atoms, protons, and so forth. Clearly I need these relations in order to exist, in a way that I am not even dependent on oxygen: for I myself am irreducible to my relation with oxygen, which can therefore affect me only through its effects on my pieces. That is to say, only by destroying the relations between my lungs, blood cells, and brain can the absent oxygen cause me difficulty, not through direct effect on me as a whole. However, even though I am causally dependent for life on the arrangement of my pieces, I am in no way ontologically dependent on them. Though it may sound strange, even my relations with my own components are external relations. This can be seen from a case of “redundant causation,” in which various cells in my body are removed or replaced, without evident impact on me as a whole. Further, it seems obvious that I can shave or cut my hair while still remaining the same person. So too, the one-armed or one-legged Harman would still be Harman after an accident. My heart could be removed and replaced with an artificial heart without destroying who I am.

The point is this: object-oriented philosophy adamantly excludes all forms of internal relation. And in this way it differs markedly from Badiou, who depicts reality in a way wholly dependent on internal relations. For instance: “there exist relations immanent to any being which is inscribed in the world.”<sup>6</sup> And though there is much complexity in Badiou’s treatment of the respective roles of appearing, objects, and multiplicity, of the logical and the ontological, and the atomic; and despite his (unconvincing) claim in *Logics of Worlds* that he has succeeded in thinking objects without subjects, I find no sense in which Badiou liberates objects from internal

relations. The issue is worthy of extensive treatment, but can only be hinted at here.

That leaves the topic of mathematisation. Coombs notes my scepticism on the topic,<sup>7</sup> but sees it as beside the point. For in his view “there is no immediately evident reason other than a preference for certain types of philosophical pathways why Harman’s theory could not be mathematised in much the same way as Badiou’s logics of worlds.” Coombs plausibly implies that my favored pathway is that of Heidegger, but he also absolves me of this bond by stating that “the Heideggerian commitments of Harman appear only as a launch pad for a philosophy that leaves Heidegger far behind.” In many ways it is good to leave Heidegger far behind, and I am relieved that Coombs does not over-identify my position with Heidegger’s own. He hints that my greatest danger from alliance with Heidegger would be to lapse into the German thinker’s view that “the structures within everyday language [have] some privileged ability to intuit the meta-physical structure of reality.” Coombs assumes or at least hopes that I am not making this error, and optimistically records the rumor (which is true) that there are numerous diagrams in one of my forthcoming books.<sup>8</sup> But this use of diagrams does not contradict my resistance to mathematised ontology. By no means am I saying “everyday language good, mathematics bad,” and hence it is irrelevant when Coombs cites the old scientific trope that mathematics has always been able to “undermine our commonsense understanding of the world derived through everyday language.” After all, I too am opposed to the commonsense understanding of the world, as any reader of my rather strange books must instantly realize.

My view of everyday language, contra Coombs, is that it tends to reduce the world to hackneyed, prefabricated categories. What I espouse instead is a method of metaphorical language, which speaks of things indirectly, or says them without saying them: namely, by alluding to them. But this claim should not be identified in overly literal fashion with a preference for the poems of Hölderlin over the scientific breakthroughs of Einstein and Bohr, which moreover is not

## Speculations I

my personal preference at all. Rather, my preference is for what Thomas Kuhn calls paradigm-shifting knowledge over “normal” knowledge, though I interpret this difference in a somewhat unusual fashion. Kuhn defines normal science as the routinized solving of puzzles within a horizon of unquestioned background assumptions: a paradigm.<sup>9</sup> At rare revolutionary moments in science (and this does sound very Badiouian) there is a paradigm shift in which facts are no longer accumulated in piecemeal fashion, but the scientist’s very conception of her subject matter is vastly transformed. My reading of Kuhn’s paradigm is not the “sociological” one that it represents an irrational collective framework beyond rational redress. Instead, I hold that the paradigm represents the object of knowledge beyond any amassing of definite qualities that can be discerned in it. I also hold that this is not an especially new idea, but a venerably classical one. For this is precisely what Socrates means whenever he insists that we must know what virtue, justice, or friendship are before we know what qualities they have. And moreover, since we philosophers are merely lovers of wisdom rather than wise, we will never fully know what virtue, justice, and friendship are, unless we become gods. This incessant need for a knowledge beyond qualities is the central paradox of Plato’s philosophy, and refutes in advance any claim that Plato joins Parmenides in upholding the codetermination of thought and being. But returning to Coombs, the point is this. My intention is not to uphold poetry and the fine arts against mathematics and the sciences (I am an avid reader of the history of science). Instead, my claim is that given the incommensurability between objects and any translation of them, or between real and sensual objects, our approach to reality must be through allusion rather than through direct formal modelling. I am opposed above all to the idea of the codetermination of thought and being, and here it will be evident why it is difficult to link Badiou’s position with my own. I have no objection to formalisation, as long as it does not claim to exhaust the reality of the things themselves and makes no pretensions to the absolute. But then this would

not be much of a formalising enterprise. It would amount simply to the helpful use of diagrams for organizing difficult thoughts, as in my forthcoming book.

In closing I make a few final points. Coombs says of my position that “there is a parallelism between relations—which we can think—and their withdrawn objects—which we cannot.” I would put this differently. Relations for me are objects, after all, and cannot be thought directly any more than any other object can. What can be thought, in my position, are sensual objects as translations of real ones: we directly encounter sensual palm trees and donkeys, but even the mighty power of mathematics cannot give us the real ones, which forever withdraw beyond view. When Coombs suggests that mathematics need not claim to exhaust withdrawn being, this is potentially reassuring. However, this is not the sense one gets from reading an excellent pro-formaliation book such as Quentin Meillassoux’s *After Finitude*, where we find the very Badiouian statement that “all those aspects of the object that can be formulated in mathematical terms can be meaningfully conceived as properties of the object in itself.”<sup>10</sup> And I find no reassurance at all in Coombs’s further claim that instead of trying to exhaust the withdrawn reality of objects, mathematics would “[denote them] in much the same way as the void in Badiou’s philosophy: as a symbolic marker for nothing.” There can be no treatment of objects more opposed to my own than to view them as symbolically denoted instances of void. My objects do not merely haunt the known as inconsistent residue. Objects for me withdraw into their own genuine and very specific reality, and engage in duels with one another no less than with human formalizers. And this is yet another reason why I cannot bring myself to agree with Coombs that both Badiou and I “arrive at a relatively similar thinking of objects” and “that the gap—if there is one—cannot be all that great.” Nonetheless, I again find myself in grateful agreement with Coombs’s final sentence: “There is surely a fruitful direction for future research lying somewhere at the intersection of these two thinkers.”

# Speculations I

## NOTES

- <sup>1</sup> Graham Harman, "On Vicarious Causation," *Collapse II*, 171-205.
- <sup>2</sup> See Bruno Latour, "Irreductions," trans. John Law, in *The Pasteurization of France*, trans. Alan Sheridan and John Law. (Cambridge, MA: Harvard University Press, 1988.)
- <sup>3</sup> Alain Badiou, *Logics of Worlds: Being and Event II*, trans. Alberto Toscano (London: Continuum, 2009).
- <sup>4</sup> Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects*. (Chicago: Open Court, 2002.)
- <sup>5</sup> See *Tool-Being*, 243-268.
- <sup>6</sup> *Logics of Worlds*, 226.
- <sup>7</sup> Graham Harman, "On the Undermining of Objects: Grant, Bruno and Radical Philosophy," In: *The Speculative Turn*, ed. Levi Bryant, Nick Srnicek, Graham Harman (Melbourne: re.press, forthcoming 2010).
- <sup>8</sup> Graham Harman, *The Quadruple Object* (Winchester, UK: Zer0 Books, forthcoming 2011). The book will appear some months earlier in French translation: *L'objet quadruple*, trans. Olivier Dubouclez (Paris: PUF, forthcoming 2010).
- <sup>9</sup> Thomas S. Kuhn, *The Structure of Scientific Revolutions*. (Cambridge, MA: MIT Press, 1970.)
- <sup>10</sup> Quentin Meillassoux, *After Finitude: Essay on the Necessity of Contingency*, page 3. Emphasis removed. Trans. Ray Brassier. (London: Continuum, 2008.)



# Networkologies

## A Manifesto, Section I

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***Networkologies: A Manifesto, Section I***

***Note to the Reader***

[The following essay presents excerpts from the soon to be completed work in progress entitled *Networkologies - A Manifesto: Towards A New Philosophy of Networks*. This book is the second and central book in the projected networkologies series. The manuscript for the first book in the series, *The Networked Mind: A New Image of Thought for a Hyperconnected Age*, is complete, and currently being proofread in preparation for solicitation for publication. This text provides the preparatory context for a philosophy of networks by placing this endeavor within the context of philosophical and scientific debates of the twentieth century. By means of examinations of recent developments in artificial neural networks, cognitive neuroscience, and contemporary continental philosophy and critical theory, *The Networked Mind* works to demonstrate the need for the philosophy of networks developed in *Networkologies - A Manifesto*.

A network is a diagram for the thinking of relation. This diagram, which does not merely describe relation, but performs it, can help us to understand the structure, dynamics, and potentials of our networked age. Networkological thought works to extract the potential meanings, concepts, programs, and perspectives which the network diagram makes available to us, and it is with this in mind that the primary commitment of a philosophy of networks must be to the thinking of relation, and to understanding what relation could mean in regard to the network diagram.

The text is written in manifesto form, and as such uses mostly propositional language and minimal citations, so that the entirety of the system can be presented in microcosm. The graphic format of the text aims to demonstrate what a networkological text looks like, a matter which is discussed in the text itself.

The first section of the manifesto, which comprises the body of this article, is divided into two parts: *orientations* (comprised of *principles* and *forms*, and *diagrammatology*. Within the section on *orientations*, the *principles* segment describes the basic principles which guide the networkological project, while the *forms* segment describes the manner in which these principles manifest themselves within the presentation of networkological thought. The section entitled *diagrammatology* describes the network diagram itself in its many permutations, so as to demonstrate how an entire worldview can be extracted therefrom. Forthcoming sections of the manifesto then perform the work of developing an ontology and ethics based on the intersection of the network diagram with the notions of the one and the commitment to relation, which are the primary ontological and ethical notions, respectively, which structure the networkological endeavor.]

# *Networkologies*

## A MANIFESTO

The network is increasingly one of the fundamental metaphors whereby we have described the character of our age. Despite this, there has yet to be a philosophy of networks, a philosophy which takes the network as its foundation.<sup>1</sup> A networkological approach aims to address this fact.

A network is a diagram for the thinking of relation. This diagram, which does not merely describe relation, but performs it, can help us to understand the structure, dynamics, and potentials of our networked age.

Our age is one in which relation is increasing, reified entities are being reworked, and previously existent relations are becoming ever more evident. These changes, which have given rise to what might be called the 'networked age,' are partially due to the rise of the Internet, the World Wide Web, global capitalism, etc. But such changes cannot be reduced to the sum of their parts, they are always the result of the interplay of material and ideal, actual and virtual.

From the networkological perspective, the entire world can be viewed as composed of networks. A chair is a network, and so are atoms, concepts, words, societies, organisms, brains, economies, etc. Understanding the different types of networks, their modes of structuration, appearing, interaction, and potentials, is the work that needs to be done to create a philosophy of networks.

*To paraphrase a famous philosopher - "To those who look at the world networkedly, the world will look networkedly back."<sup>2</sup> This is the fundamental wager of the networkological endeavor. The networkological perspective takes the notion of relation and works to elevate it to the notion of a concept, diagram, and project.*

**orientations** [*principles*] Relation, Process, Reification, Refraction [*forms*] Method, Discipline, Text, Context, Immanence, Networkologies, Groundings

site map

**diagrammatology** Diagram, Precision, Intensity, Topology, Combination, Symmetry, Difference, Identity, Societies, Combinatorics, Dynamics, Systems, Genetics, Levels

[Forthcoming Sections:]

**matrixology** [*extension and appearance*] Matrix, Extension, Mattering, Actuality, World, Self-Differing, Paradox, Quandry, Obstacle, Opening, Potential, Privacy, Mind, Complexity [*mnemosystemics and combinatorics*] Memory, Intertwining, Form, Structure, Virtuality, Manifestation, Governing, Understanding, Affection, Mentalities, Machines, Life, Memory System, Evolution, Persons, Perception, Awareness, Excess, Qualities, Experience, Horizon, Excess, Brains, Consciousness, Modulation, Self-Consciousness, Wideware, Quasi-Life, Plexes, Culture, Semiotics, Mediology, Meaning, Psychology, Emotions, Mental Structures, Emotional Structures, Psyche, Metabolics, Reflection, Intuition, Praxis, Knowledge, Objects, Metaphysics, Adaptation, Problematics, Critique, Experimentation, Landscape, Meta-Understanding, Philosophy, Meta-Philosophy, Relationalism, Fundament, Synergy [*freedom and opening*] Freedom, The Virtual, Universe, Opening, Generation

**network ethics** [*metaleptics*] Ethics, Value, Attribution, Proto-Value, Control, Development, Regulation, Diversity, Learning, Programming, Cultural Evolution, Supra-plexes, Meta-Evolution, Paranoia, Paranoid Social Structures, Capitalism, Limitation, Meta-Robustness, Liberation, Choice, Trust, Exchange, Leap, Metalepsis, Historicity, Call, Embeddedness [*practices*] Maxim, Practics, Heuristics, Evaluation, Duty, Example, Pain, Pleasure, Harm, Curiosity, Therapeautics, Clinic, Diagnostics, Social Practics, Network Analysis, Science, Democracy, Socialism, Competition, Political Practics, Cross-Activism,

Articulation, Crossing, Discourse of the Oppressed, Access, Pedagogy, Education, Academics, The Public Intellectual, Ways of Knowing, Obsolescence, Hope, Art, Inspiration, Aesthetics, Production, Creation, Pataphysics, Decision, Modernity, Catastrophe, Appeal, Pax Capitala, The Age of Networks, god, Relationalism, Commitment

# orientations

[*principles*]

**Relation.** A network is a diagram for the thinking of relation. That is, a network shows how entities relate. A network does not merely describe relation, it performs it. Networkological thought works to extract the potential meanings, concepts, programs, and perspectives which the network diagram makes available to us, and it is with this in mind that the primary commitment of a philosophy of networks must be to the thinking of relation, and to understanding what relation could mean in regard to the network diagram. This is not to deny the existence of relatively isolated elements in the world, so long as these are seen as ultimately related to the contexts and processes of their production. The networkological approach is, however, against any theory which presupposes fundamental divisions between mind and body, epistemology and ethics, the social and the natural, science and culture, or any approach which views any given binary opposition, reified entity, or limited list of hypostatized terms as ultimate or fundamental, for any term or entity is merely an aspect of what is. The only ultimate we can know, and even then only an aspect of what is, is *the open*.

*the open*

## Speculations I

**Process.** The networkological approach, as a philosophy of relation, is also necessarily a philosophy of process, for relation needs to be understood not only spatially, but temporally as well. From such a perspective, any entity which has *individuated* itself from a *ground* is necessarily related to that ground, and to other entities to which it may be related at a different *level* of scale or abstraction. No entity is ever absolute, but rather an element of more encompassing frames of reference, and no product is ever more fundamental than the processes of its production. Since all networks, no matter how static they appear, have at some point been produced, all networks and network elements are necessarily dynamic, examples of relational entities-in-process, any one of which is an *x-in-process*.

*individuation,  
ground, level,  
x-in-process,  
reification*

**Reification.** When an entity is viewed in a way which is separate from processes of its production, this is known as *reification*. Reification gives rise to forms of knowledge and understanding which are based upon firm separations, hypostatized entities, otherworldly or transcendent standards of value, rigid categories, unrelated histories, etc. Following Alfred North Whitehead, who describes reification by means of the notion of the ‘fallacy of misplaced concreteness,’<sup>3</sup> the networkological endeavor views reification as a necessary step towards understanding what is, but one which is vastly overutilized, and in a manner which has many potentially harmful effects. The forms which reification takes, which will be examined in greater detail in later sections, include *serial repetition*, *hyper-objectification*, *hyper-linking*, *hyper-resonance*, *over-grounding*, and *transcendence*. In its many forms, the networkological enterprise therefore seeks to limit the damage which reification creates in its many forms.

**Refraction.** The attempt to think relation in regard to the network diagram manifests itself in the networkological endeavor from many possible angles and levels of scale. As expressions of the whole from which they emerge, each entity and network in the world are ultimately perspectives thereupon, and in this sense, each part contains, in its way, the whole of what is. The networkological approach is therefore not only

*networkological  
principles:  
relation,  
process,  
holography,  
fractality,  
inter-mediation,  
emergence*

relational/processural, but also holographic. This holography extends to all levels of scale, such that within the bounds of all that we know that exists, the holographic principle not only holds but, in a weak and relative sense, holds in a manner which is fractally self-similar in nature. That is, within the limits of the existent at either end in regard to the open, all networks are the product of networks at a micro-scale, and produce other networks at a macro-scale. Furthermore, in their relational, processural, holographic and fractal intertwinings, all entities mediate all other entities, if in differing degrees, both in regard to each other, as well as in regard to the whole of what is. This intermediation is what constitutes space and time, as well as mind and matter, for mind is the mediation of matter by itself, just as matter is the actualized localization of mind in space and time. Each of these abstractions indicates an aspect of the manner in which matter is virtually present in other matters in the whole of what is. Both these abstractions and the matters they describe are expressions of the manner in which the nested networks of all that is comes to experience itself via relation by means of a process of self-differentiation known as emergence. From this perspective, the ethico-epistemo-ontological commitment to relation which founds the networkological endeavor articulates itself in regard to the five corollary principles articulated above, namely, those of *process (relation-in-time)*, *holography (relation-in-space)*, *fractality (relation-in-level)*, *inter-mediation (relation-in-virtuality)*, and *emergence (relation-in-differing)*. It is based on these principles that the networkological approach articulates its relation to the wider world of nature, meaning, matter, mind, and society.

[forms]

**Method.** The networkological enterprise aims to describe a philosophical system which can help us understand what is. In what follows, the formal aspects of this system will be explained. Due to its commitment to relation and process, as well as to the project of reducing the harmful impact of excessive reification on human cultural relations to the world, the networkological approach is *transgressive of traditional atomizations, distinctions, and reifications* which often serve to structure contemporary discursive and philosophical

networko-  
logical critique

## Speculations I

projects. Not only does the networkological perspective work to transgress traditional reifying formulations, but it also implies a method of critique thereof, a method of analysis. Any reified entity (ie: the subject, the signifier, production, being, etc.) or distinction (ie: mind/body, subject/object, etc.) will necessarily be broken down by **networkological critique**, and re-related to the wider contexts within which it exists and from which it has emerged. Networkological critique blasts apart reified entities, revealing the dynamic networks contained within. Drawing inspiration from the analytical methods of Gilles Deleuze, Gilbert Simondon, G.W.F. Hegel, Karl Marx, and Henri Bergson, the goal of networkological critique is to demonstrate the relations hidden behind, beneath, within, and around what others view as elementary. For while some networks may work to reify particular networks or parts thereof, the networkological approach views any reified structure as ultimately a derivative of the process of its own production.

**Discipline.** Networkological critique is necessarily *transgressive of traditional disciplinary boundaries*. Ranging freely from physics to metaphysics, societal analysis to abstract math, literature to art and culture, politics to ethology, networkological philosophy is necessarily committed to a polyform perversity in regard to conventions, strictures, and norms.

**Text.** Networkological texts are necessarily polyform, and seek to increase potential modes of relation between texts and their **interactors**. Networkological texts aim to use many different voices and forms of writing, such that many different types of interactors can access these texts. Reified categories which dictate that certain forms of writing need to be used to express certain types of ideas are simply not applicable to our networked age. This does not mean, however, that networkological texts dispense with all forms of division or separation of elements within them. Rather, these texts often increase the atomization of their components so as to allow a greater multiplicity of the forms of their potential (re)combination by potential readers. In this manner, networkological texts are symbolic assemblages which take Bertolt Brecht's imperatives for theater and apply them to the realm of theoretical text. Working to undermine the mythologization of a text as a unified whole, parts of a text are separated out so as to allow for multiple forms of their potential interrelation. Brecht's dictum of a "**radical separation of the elements**"<sup>4</sup> can therefore serve as a guide for the construction of a networkological

networko-  
logical text,  
interactors



text. With this aim in mind, networkological texts are structured such that images, citations, captions, and written bits all float, while various textual, graphical, and organizational devices are deployed so as to assist the potential de- and re-linkage of parts. Furthermore, because networked diagrams show as much as they say, performing the thought they describe, networkological texts make extensive use of diagrams and images. The goal is to present ideas visually as much as verbally. The result is a text which is perhaps uniquely suited to the reading styles at work in our

*“radical separation  
of the elements”  
- Brecht*

hypervisual age. Networkological texts are multi-planar products, inspired by the ‘surfing’ employed when users jump between websites, windows, screens, texts, captions, images, and devices in our hypermediated times. The activity

of reading today is suffused with surprise jumps, tunnels, fragments, and layers of text and image, and networkological texts aim to capture aspects of this not only in what they say but also what they do. This is not only so as to be in sync with the needs of our times, but to also experiment to find more relational forms of textual structuration. Beyond books and websites, the goal is to push through distraction to new forms of ideational proliferation and association. Networkological writing therefore aims to interact with its readers in a manner which is inherently multiple and complex. While not all networkological texts may employ all of these means at any one time, it is imperative that the networkological enterprise as a whole do so.

**Context.** Many of the philosophies and theories which have influenced the development of the networkological perspective were written in a particular context, namely, in France during the period immediately before and after the failed revolution of 1968. The movements associated with this period in France, which generally go under the names of structuralism and post-structuralism (the critique and continuation of structuralism), have had an enormous influence on nearly all fields of the humanities within the English-speaking world in the last twenty to thirty years. Most of the philosophies in question, however, were written before the massive technological and social changes which have brought about a new era, that of the internet, an age of networks. It is hard to underestimate the massive changes which the internet has and will bring to our whole way of being in the world, of which reading, writing, and philosophy indicate one small part. It would be naïve to think that we can simply do philosophy in the same way as before. While structuralism and post-structuralism were written during the rise of what many have called late-

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capitalism, we need new models to help think our new age. While there are many ways in which the networkological perspective differs from the post-structuralism which preceded it, the most immediately apparent, particularly on a textual level, is that of access. Post-structuralist texts in particular were often written in a manner

*“a network is a diagram for the thinking of relation. it does not merely describe relation, it performs it.”*

which aimed to combat the increasing commodification of knowledge by means of an effort to make the concepts presented in these works difficult to reify and commodify. The primary goal of this was to stop this form of thinking from being reduced to sound-bites, and the philosophers to stars (as often happened in France at the time). But we live in different days. Few contexts could be more different than

France in 1968 and the global English netscape of the early twenty-first century. No longer is there much of a danger of philosophers becoming stars, nor do we really imagine that the difficulty of a text is likely to stop efforts to reify its content. Rather than try to escape the influence of commodification on our forms of knowing by means of defensive structures, we need instead to understand what this commodification might mean, and what hidden potentials for philosophy and action it may conceal. Evolution does not go backwards, and if we are to take what is good in the age of networks use it to fight that which is harmful, we need to understand these mutations so as to go through and beyond them, rather than nostalgically yearn for what has been left behind. It is for this reason that the networkological endeavor aims to update the writing of philosophy and theory so as to fit the needs of the age of the internet. Rather than avoid sound-bites and accessible discourse, the networkological perspective aims to proliferate the separation of the elements, to use different sorts of discourses for different aims, just as networked systems alter their approach based on the circumstances in which they find themselves. A 'one-size-fits-all' approach to discourse hardly indicates an approach in sync with the proliferation of discourses, perspectives, and connections inherent to our ever more networked age. It is for this reason that the networkological approach will not sacrifice the development of novel terminologies, so necessary for the imagining of new worlds, nor accessible discourse, so necessary to bring theory beyond the realm of universities and academic writing. Within the cultural context within which this text was written, the university is where our society sends thoughts to die, and where it sends dangerous minds when it wants to put them out to pasture. From such a perspective, writing a text accessible to the

non-specialist, which speaks to multiple audiences, which explains implied context in a manner which does not support the contemporary separation of texts into exegetical and novel, is a political act. Academics who defend their writing as deep because inaccessible retain a myth that a writer must be one or the other, but if the age of networks has taught us anything about authorship and the self, it is that we are always plural. It is in this sense that just as networkological texts aim to proliferate the separation between the elements of which it is composed, so does networkological discourse aim to operate at multiple levels. Speaking in philosophical jargon in some circumstances and slang in others, drawing examples from obscure areas in the sciences in some cases and pop culture in others, switching tones and modes of address within the same text and sometimes within the same paragraph or sentence, the networkological approach to discourse is based on relevance to context rather than an ultimately atavistic notion that there is only one form in which philosophy can and should be written.

***Immanence.*** Due to its commitment to the development of a fully relational way of looking at the world, the networkological perspective aims to develop a completely *immanent* or ‘flat’ philosophical system. This has two primary implications. The first is an injunction against any term which implies some sort of reified, transcendent entity needed to provide for the coherence of its system. This approach, known as ‘old fashioned metaphysics,’ will be avoided, and new forms of metaphysics, immanent and relational forms, will be substituted in its place. Metaphysics is unavoidable, for there are many aspects of the world which cannot be known directly, but only by means of their effects. And as we will see later in this inquiry, metaphysics is also a part of all knowledge. Thus, it is not a question of avoiding metaphysics, but of the extent to which one does metaphysics, and how. For the networkological endeavor to be relational, it is essential that its metaphysical terms are defined relationally, rather than in a reified manner. Beyond this, the second implication of its desire to produce a flat and immanent system is that the any metaphysical terms which are developed must not conflict with the findings of contemporary science. This is not to overvalorize science, but simply to argue the need for what Freidrich Nietzsche might call a ‘this-worldly’ type of metaphysics which can form a part of a this-worldly philosophy. To be consistent with the findings of science is not to necessarily agree with the way scientism frames the world, and more will be said about this later in this work. But for now let it be said that science is one of the ways in which our actions come into greater sync with the world, and one

## Speculations I

of the primary goals of the networkological enterprise is to increase this sync. Relational philosophy, including metaphysics, and non-reified forms of scientific practice can and should both be a part of this endeavor. While there are many controversies about how to interpret science, the networkological endeavor will employ aspects of the discourse produced by science in an effort to create a this-worldly, immanent philosophy which does not contradict the best aspects of the way in which scientific practices have worked to increase the sync between human action and the world. All of which means, of course, that aspects of the networkological endeavor can be brought into question by future scientific discoveries. The fact that many of its aspects can become obsolete is a necessary admission on the part of relational approaches to the world. That said, even when parts of the networkological approach need to be reworked due to future scientific discoveries, or other types of change within our relation to the world which we cannot have foreseen, the general relational commitments which structure the networkological approach point the way in which future scientific and cultural discoveries could be integrated into the general relational perspective articulated therein. In this sense, the networkological perspective is in some sense realist in its relation to science, so long as we do not take the term realism to mean a belief in the impoverished view of reality put forth by scientism. Rather, this approach to realism is grounded in the belief in unavailability of metaphysics, and the benefits of some forms of metaphysics and scientific practices over others. Thus, the realism put forth by the networkological approach is also necessarily speculative, a type of speculative realism. The full meaning of these terms in relation to scientism will be developed in full later in this text.

***Networkologies.*** Beyond text and discourse, the networkological position takes a transgressive relation to the standard divisions that structure philosophy. Philosophy has traditionally fractured its investigation of the world into a series of domains, such as epistemology, ontology, metaphysics, and ethics. In its commitment to thinking relation, the networkological perspective does not see these as anything more than various lenses upon the relation-in-process of all that is. While the details of the concepts structuring the networkological enterprise will be discussed in detail later in this text, the brief sketch which follows will help describe the overall relationality of the form of this conceptual network. The networkological perspective manifests its ***commitment to*** *grounding (ethico-), giving rise to (onto-), manifestation (epistemo-)*

*relation* epistemologically by means of its concept of *the open*, ontologically by its concept of *the oneand*, and ethically by its concept of the *call to robustness*. As with all networkological terms, these concepts do not indicate domains or realms as much as aspects, sides, moments, or perspectives, such that multiplication of conceptual names and terms should therefore be seen as so many holographic views on the emerging relation of what is. Thus, each of the primary sides of the networkological philosophical system has its own way of relating to other terms, in that the commitment to relation (ethico-) *grounds* the oneand (onto-) and the open (epistemo-), the oneand *gives rise to* the open and the commitment to relation, and the open provides the perspective whereby we can see the oneand and the need for the commitment to relation, that is, it *manifests* them. Any examination of one of the

*self-differing,  
relation-in-process,  
emergence-in-relation*

terms will lead ultimately to the others. Furthermore, when we examine each of these terms in greater detail, we will see that they then shatter, fractally giving rise to conceptual sub-networks which

repeat their inter-mediation at further levels of scale. From an epistemological perspective, for example, the open gives rise to more refractions of key terms as they interact with fragments of the others already mentioned. This manifests according to three forms, namely, the undecideability known as *the fundamental obstacle*, the ontological *quandary of potential*, and the ethical demand known as *the appeal of the other*. Moving from the epistemological to the ethical, we see how the call to robustness (freedom, ethics from the future) requires an *attentiveness* to this appeal of the other (attention, ethics in the present), resulting in the commitment to relation (decision, ethics in the past), which grounds the system as a whole. And from an ontological perspective, the oneand, which gives rise to space and time, actual and potential, also gives rise to emergence. Emergence then displays relation under the aspect of potential, just as relation displays emergence under the aspects of the actual, while both of these are manifestations of *self-differing* in the process of coming to be as relation-in-process/emergence-in-relation. Continuing this line of thought by further dividing its approach to what is (the onto-), the networkological perspective describes the foundation of all that is in regard to its existence by means of the term *matrix*. The investigation of matrix and its modes of appearance, including, the open, the oneand, and the other, gives rise to the series of perspectives known as *matrixology*. The *modes of appearance* of matrix include emergence, relation, spacetime, location, perspective, matter, mind, actual, potential, past,

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future, present, variance, invariance, separation, connection, aspect, element, context, etc. When emergence occurs in matter in the past, it is called *actual*, while the term *potential* is used when emergence in matter has yet to occur. And when emergence gives rise to itself, and hence relation, it is known as self-differing, emergence-in-process, or simply as emergence, for *emergence always contains itself at a higher dimensional level*, it is what gives rise to the production of layers of difference and relation as such. Moving to the ethical, the extraction of guides for action of individuals and collectives from the analysis of networks in the world is known as *network ethics*, just as the analysis of the potentials inherent in the network diagram is known as *diagrammatology*. Because diagrammatology describes the network diagram in its most basic form, it is from this aspect of the networkological perspective that we will begin, though in principle any of these divisions of the networkological enterprise could act as a point of entry. In light of all that is stated above, we can see that the networkological perspective recasts the traditional philosophical divisions, such that ontology through a networkological lens becomes matrixology, epistemology becomes diagrammatology, while the study of the implications of these are considered by network ethics. The rest of this text will work to fill out precisely what the concepts just described mean.

**Groundings.** All of the concepts and terms employed by the networkological perspective are developed so as to be in sync with the varied aspects of the principle

of relation, including process, holography, fractality, inter-mediation, and emergence. Each concept is necessarily a holographic and fractal intermediation of the relation-in-process of the whole, indicative of the manner in which emergence manifests itself as relation within philosophy. When terms are contained, nested, or intertwined within each other, these points of self-containment do not indicate self-contradictions, as might be assumed from a non-relational perspective, but rather describe the structure

*the  
thread*

of the networkological enterprise itself. For in fact, these nestings indicate foldings between levels of the networkological enterprise, thereby manifesting its topological form, the manner in which its terms and concepts layer and intertwine around the self-containing self-differing which is emergence-in-relation / relation-in-process. Emergence is fundamentally non-totalizing, it moves within itself while standing still, as relation-differing and differing-in-relation. It is how relation manifests itself in time as that which is not one with itself. Emergence is always nested within itself, giving rise to itself, such that self-containment is not something to be eliminated as much as understood. Emergence as a temporal structure is thus perhaps best described by means of means of 4...n-dimensional, non-orientable surfaces such as a cross-cap or Klein bottle, so long as these shapes are only seen as illustrations of a process which is fundamentally plural, composed of non-linear networks of relation-in-process at multiple levels of scale, of which non-orientable diagrams describe a mere part. From such a perspective, however, we can begin to see the manner in which the networkological perspective grounds itself by means of a process of 'eating its own

*“emergence always contains itself at a higher dimensional level”*

tail,' one which follows the temporal and logical structure of emergence in its process of differing with itself. For in fact, all that is is the result of that which contains itself fracturing and differentiating itself and then re-relating to and recontaining itself at multiple levels of scale. Within all that exists, threads of potential emergence remain, indicating the network that connects the potential of all to all, if at differing degrees of intensity. Understanding the topologies of such intensity in relation to what is is a large part of what is entailed in the networkological enterprise itself, which will now move through a series of linked investigations into precisely how this complexity manifests from a networkological perspective on our world. While the presentation of the networkological perspective in this text moves from diagrammatology through matrixology to ethics, ultimately, it could have begun anywhere, for the parts all contain the whole in miniature. The entirety of the system is what grounds it, by

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means of what it gives rise to via its movement within itself. And as we will work to show, what it gives rise to is itself, the networkological perspective, by means of the intertwining of the one and of emergence-in-relation / relation-in-process and the *threeand* of the network diagram in its many forms.

# diagrammatology

**Diagram.** The networkological project is an attempt to develop the concepts implicit in the network diagram. A network is an iconic sign of the relational aspects of the world. The three primary components of a network diagram are the *node*, or individual, the *link*, or relation, and the *ground*, or context, from which these emerge. When a node emerges from a ground, we say that it has *individuated*, and when a link emerges between nodes, it has *connected* them. Networks, nodes, links, and grounds may be static or dynamic, heterogeneous or homogeneous. Nodes may encompass all of an element, or only an aspect thereof. Links may be uni-, bi-, or multi-directional, precise or fuzzy (indicative of what Ludwig Wittgenstein would call a 'family resemblance'<sup>5</sup>), single or multi-threaded, etc. Networks include any and all of these permutations. From this diagrammatic germ - *node, link, ground* - the entire networkological project springs.

*node, link,  
ground*

**Precision.** Any aspect of a network may be precise or fuzzy. Fuzziness does not necessarily indicate messiness, for in fact, it can be measured quite precisely in mathematical terms. Rather, fuzziness may indicate states such as partial belonging (ie: a shade of green is so many degrees between blue and yellow), a condition of so-called 'family resemblance' (in which a specific

*precise,  
fuzzy*



number of a group of traits are shared by all members of a network, even if not all traits are present in all members or in equal degree), or loose coupling/sync between parts. Fuzziness also often indicates a state from which more precise formations emerge, and to which they may return. Most networks and their parts are fuzzy to varying degrees, for in fact it is rigidity and precision which are in fact rare conditions within the world.

**Intensity.** Among networks and their elements, there are differences in *intensity* in regard to the rest of what is. Such intensity can be measured relationally in a variety of forms. The number of levels of emergence within a network is called its *depth*. The number of networks and/or the components which are intertwined with each other on a given level indicates that level's *interior diversity (or breadth)*, while networks and/or components from without indicate that network's *exterior diversity*. The complexity of a network is determined by a combination of the degree of diversity (both interior and exterior), the degree of depth, and the contribution of the potential of each component in question. Determinations of degree can only be made retroactively and relationally by networks which come to know the network in question.

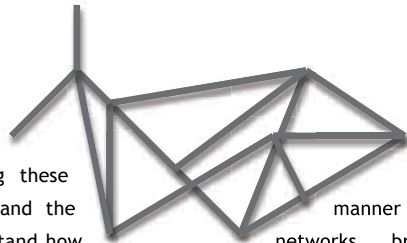
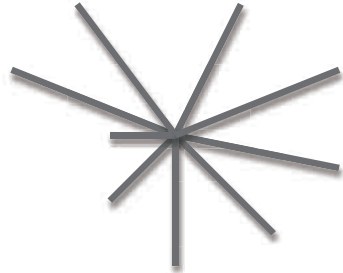
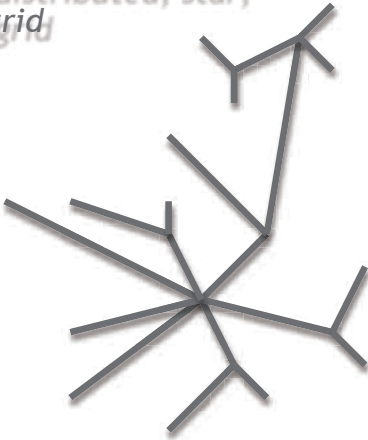
*intensity,  
depth,  
diversity/  
breadth*

**Topology.** Networks may take different shapes, and these are generally referred to as indicating a network's topology. *Topology* is the name of a branch of mathematics that deals with the way surfaces can vary so long as they are not torn or broken. Likewise, network topologies indicate the manner in which networks can be reshaped without being broken into smaller parts. Many topologies are constrained by the nature and number of links between nodes. Some nodes may have only a few links to other nodes, while others, often called *hubs*, have many. The distribution of hubs often alters the potential topologies of a given network. While many topologies are possible, some standard network topologies include grid, chain, bus, star, multi-hub, distributed, self-similar/fractal, star/centralized/hierarchical network, etc. Some networks have balanced topologies, while others are more *contractive* or *expansive* at particular sites. Many networks join to others at such sites, for the contraction and expansion of aspects of the world is one of the most powerful ways in which networks understand and transform the

*hubs,  
contraction,  
expansion*

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three different  
network  
topologies:  
distributed, star,  
grid



world around them. Conceptualizing these contractive and expansive aspects, and the manner in which they interconnect, is to understand how networks bring complexity into the world. Beyond this, the topology of a network indicates an enormous amount of information on the way a network may respond to external factors, particularly in dynamic networks in the world. Quantitative network analysis is the field which has worked to isolate specific parameters of networks, and use them to analyze the behavior of networks in fields from biology to economics.<sup>6</sup> According to network researchers from a wide variety of fields, a consensus has been reached that, within the realm of dynamic network analysis, distributed, 'small-world,' self-similar networks are those which are most robust in the widest array of circumstances.<sup>7</sup> Star-networks, which are highly efficient and centralized, and often highly useful in surviving periods of extreme crisis, are ultimately less robust in the long-run, despite short-run utility, for they strangle the diversity and newness necessary for stability in a changing environment. These two key types of networks, so essential within dynamic

systems, and which may be roughly termed *democratic* and *paranoid*, respectively, have much to teach us in regard to network ethics.<sup>8</sup>

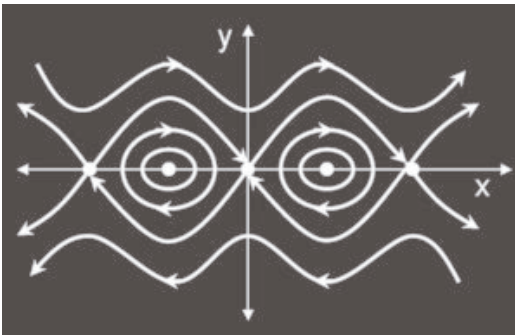
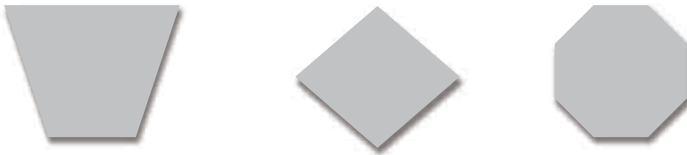
**Combination.** Networks may interlink in a wide variety of ways. Each node within a network may be a whole network in itself, or a network may have sub-networks within it which encompass more than one node, but not the entire network. These contained, or *nested* networks, allow for the formation of sub-networks, often called *components* or *modules*. When a single component dominates the network of which it is a part, it is called a *great component*. When networks do not fully encompass one another, but they share certain nodes, links, or ground, we say that they are *layered* on each other. In relation to dynamics, networks may impact the functioning of one another, in which case, we say that they are *coupled* with each other. Coupling may be rigid or loose, and when coupling is loose and over a distance, we say that the networks in question are coupled by *resonance* between them. And just as networks can be loosely coupled or in a resonant relation with each other, the same holds between nodes as well. When entire components of networks resonate together, whether tightly or loosely, we say that they are in *sync*.

**Symmetry.** Networks are closely related to the notion of *symmetry*. Whenever there is something which is the same or similar (a critical mass of characteristics in common) amongst a group of entities, this relationship of invariance can be represented by a network. Commonality of any sort can therefore be thought of as a symmetry, for symmetries indicate aspects of an element which, despite morphisms or transformations, remains the same.<sup>9</sup> Thus, any rule, law, principle, or heuristic within a given system can be thought of as a symmetry. For example, water is still H<sub>2</sub>O even when frozen or boiled, so that we can therefore say that H<sub>2</sub>O has symmetry at the molecular level over changes in temperature and pressure. A language maintains roughly the same grammatical rules despite changes in phrases and sentences, so these rules indicate a symmetry in regard to changes in writing and speech, even though there are more fuzzy sorts of symmetry in regard to patterns of slang. Rules such as addition or subtraction indicate symmetries within

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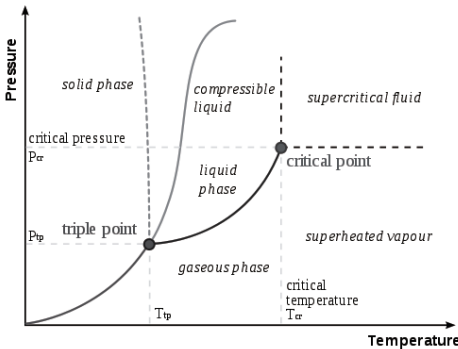
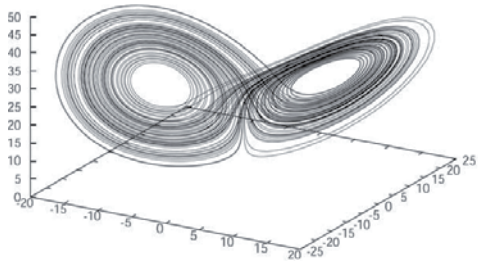
changes of quantity within mathematics. Physicists often describe the universe as exhibiting a symmetry in regard to the conservation of energy. Even dynamic structures such as a whirlpool can be seen as governed by symmetry. With tools such as phase or state space diagrams<sup>10</sup>, any regularity within even highly complex forms of motion can be plotted as a node, or attractor, which then acts as a point or axis of symmetry within a relatively simple network diagram: all that is needed is a change in perspective. The expansion, contraction, alteration, and disparation of symmetries indicate the manner in which relative forms of invariance give structure to worlds of various sorts. Symmetry, as well as symmetry breaking<sup>11</sup> or emergence, indicate two key ways of understanding the changes within networks in physical, symbolic, mathematical, and many other varied types of worlds.<sup>12</sup>

*simple symmetries: 360°, 90°, 45°*



*state space diagram of a simple pendulum with three attractors (two ends of the pendulum swing and the center point at rest)*

state space diagram of a complex dynamic system governed by a Lorenz attractor (note the two symmetry-defining nodes/attractors around which the pattern swirls)



a phase diagram for H<sub>2</sub>O with boundaries, territories, triple point, and critical point: notice how some phases emerge or vanish depending on how one 'moves' through the diagram

**Difference.** Just as networks depict what unites, they may also depict that which divides. Networks that describe sameness or similarities can therefore be called **symmetrical** or **invariance networks**, while those which are used to describe difference will be called **asymmetrical, variance, or difference networks**. When symmetries are broken, they give rise to boundaries between states which

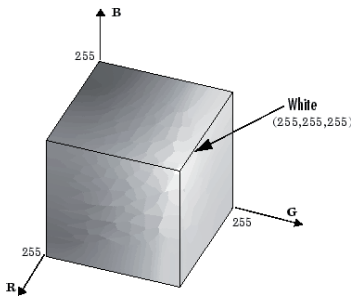
are no longer invariant in relation to each other, as well as points of juncture where these boundaries meet. These points of juncture, which emerge either due to the intersection of boundaries or because they indicate a disturbance within a ground which may eventually give rise to a boundary, are

(a)/symmetrical networks

known as **events, or singularities**. Pure singularities are nodes with nothing in common, not even a shared ground, and as such are an abstraction from singularities in the world, for any singularity we could know about must have some relation to other singularities, shared grounds, and the world around it. When singularities float within a ground of dynamic flux, they may create

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patterns of flow within this ground, but singularities may also divide up the ground into aspects thereof, and even bring about the formation of links of difference between the singularities. Such links indicate *boundaries* between these aspects of the ground, called *territories*. A ground divided into territories is known as a *plane*, and territories may be co-planar or multi-planar. While it is possible to think of singularities as breaking the symmetry of the ground within which they emerge, such an event can also be thought of as an intersection of separate grounds, that of the singularity and that of the ground, into a single plane. From such a perspective, any singularity indicates the presence of one ground within another, and thus, depending on the perspective, all planes can be seen, in this sense, as multi-planar.



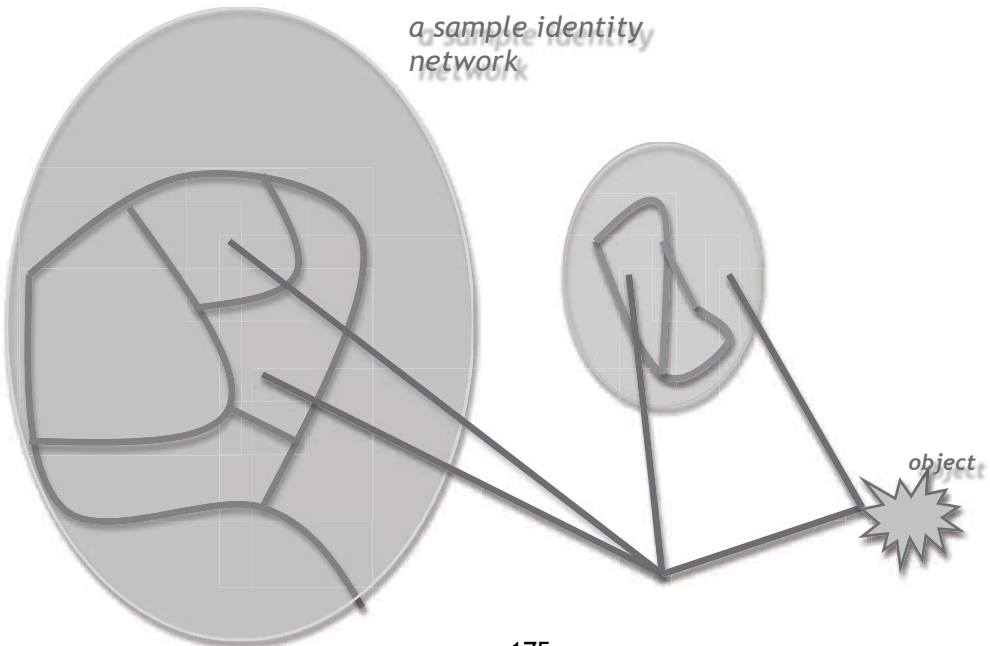
*multi-dimensional color-space diagram in which x, y, and z axes are mapped to green, blue, and red, respectively*

**Identity.** When territories in a difference network, whether co- or multi-planar, are united by additional networks that link elements, flows, or networks between them, they give rise to intertwined networks that describe specific parameters of sameness and difference. This unique type of network, called an

*identity network* or simply an *identity*, describe entities which maintain certain traits while others vary under changing circumstances. H<sub>2</sub>O, for example, is both the same (molecularly) and different (inter-molecularly) over changes in temperature and pressure, therefore requiring an identity network to describe this ability to both change and stay the same. A more abstract entity, such as 'catholicism,' can be

*identity,  
substance,  
object, set,  
category,  
location,  
thing, idea,  
concept*

seen to function in a similar, if perhaps more fuzzy, manner. All identities have certain conditions under which they cease to be the same thing, but these conditions vary, depending on the structure of meta-identity networks which determine these conditions. When a *meta-identity network* is static, we call it a *set*, and when it is dynamic, we call it a *category* (the foundations of modernist mathematics, and post-modern mathematics, respectively).<sup>13</sup> When a class of entities (ie: H<sub>2</sub>O) is described by an identity network, we say that it is a *substance*, and when a single entity is described by such a network (ie: a particular molecule of H<sub>2</sub>O, catholicism) we say this entity is an *object*. Ultimately this distinction is relative, for some entities may be classes or individuals, depending upon the networks to which it is currently connected in a given instance (ie: H<sub>2</sub>O as an element of a table of chemicals, H<sub>2</sub>O as a description of the molecular structure of all the water in the world). When an identity is linked to a particular segment of the extended networks of spacetime, independent of what else is located in that particular segment of spacetime, it is called a *location*, but when an identity is linked to a particular segment of matter, independent of location, we say it is a *material object, or thing*. Identities which are neither located nor materialized can still exist as networks within a mind which can think them, and can continue within minds that possess the ability to store them in memory. Such objects are known as *mental objects*, of which there are two types, *ideas, or impressions*,



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and abstract conceptions of ideas, meta-ideas known as *concepts*. When networks of ideas are linked by a mind, we say they are associated, and when associations reach the level of structuration of identity networks, these second-order ideas are concepts. A common everyday object of experience often links all these networks and more, and needs to be broken down into all its relevant networks in order to be fully understood.

**Societies.** Societies are organized networks of networks, and include entities such as organisms, languages, etc. The simplest form of society is an *aggregate*, for example, a pile of sand. But more complex aggregates include layered intersections of networks, known as a *combinatories*, but beyond this, there are also societies of combinatories, known as *hypercombinatories*, as well as societies of combinatories which control societies of aggregates. These complex intertwinings of combinatories and aggregates, known as *complex societies*, indicate some of the most complex entities on the planet. Societies of humans, for example, and their various extensions (signs, objects, etc.) are perhaps the most complex network formations on earth, involving networks of networks of symbol systems, associations, organisms, raw materials, energetic flows, etc. Humans internalize various materials, process them, and produce them in a cycle which continually fractures entities to produce raw materials for new creativity. In the process, humans give rise to not only themselves, but meta-systems, such as semiotic structures and systems of objects. Linking symbolic, locational, energetic, material, mental, economic, and varieties of other types of networks layered and nested within and on top of each other, societies are perhaps the most intricate networks we know.

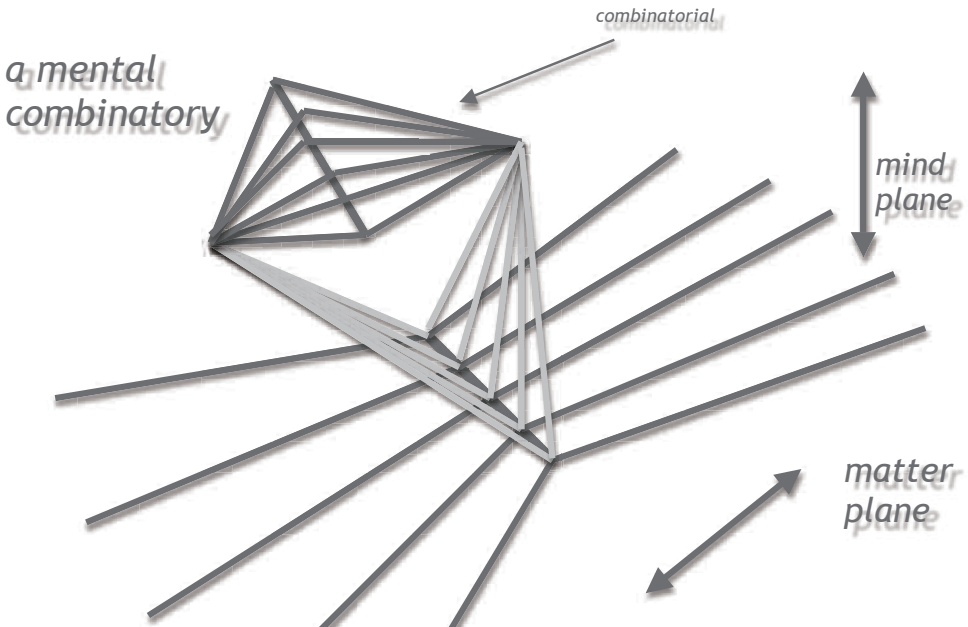
*aggregate,  
society,  
combinatory,  
hyper-  
combinatory,  
complex society*

**Combinatories.** When networks intersect with each other, they often impact aspects of each other. In such circumstances these intersections give rise to compound networks known as *combinatories*. The networks they give rise to, which are both at another level of scale and which govern the modes of interrelation of the original networks in question, are known as *combinatorials*. A combinatorial occurs when different matters affect each other by means of a form of processing which occurs between the networks in question. The simplest

*combinatorial,  
machinic/complex*



*combinatorials*. A combinatorial occurs when different matters affect each other by means of a form of processing which occurs between the networks in question. The simplest



type of combinatorial is ephemeral, and occurs when networks intersect such that there is a temporary influence between them. Many combinatorials, however, persist over time, developing complex combinatorials between them. There are many types of combinatorials, and the combinatorials that govern these can be single or multi-level, rigid or fuzzy, static or dynamic. Two general poles govern the types of combinatorials that exist - the machinic and the complex. *Machinic* combinatorials link many objects with each other according to series of rules whereby the parts determine the potentials of the whole. An engine, for example, is such a combinatorial, as is a contemporary digital computer. Such devices rarely surprise us, for they are designed in a manner which maximizes the role of matter and actuality in their construction.

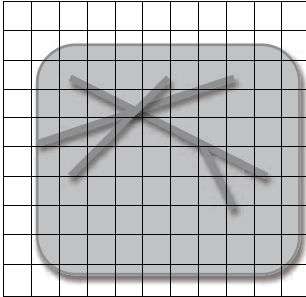
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energetic systems which are metastable, thereby providing conditions which are between order and disorder within the environment of that combinatory. Languages, for example, are complex combinatories, and it is the relation of language to humans, just as it is the relation of humans to the sun, which allows both humans and their languages to continually surprise us, for the sun, humans, and language are metastable systems, each in their own way. The most complex type of combinatory, however, is one which links dynamic sets of elements to others by means of a combinatorial which is itself a complex combinatory. This is called a *hypercombinatory, or mind*. Minds link a series of elements together, at another level of scale, via a set of processes or rules, and then actualize one of several potential actions. When a mind is observed by another conscious mind, either from within or without, these potentials are mapped out by a system which connects the first set of elements to the second set by a series of processes or rules. When hypercombinatories organize a complex combinatory, we say this complex society is alive. Combinatories go from the simple to the complex, and understanding the varied types of combinatories in our world is essential to understanding the potentials inherent within aggregates of networks.

**Dynamics.** Networks may be dynamic in a wide variety of ways. Grounds may be static and homogenous, or they may indicate mixtures of constituents or conditions of viscosity, varied density, and flows. Grounds can combine and flow into each other, flows may condense into nodes, or nodes may emerge from the interaction of a ground with entities beyond it. Nodes may individuate and de-individuate from a ground, alter patterns of flow around them, and resonate with each other by means of the disturbances carried by constituents of the ground from which they emerge. Nodes may link or de-link from each other, and if these links are themselves dynamic, they may increase or decrease the amount of flow moving between nodes, increase or decrease the fuzziness of the connection between nodes, allow for branching and multiple pathways to emerge within links, etc. Singularities may individuate, merge, or link and de-link to other singularities to produce or collapse new boundaries or territories. Networks or their components can also go in and out of varying states of resonance or sync. Determining dynamics and its extent requires that there be some standard in regard to which change can be determined. Every network, from the simplest to the most complex, can be linked up with a network known as a *metric* which can establish conditions to determine distance between the separate elements in a network, and from this metric, a *netspace* can be mapped. In dynamic networks,

*metric,*  
*netspace,*  
*nettime*

a temporal metric can be used to establish *nettime*.



**Systems.** All dynamic networks require a relation to a difference in the distribution of potentials, either within themselves or their contexts. Under metastable<sup>14</sup> conditions, flows of the various forms of this potential, or unleashed by this potential, may organize into locations in which networks may emerge in a sustained fashion, thereby creating dynamic networks. To describe dynamic networks, we will need to rework the

*network with metric*

terms employed in more static network diagrams. When dynamic, a ground is referred to as **field** composed of **flows**, each which may be hetero- or homogenous. When a field is relatively bounded, it is known as a **system**. Nodes and links may be

heterogeneous to the flows in a given field, in which case they may create obstacles, boundaries or channels within this flow. Systems produce and reproduce themselves by means of energetic potential, stored or in motion, and when flows of such potential congeal, we speak of these concretized forms of potential flow as **stocks**. Stocks may themselves then circulate, creating meta-flows within a system in addition to ground-flows. Beyond stocks, there may also be meta-stocks known as **currency**, and meta-meta-stocks known as **capital**. Examples of currencies include molecular-ATP in many living organic cells, or money in economic networks. Examples of capitals may include status, machinery in a factory (labor congealed in the form of a labor amplifier), or fat stores within an animal. Most systems remain robust when there are multiple capitals circulating within a system, but the economic system known as **capitalism**, a variation on the star-network topology, indicates a cancerous condition in which one type of capital attempts to reduce all others, via resonance or conversion, into its type, in a manner which is ultimately harmful to the robustness of the system. Much more will be said about this in the section on network ethics.

*field, system,  
flow, stock,  
currency,  
capital,  
capitalism*

**Genetics.** Networks can be thought of spatially, dynamically, and also

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*indifference,  
event,  
structure,  
element*

*genetically*, that is, in relation to the historical and/or logical process whereby a network emerges, or *individuates*, from its surroundings. While all networks have a particular history, all networks can also be seen as composed of elements of the logical genetic chain of moves, from simplest to most complex, which exist as potentials within the network diagram. The genetic approach attempts to give a general description of the potentials of networks as a series of logical moments. If the network diagram consists, in simplest form, of the three terms node, link, and ground, then genetics needs first understand how it is that a node, link, or ground come to be. From a logical perspective, then, the first stage of network development would be that of *indifference*, a condition in which everything is possible, but nothing in particular has taken shape. Indifference indicates neither symmetry nor asymmetry, sameness nor difference, but that from which these notions emerge. When something emerges which differs from indifference, we say that an *event* has occurred in relation to a *ground*. Event and ground are co-constitutive, for they indicate the emergence of difference from within indifference, and each can be thought of as the ground to the event of the other, and vice-versa, depending on the perspective in question. Within a given ground, however, multiple events may emerge, and the degree to which these events interact, either with themselves or with the ground surrounding them, may vary. Events may be ephemeral or relatively stable, and when events endure over time they may enter in relation with other events with which they share one or more grounds. If these events in any way relate, we say that they then share a structure, and these events can then be seen as elements of that structure. The aspects of an element which has something in common with a structure is known as a node, that which connects nodes is a link, and the structure as a whole is a network. Thus the emergence of any of these three indicates the emergence of the other two. Nodes may be completely determined by a network, and hence identical to their elements, or only slightly determined by a network, indicative of a large distinction between node and element. Ultimately, the determination of relation between any of these terms depends upon the networks from which these elements are understood.

**Levels.** Nodes, links, and grounds are differentiated via the notion of individuation, or emergence. A node individuates from a ground, links individuate from nodes, and networks individuate from links. If we reverse this process, however, a

network may involute into a series of disconnected links, links into a series of nodes, and nodes back to ground. Involution and individuation are two sides of the same process, and in many networks-in-process, we see network elements transforming into each other on a regular basis. None of the terms used to describe networks, such as ground, node, field, structure, link, topology, module, layer, individuation, etc., are elements which exist separately from each other, for they are only defined

*“relation is  
what mind  
does”*

relationally. That is, as theorists such as Manuel Castells have argued, a node is ‘where a curve intersects itself’,<sup>15</sup> or, as some theorists have argued, ‘a node is a shortened link, a link an extended node.’<sup>16</sup> We can also say that a node is where a ground curves into itself, for each node

that individuates from a ground is itself a network at another level of scale, just as every network is itself a node, all the way up and down at every level of scale until one reaches the open. What then is a level of scale? It is a differentiating link between a node and a node - or, depending on one’s perspective, a network and a network, ground a from ground, a link from link - distinguishing one from another as part from whole, container from contained, layer from layered. Mathematicians often speak of a singularity as the presence of one dimension in another,<sup>17</sup> and so it is with networks, in that each structure can indicate, depending on the perspective, an interpenetration of levels. While levels may have a relation of verticality with each other, this is not a necessity. A level is a sheet or zone of emergence, that from which nodes, links, grounds, and networks individuate. Furthermore, these elements are not only elements, but also moments, for a node is always a nodding, a link always a linking, a ground always a grounding, and a network always a networking, for relation is always in-process. The dynamic separation and intersection of levels or dimensions of difference within the world is emergence, relation in the process of self-differing. At each point in which levels indicate the manner in which emergence contains or layers upon itself, and whenever it folds upon itself in this manner, emergence is then in the process of relating to itself, of suturing together the dimensions of itself which it has caused to diverge from itself in the first place. The spatio-temporal paradoxes which result from many prior attempts to describe aspects of emergence are the result of the non-relational manner in which these attempts try to describe its fully relational structure. Any attempt to define emergence ultimately returns to where it began, but with an infinite and multiplicitous twist, and this torsion is precisely emergence itself. It is from emergence that the networkological project comes to be, at the site of difference in relation, at the site of the disparation which gives rise to levels and their

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elements and connections. Any philosophy which aims to describe the structure of relation must perform this very torsion itself, as this text will attempt to do. The networkological perspective attempts to enact this torsion in its unfolding of the potentials of the network diagram, a diagram which performs relation in its very structure. And yet, it is not enough for the diagram to be relational, for the unfolding thereof must be relational as well.

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Cover Image: The image used for the cover is a modified version of ‘Little Rock Lake Trophic Web: Cannibal Image 2,’ The image was produced with FoodWeb3D, written by R.J. Williams and provided by the Pacific Ecoinformatics and Computational Ecology Lab ([www.foodwebs.org](http://www.foodwebs.org), Yoon et al. 2004). The image itself can be found at Yoon, I., R.J. Williams, E. Levine, S. Yoon, J.A. Dunne, and N.D. Martinez. 2004. Webs on the Web (WoW): 3D visualization of ecological networks on the WWW for collaborative research and education. Proceedings of the IS&T/SPIE Symposium on Electronic Imaging, Visualization and Data Analysis 5295:124-132.

Acknowledgement: I’d like to thank the Santa Fe Institute in Santa Fe, New Mexico, for making possible my attendance at the Complex Systems Summer School 2006 for research related to this paper.

<sup>1</sup> The closest to a philosophy of networks in the existent literature is the work of Bruno Latour and his associates (ie: John Law) on ‘actor-network theory.’ However, what is primary for these theorists, compared to this work, is not networks, which are ultimately a supporting structure, but actants. There are other theorists, however, which can be seen as clear precursors of the networkological enterprise, even if networks were for them not the foundation of their theoretical enterprise. Gilles Deleuze is certainly a theorist for whom network forms are essential (for more, see my blog post from December 30, 2009, entitled “Deleuze as Networkologist: ‘The Logic of Sense’ and the Networkology of Events,” at <http://networkologies.wordpress.com/2009/12/30/deleuze-as-networkologist-the-logic-of-sense-and-networks-of-events/>. For more on Whitehead and Leibniz as networkological thinkers, see my blog post from Dec. 27, 2009, entitled “Manifoldness: Spacetime as Hypernetwork with Leibniz, Whitehead, and Riemann,” as well as my post from Nov. 15, 2009 entitled “World as Medium: Or, How Self-Differing Substance Makes Strange Bedfellows of Whitehead, Hegel, and Deleuze” (these and other related posts available at <http://networkologies.wordpress.com>). For more on Latour’s actor-network theory, see Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network Theory*, Oxford: Oxford Univ. Press, 2007).

<sup>2</sup> “To him who looks at the world rationally, the world looks rationally back.” Georg Wilhelm Friedrich Hegel, *Reason in History* (New York: Prentice Hall, 1996), 13.

<sup>3</sup> See Alfred North Whitehead, *Science and the Modern World* (New York: Free Press, 1997), pp. 51-8.

<sup>4</sup> Bertolt Brecht, *Brecht on Theater*, (New York: Hill and Wang, 13<sup>th</sup> Edition), 37.

<sup>5</sup> For more on the notion of family resemblance in Wittgenstein, see *Philosophical Investigations*, (Hoboken: Wiley-Blackwell, 2009), 35-7.

<sup>6</sup> For a general introduction to quantitative network analysis, see *Linked: How Everything is Connected to Everything Else and What it Means*, by Albert-László Barabási (New York: Plume, 2003). An intermediate level text is *Small Worlds: The Dynamics of Networks Between Order and Randomness*, by Duncan Watts (Princeton: Princeton Univ. Press, 2003), while a more advanced text is *The Structure and Dynamics of Networks*, by Albert-László Barabási, Mark Newman, and Duncan Watts (Princeton: Princeton Univ. Press, 2006).

<sup>7</sup> For more on distributed networks, see Barabási, op.cit., 143-162, 219-226.

<sup>8</sup> For more on the political ramifications of network topologies, see Philip Ball, *Critical Mass: How One Thing Leads to Another* (London: Farrar, Straus, and Giroux, 2006), 295-371

<sup>9</sup> For more on symmetry as invariance, as well as its relation to group theory, see Leon M. Lederman and Christopher T. Hill, *Symmetry and the Beautiful Universe* (Amherst: Prometheus Books, 2008), 1-116.

<sup>10</sup> For more on state and phase space diagrams and their uses, see Klaus Mainzer, *Thinking in Complexity: The Computational Dynamics of Matter, Mind, and Mankind*, 5<sup>th</sup> Edition, (Berlin: Springer, 2007), 30-43.

<sup>11</sup> For more on symmetry breaking, see Lederman, op.cit., 189-202.

<sup>12</sup> The three diagrams in this section are public domain images, retrieved on 11:00 p.m., Feb. 28<sup>th</sup> 2010, from the following sources: pendulum state-space diagram([http://www.scholarpedia.org/article/Image:Terman\\_pendulum.jpg](http://www.scholarpedia.org/article/Image:Terman_pendulum.jpg)), phase-space diagram of water(<http://en.wikipedia.org/wiki/File:Phase-diag.svg>), and color-space (<http://www.mathworks.com/access/helpdesk/help/toolbox/images/color7.gif>).

<sup>13</sup> For more on the analysis of the history of mathematics by means of the terms modernism and post-modernism, see Jeremy Gray, *Plato's Ghost: The Modernist Transformation of Mathematics* (Princeton: Princeton Univ. Press, 2008), 18-33. For more on set theory in its historical context, see *ibid.*, pp. 157-169. For more on category theory in its historical context, see Ralf Krömer, *Tool and Object: A History and Philosophy of Category Theory* (Basel: Birkhäuser Basel, 2007), xxi-xxxvi.

<sup>14</sup> For an extended philosophical meditation on the ramifications of metastable energetic conditions, see Gilbert Simondon, *L'individuation psychique et collective: A la lumière des notions de Forme, Information, Potentiel, et Métastabilité* (Paris: Editions Aubier, 2007). For an examination which focuses more on the scientific end of things, see Ilya Prigogine and Isabelle Stengers, *Order out of Chaos: Man's New Dialogue with Nature* (New York: Bantam, 1985).

<sup>15</sup> "A node is the point at which a curve intersects itself," Manuel Castells, *The Rise of the Network Society: Volume One* (London: Wiley-Blackwell, 2000), 501.

<sup>16</sup> I am quite sure that this notion is not my own, but I am currently unable to locate the source, a matter which will hopefully be addressed in future editions of this text.

<sup>17</sup> For more on the notion of a singularity as the presence of one dimension in another, see more on the manner in which the complex plane was generated in the history of mathematics, as well as the manner in which complex or 'imaginary' numbers are used in contemporary quantum physics to understand the structure of the wave function in the Schrödinger equation. For more on the history of the complex plane, see Paul Nahin, *An Imaginary Tale: The Story of  $\sqrt{-1}$*  (Princeton: Princeton Univ. Press, 1998), 31-66. For more on the uses of this idea in physics in regard to the wave function, see Bruce A. Schumm, *Deep Down Things: The Breathtaking Beauty of Particle Physics* (Baltimore: The Johns Hopkins Univ. Press, 2004), 154-168.

*Deleuze/Guattari & Ecology*

edited by Bernd Herzogenrath

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290 pages

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**T**HERE IS A SUGGESTIVELY ecological quality to the writings of French philosophers Gilles Deleuze and Félix Guattari. Their concepts feel knotted and tangled, as if they are working their fingers through matted conceptual soils thick with philosophical roots and tubers, earthworms and fossils, that emerge in refrains and crescendos never reaching a unison chorus but, rather, bubbling up into temporary congealments, only to slide out into oozing bursts of liquid and foam, semen and spittle, organic pulsation and machinic propulsion, tremolo strings and cacophonous percussion. There are rhizomes threaded through their work, yes, but there are nomadic war machines too, allied against states and doctrines, but against nature as well, if nature be a domain set apart from society or, indeed, from the resonant machinery of matter. (Which, for Deleuze and Guattari, it isn't.)

Earlier efforts to appropriate D&G for environmental theory—by phenomenologists like Edward Casey and Robert Mugerauer, anthropologists like Stephen Muecke, and ecophilosophers like Dolores LaChappelle—worked with individual conceptual threads, such as the rhizome or the nomadic spatialities of smoothness and striation, but a more complete accounting of D&G's 'ecologics' has had wait for their works to be more fully translated and thoroughly digested. Such an ecologics



has begun to be developed in the work of Mark Bonta and John Protevi, Manuel DeLanda, and others.

Over the last few years, three anthologies have appeared, one as a special issue of the on-line journal *Rhizomes*, and the other two collections both edited by German cultural theorist Bernd Herzogenrath, *An (Un)Likely Alliance: Thinking Environment(s) with Deleuze/Guattari* (Cambridge Scholars Press, 2008) and the book being reviewed here. All three evince a similar multiplicity of orientations: some pieces labor to develop a Deleuzo-Guattarian ecology, with lesser or greater degrees of success, while others pick up a conceptual brick or two from D&G and send it on its own flight vector, for instance analyzing a cultural or political phenomenon in its terms, but without fully developing a contextual terrain for it. In each case also, the overall mix tends toward an uneven Babel of disparate voices than a convergent synthesis of approaches, though this may be a fact of life in Deleuzo-Guattarian studies. The strength of the three volumes, taken together, is that they place Deleuze/Guattari in communication with ecological theories of various kinds, and that they frequently perform this connective labor with the aid of conceptual tools already in motion, such as those provided by von Uexkull, Maturana and Varela, Bateson, Prigogine, Flusser, Luhmann, and others.

To the extent that a convergence appears on the horizon of *Deleuze/Guattari and Ecology*, it is around that ‘resonant machinery of matter’: the world, filtered through a Deleuzo-Guattarian sieve, is the lively and uncontainable one of desiring-production, a world of becomings, connections, and organic-machinic-socio-psychic assemblages. Bernd Herzogenrath’s lucid introduction sets this theme up in terms of Guattari’s ‘generalized machinics’ and Deleuze’s ‘intelligent materialism,’ that is, the latter’s recognition of the autopoietic intelligence of matter. The next three chapters follow up with ambitious and challenging, if divergent, attempts to articulate such a machinic ecology.

Manuel DeLanda’s ‘Ecology and Realist Ontology’ is an odd selection to follow Herzogenrath’s introductory overview, as it immediately throws the reader into the full density of

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mathematical, topological, and cybernetic concepts DeLanda has been developing for several years, albeit a little unanchored in a shared language. DeLanda makes a case for a materialist philosophy of ecology (as opposed to one 'rooted in literary criticism, semiotics, or hermeneutics'), specifically a 'philosophy of difference,' and for a 'realist ontology that does not depend on essences' but instead grapples with the morphogenetic capacities of matter. Like a few of the other chapters here, however, DeLanda's case remains very much his own, and it will not be clear to all readers where exactly it remains faithful to Deleuze and Guattari and where it veers away from them.

Ronald Bogue's 'A Thousand Ecologies' would have been a better chapter to begin with, as it provides a useful overview of D/G's main ecologically applicable concepts – the refrain, territorialization, machinic desiring-production, D/G's 'qualified' and open holism, and their call, at the end of *What is Philosophy?*, to create 'possibilities of life or modes of existence' that would constitute a 'new earth' and a 'people to come.' Usefully, Bogue refers these back to Arne Naess's definitions of ecology, ecophilosophy, and ecosophy, and concludes that D&G, while not ecologists, do promote a 'view of nature as a complex of interactive organism-environment systems'; that they qualify as ecophilosophers only in a loose sense of the word; and that 'they are ecosophers in that the ethics of their thought informs their views of the relationships of humans to the world,' views which are complex with regard to technology and the valorization of wilderness and intrinsic value of organisms, but which are qualifiedly holistic, pluralistic, and anthropocentric (though I would question the latter, as it's based on a single rather uncharacteristic definition of the term). In other words, they are ecosophists of a sort, though not the usual kind.

In the book's longest chapter, 'Structural couplings: Radical constructivism and a Deleuzian *ecologies*,' Hanjo Berressem ambitiously attempts to push D&G further into the 'radical constructivist' systems-theoretical direction that implicitly underlies much of their work. The result, as Berressem lays

it out, is an expansive conceptual alliance between Deleuze's philosophy, Guattari's ecopolitics, and the various systems theories of cognitive biologists Maturana and Varela, communication and social theorists Luhmann and Flusser, cyberneticists von Forster, von Glasersfeld, Bateson, and Wilden, and land artist Robert Smithson, among others. Berressem envisions the resulting assemblage as a 'radical ecologies,' a Haeckelian 'systems theory of the living' that is inclusive of the whole machinic world of social, economic, linguistic and biological 'machines' in addition to the virtual, the field of pure potentiality. He further characterizes it as a 'radical haecology' that, as a didactics, would aim to make 'the operations of "structural couplings" conscious'; as a science, would 'generate knowledge about structural couplings' and develop 'routines that allow for regulated responses to structural disequilibria'; as a practice, would implement 'parameters within which the equilibrium between the autopoietic systems and their media can be kept, both locally and globally'; as an artform, would provide 'blocks of sensation'; and as a philosophy, would create 'concepts that radically link immaterial concepts and material movements' (89). Despite its density, the chapter is a rich and rewarding theoretical treatment that emphasizes connections over tensions or potential incongruencies.

While less ambitious in their scope, the next handful of chapters (by Gary Genosko, Verena Andermatt Conley, Jonathan Maskit, and Dorothea Olkowski) explore a diversity of angles on theoretical themes. Genosko examines Guattari's *Three Ecologies* in order to answer the question 'why three?' and answers it through a reduction to a single idea—*subjectivity* as a common principle, which he (rightly, I think) takes to be Guattari's 'most original contribution to the theorization of ecology'—that is expressed at three levels: the macro level of the biosphere, the intermediate level of social relations, and the micro or molecular level of human subjectivity. Guattari may indeed have had something like the macro-intermediate-micro in mind, but this does raise the objection that neither of his three ecologies need be purely macro or micro: environmental ecologies can be pretty fine-tuned and

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local, while subjective or mental ecologies can be global, and arguably are becoming ever more so. An alternative conceptualization of the three ecologies might have been to take the material and the social as complementary poles, in the sense that Whitehead perceived each act of experience to harbor its interior or 'subjective' pole and its exterior or 'objective' pole, and then to bring in the third element of 'perceptual' or 'mental ecology' as a kind of intermediate, ecossemiotic and intersubjective realm of material engagements and enactments from out of which the two other poles emerge. This kind of intermediary realm may be what Genosko has in mind in focusing on 'subjectivity.'

Maskit, in 'Subjectivity, Desire, and the Problem of Consumption,' concurs with Genosko's assessment of the importance of Guattari's focus on subjectivity. If environmentalism can be defined as 'there are too many people using up too much stuff too quickly for it to regenerate itself' (129), and the best way to approach the problem is to focus on consumption (as opposed to population control or resource regeneration), and if the common strategies for doing this have been either ethical (personal responsibility, shame) or policy oriented (incentives and constraints), then Guattari's approach has been distinctive in asking how we can restructure capitalist *subjectivity*. Maskit's list of suggestions, unfortunately, is a little anticlimactic: 'Don't watch television. Question all assertions that a practice is impossible. Know the people who produce your food. Figure out how to get from point A to point B without driving or flying.' (140). He notes, interestingly, that 'some of these things look like ascetic practices' (141), which perhaps is part of the problem: if capitalist subjectivity lures us with its promises of desires and pleasures available through the marketplace (138), how can such an ascetic counter-subjectivity attract the numbers it needs to make a significant environmental impact?

Most of the book's remaining chapters provide case studies or readings of specific phenomena or artistic forms in light of Deleuzo-Guattarian concepts. John Protevi's 'Katrina' is an exemplary study of Hurricane Katrina in terms underpinned

by Deleuzian and Delandaesque complex-systems analysis (though the Deleuzo-Guattarian conceptual links are not explicitly articulated, which leaves the reader to judge these links for themselves).

Stephen Zepke's 'Eco-Aesthetics: Beyond Structure in the World of Robert Smithson, Gilles Deleuze and Felix Guattari' traces parallel and roughly contemporaneous shifts or 'breaks' in Smithson's artistic practice and Deleuze's philosophy. Occurring roughly between 1967 and 1969, these shifts take both men from a 'conceptual mapping of structures' (which in Smithson was a concern with art institutions and conceptual interventions) to a more direct engagement with the 'material machinery of production', that is, the material and compositional forces of the Earth. The turning point for Smithson, according to Zepke, came in his encounter with Nature-as-entropy in *Tour of the Monuments of Passaic, New Jersey* (1967), which was followed by a trip to the deserts of the southwest and an ostensible rediscovery of himself as a kind of 'schizo-artist' who composes matter, in Smithson's words, 'to give evidence of this experience...of the original unbounded state,' a place where 'words and rocks' become 'de-differentiated according to an entropic logic by which "mind and matter get endlessly confounded"' (206). Deleuze, meanwhile, arrived at the same space, with the aid of Spinoza and Artaud, sometime between *Difference and Repetition* and his 1970s collaborations with Guattari. Zepke interprets both men's shifts as breakthroughs marking an entry into the production and 'emergence of Nature itself,' by which art (and perhaps philosophy) 'is transformed into eco-aesthetics, and the way in which eco-aesthetics can open for us a new future' (213).

Bernd Herzogenrath traces a similar shift in musical composition from the musical *representation* of nature in eighteenth and nineteenth century classical music, as instantiated in the work of American composer Charles Ives, to a 'reproduction of the processes and dynamics of the weather as a system "on the edge of chaos"' in the compositional practice of Thoreauvian composer-anarchist John Cage, and

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finally to an 'ecology of music' in the work of contemporary Alaska-based composer John Luther Adams. In Ives, both music and nature are metaphorical, with the 'weather of music' and nature itself representative of an Emersonian Over-soul, while in Cage music itself becomes 'meterological,' with chance processes, including those representing the weather, dictating the performance of a musician. But Cage, for Herzogenrath, remained within a modernist frame of the artist making 'clear-cut objects' (228). Adams, on the other hand, comes closest to a pure 'sonic geography' in which music does not imitate nature, but rather 'taps into nature's dynamic processes *themselves* for the generation of sound and light' (226). Like Zepke, Herzogenrath is making a case for a particular kind of compositional practice in which the machinery of nature and the machinery of music become one; but the objection can still be raised that each of these compositional practices involves some translation (in Latourian terms) from one domain to another, so that there isn't a collapse of what were two domains into one, but the creation of something new through a productive process which, in all three cases, remains a form of compositional practice.

Mark Halsey's 'Deleuze and *Deliverance*: Body, Wildness, Ethics,' reads John Boorman's 1972 film *Deliverance* as a Deleuzo-Guattarian 'descent,' as Halsey puts it, of 'rationality (the Cartesian subject), law (right), and the trappings and habits spawned by urbanity (sedentary life, the rise of the Urstaat),' followed by a 'return' of 'bodies (molecular), wildness, and the singular experience of an ethics.' Halsey interprets the decision of Lewis and Ed—two of the Atlanta businessmen on a canoeing trip whose brutal wilderness encounter with two Appalachian mountain men results in the murder of one of the latter—to bury the murdered man's body, rather than reporting it to the police, as a Nietzschean-Deleuzian 'ethical act.' This sets Lewis up as a prophet of Deleuzo-Guattarian ecological reckoning: 'sooner, rather than later,' Halsey writes, 'the relative comfort' of our 'vessels (cars, jets, offices, mansions, yachts, time-share apartments) will encounter the bank of the river and the illusion of interiority will be forced center stage'

and then ‘everyone,’ ecological deniers and managers, ‘will be forced to play the game.’ In opting for this reading, however, Halsey ignores the critiques that have been made of Lewis’s, and author James Dickey’s, hypermasculinist survivalism as a libertarian denial of sociality and a proto-fascist critique of civilization’s ‘feminization’ of men, and of its depiction of ‘hillbillies’ as the very kind of urban stereotype that lays bare the hollowness at the core of the film’s romanticization of the wild. Halsey’s reading thus exemplifies one strain of Deleuzo-Guattarian critique, which places D&G’s ideas at the service of a kind of nature-culture dualism that the two theorists, at times at least, strove hard to overcome.

Chapters by Conley, Olkowski, Luciana Parisi, Yves Abrioux, and Matthew Fuller, on topics ranging from bioinformatics and symbiosensation (Parisi) to art made ‘for animals,’ or at least intended to involve humans in interaction with nonhuman animals (Fuller), round out the anthology. Abrioux’s is a particularly engaging meditation on landscape, gardening, and land art (a topic that recurs in a few of the other chapters as well), read via D&G’s ‘eleventh plateau,’ ‘Of the refrain.’

As a whole, the collection is marked both by a welcome diversity of writing and expressive styles and by a tension between the more cohesive theoretical pieces, such as DeLanda’s and Berressem’s, which work toward establishing a complex and layered D/G-inspired theoretical framework, and the applications of Deleuzo-Guattarian themes to single instances or specific types of art, science, or politics. Along with the other two anthologies of Deleuzo-Guattarian ecological philosophy, this one can be considered as representative of an initial phase whereby Deleuzo-Guattarian ecological work remains exploratory and marked neither by a clear convergence nor a divergence into distinct ‘camps’ or ‘schools.’ Some of the authors, of course, are hard at work on their own synthetic eco/geophilosophical programs, which shows through in their chapters here. As a set of working reports on the possible directions of a Deleuzo-Guattarian ecologies, then, this anthology is a welcome addition to the literature.

Tim Morton, *The Ecological Thought*  
Cambridge, MA: Harvard University Press, 2010.  
184 pages

Peter Gratton

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AS A “PRE-QUEL” TO MORTON’S *Ecology without Nature* (2008), in which the author argued for rethinking our relationship to the environment without the overly Romantic notion of nature, the present book sets out to provide the background “mesh” that he will discuss in *Ecology without Nature* in terms of “practical” ecological concerns. In this sense, *The Ecological Thought*, as the title itself suggests, lays the theoretical ground that the earlier work had put into practice.

Given the venue for this review, I will argue for its place in the larger “speculative” realist orbit, and, joining with the other reviews in this issue, argue for a more ecumenical, even ecological, consideration of realism. In other words, I see Morton’s book as akin to the “object oriented ontology” found in such thinkers as Graham Harman and Levi Bryant, while also touching on the post-metaphysical realism on order from other thinkers (e.g., Jean-Luc Nancy). By challenging the bases of any anthropocentrism (and even deeming “anthropocentrism” to be a line of attack from *within* anti-realisms), Morton’s book joins forces with these thinkers, though, as I’ll note, the premises of his “relationism” will be at odds with the “allure” and secreted otherness of objects found in several of these thinkers. But his attunement to “hyper-objects” and an



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almost Latourian “mesh” should itself mesh well with thinkers in and around these incipient movements. Finally, before turning to the review proper, let me note that Morton’s work is simply a fine piece of writing. If anything is represented by Harman, Latour, Bryant, and many others considered in relation to this speculative realism, it’s a facility with master figures while not getting lost in the mesh of their writings. Morton’s work is a lively book and performs the relationality of concepts, descriptions, allusions, etc., that is its topic.

For this reason, this is a difficult work to summarize, since it lays out its concepts by *thinking* ecologically (it’s an ecological thought at the level of “form,” if the mesh doesn’t undo such form/content distinctions as a matter of course), that is, each chapter enfolds on the other, rather than having discrete subject matter. This should not be read to mean that this is but a meandering tome in search of its thesis, but that Morton performs a kind of horizontal thinking that he believes necessary for coming to terms with ecological being. In his earlier *Ecology without Nature*, Morton argued that nature itself is a modern concept that pushed a part of being to some “out there” beyond human cultures (like the carrot on a stick always used to make Bugs Bunny march along—he never would get to it). This present book makes clear just how destructive he takes this concept to be. In the first place, “nature” repeats the capitalist treatment of the non-human as a resource for human beings, except this resource is the mark of a pre-cultural origin to which we are to return. Politically, this is disastrous, not least because of the use and abuse of nature in various right-wing ideologies of the past two hundred years. (Here Morton is dead-on in his critique of Heidegger-inflected environmental holism as a repetition in another form of Heidegger’s notorious 1930s political convictions, an argument I’ll let the reader discover for herself.) It’s also problematic in the way that it can’t help but be puritanist and reactionary to what is technologically and culturally omnipresent, though Morton is also clear that there never was a time of a lost communion of humans with nature. In this way, “nature” is a by-word for “wilderness areas”

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that “are giant, abstract versions of the products hanging in mall windows”<sup>1</sup> (7).

Thus, in a sense, Morton’s book is directed less at the ideologues who will deny global warming until well after the water has waded up to the knees of Floridians than at deep ecologists, who, following Arne Naess, talk about a profound *a priori* harmony between human beings and nature disrupted by modern capitalism. It’s not clear from Morton’s book what the ontological status of such a “nature” would be, since it’s one thing to say that ecological thinking must deal with nature as it is now, another to argue against the deep ecologists that there is some *x* that is outside and beyond the human, and still another to deny *tout court* a non-human real.

The point, as I take it, is that it’s the Romantic “nature” as well as any conception of a pre-established harmony that truly must be done away with: “The idea of Nature as holistic, healthy, real thing avoids the challenge” of radical coexistence (11). In this way, Morton argues, we must also do away with the notion of the “environment,” which has also stood for that which surrounds the human. But an ecological thought, he argues, does not just protest the “rigid ideological categories” of human/animal, culture/nature, etc. Rather, it sets out to demonstrate not just how nature itself is a category of the human (when it posits what does not belong to it) but also how what we consider the natural (minerals, machine-like movements, etc.) is the human.<sup>2</sup>

Here, though, I am less convinced. I think Morton’s “mesh” does much to “deconstruct” the old nature/culture binaries, but I’ve also been convinced by ecologists and environmental thinkers such as my colleague Mark Woods, whose forthcoming book argues for a thinking of the “wild” irreducible to human conceptualization. In the first part of that work, Woods traces the production and the history of the legal creation of specific wilderness areas—a social/political construction if there ever was one. But this should not take away from the “strange strangeness,” to borrow Morton’s term, of such “wild” areas. Moreover, it seems to me that the “wild” is itself a wild concept, too anti-essentialist *in itself* to be tamed under a given heading.

It is just for this sort of reason that Morton introduces the idea of the “mesh” as a means for understanding the “interconnectedness” of existence. Since he is well aware of the use and abuse of internet (the web, networks, etc.) and spiritualist (vitalism, the holism, etc.) metaphors and concepts, Morton seeks out this term to take up those forms of connections and separations among the objects of the world, without arguing that there is some substance (e.g., Thales water) hovering in the background of all things. To think the “mesh” is to think these connections and blank spaces that exist in a mesh, which is akin to Bruno Latour’s irreductionist theory of assemblages, wherein there are no substances but only collectives of relations. To bulk up this concept, Morton turns at several crucial places to the writings of Darwin and points out how his thought enables anti-essentialist, anti-teleological thinking inimical to considerations of structures not *a posteriori* to material events. He writes, “The ecological thought stirs because the mesh appears in our social, psychic, and scientific domains. Since everything is interconnected, there is no definite background and therefore no definite foreground. Darwin,” he concludes, “sensed the mesh while pondering the implications of natural selection” (28). The seeming “pointlessness of life forms” in evolutionary theory, he notes ironically, provides the “saving grace” of ecological thought.

In his first chapter, “Thinking Big,” Morton attacks the postmodern thesis according to which all that is left to us, after modernity, are petit narratives bereft of totalizing force. Yet, he clearly is not out to return to “thinking big” in terms of “centered” modes of thinking (humanism, theology, substance ontology, etc.). Conceptually, a mesh is itself nothing but a set of relations that are None-All, to use Lacanian parlance, or all-at-once, but also not utterly divided temporally and temporarily from each other. Thus, it functions as “vast yet intimate” space-time: “there is no here or there, so everything is brought within our awareness. The more we analyze, the more ambiguous things become” (40). Here Morton raises the mesh of the works of Darwin. The turn to evolutionary theory in the last several years—not to offer amateurish

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one-offs, but profound analyses—is welcome and mirrored in Morton’s work. From Martin Hägglund’s radical atheism project to Elizabeth Grosz’s vitalist conceptions of time to Adrian Johnston’s considerations of the cadence of change, no longer do Continental philosophers equate Darwinism, as Heidegger did, with de-spiritualized mechanization or unrepentant biopower, as some Foucaultians argue. For Morton, thinking the mesh of Darwinian interdependence means taking cognizance of the non-existence of species difference wherein an essence of “animality” could be offered as simply “non-human.” (Whenever the legatees of humanism declare an essential human trait, it’s not long before some animal is found with an akin characteristic [70-71].) The point is to think the “strange strangers” of those that coexist with us, including the strange depths of our subjectivities. At this point, Morton lapses into the mode of the poetic, working through Coleridge’s *The Rime of the Ancient Mariner* as a means of conceiving this mysterious strangeness among and within us.<sup>3</sup>

This brings us to the “uncanny” element of the mesh itself, which, while precisely not something in which we would be *at home* or *heimliche* (so much for all the metaphors of deep ecology), is something “you never perceive directly,” since it would cease to be the “interconnectedness” of things and be but one thing among others (57).<sup>4</sup> The point, as I take it, is to think an expanding unboundedness of relations, while being attuned to the mysterious element this “unboundedness” marks. But this “mesh” is not a formalism. He argues that it informs, rather than forms, a “true materialism” that “would be nonsubstantialist: it would think matter as self-assembling sets of interrelationships in which information is directly inscribed” (83).<sup>5</sup>

This brings us to the second chapter, “Dark Thoughts.” I want to be careful not to suggest that Morton is providing us with another environmentalist or new age conception of the “ineffable.” A “dark ecology” does not stop short of thinking the non-human beyond, like a spiritualist version of negative theology. Rather, it marks how “knowing more about interconnectedness results in more uncertainty” about

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the very categories we use to mark out the world. Where this has led some to a postmodern skepticism that dictates all we know is that we cannot know about the world, Morton is right to champion a mode of realism, but one in which clarity is precisely the enemy of thought about what is real: “The book of Nature is more like a Mallarmé poem than a linear, syntactically well organize, unified work” (61). More recently, Morton has linked this “ecology” less to Darwinian biology than (meta)physics, attacking the Newtonian pool hall view of the world of previous generations of “realists”:

[I]n the late 80s I remember one rather belligerent fellow guilting us out for even thinking about deconstruction—“Reality as I see it is like a boring painting, but you make it sound like an acid trip.” The funny thing is, the current state of physics means that the view of matter as shiny pingpong balls, with a separate self viewing them, is the hallucination. In any case, these developments [in physics] are 1) Real, 2) Pressing and 3) They severely limit (or in the case of nonlocality, profoundly undermine) a materialism consisting of little shiny pingpong balls, bundled with the attitude of subject-object dualism, in particular, the mind-matter manifold that has done some damage (shall we say) in its rather brief historical run.<sup>6</sup>

The author is not alone, of course, in trying to tease out a workable ontology consistent with the fantastic, almost trippy visions of the world on offer from physics and biology as well as the deconstruction of the subject where co-existence or Heideggerian “*Mitsein*” comes to the fore. The trick is to produce concepts that don’t fall back into the old binary oppositions now rendered moot while also not simply rendering oneself mute in the face of our quite dark thoughts about ecological devastation. This occasionally, however, leads Morton to link “the ecological thought” to all manner of progressive thinking, which, while critical of identity politics, would “also be friendly to disability” studies (85). Morton’s “dark ecology” guides us to a rather bright version of the future in which races are known not to exist, disabilities are to be thought as differential abilities, and homophobia becomes homo-philia.

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But, on the flip side, isn't there a danger of this being anti-ecological in the every day sense? Thinking big seem to mean here simply describing as inoperative the stubborn localized identities of various "collectives" whose members, such as indigenous critics of globalization, are simply holding to naïve essentialisms, while Morton also aligns himself to the goodness of rather heterogeneous areas of study—many of which are indeed anti-ecological. In other words, Morton's metaphysical claim is that "absolutely everything is absolutely related to absolutely everything else."<sup>7</sup> But this doesn't mean the ecological thought can be all things to all people.

This brings us to Morton's minimal thesis: existence "is coexistence." His final chapter, "Forward Thinking," champions an ethics that no longer is content to find ways to "let nature be" (101). (This, of course, is an implicit criticism of Heideggerian environmentalisms founded in the dead-end of "Gelassenheit.") In this chapter, Morton weaves considerations of "cooperation" across species and across the globe as an "obligation of ecological thought" (101). But here more theoretical *choices* need to be made. It is not a simple binary, but for a short review let's put it thusly: Levinas or Heidegger? Morton's work is convincing on the problems of using Heidegger's later writings for the "ecological thought," and his references to Levinas and the "elemental" are the most incisive in this work. But ultimately, again to simplify, it is *Heidegger* who is the horizontal thinker of being as being-with, of existence as "co-existence." This "co-existence" of the mesh, in which, again, everything is related and relatable, is hard to square with a Levinasian conception of otherness that is specifically *unrelatable*, in fact, the non-relation *par excellence*. (This is why when Levinas used the phrase "relation to the Other," he talked about "separation" and the "epiphany of the face" both to side-step a relational ontology and in order not to depict the Other as someone with whom I could be *with*; this was specifically his critique of Heideggerian *Mitsein*.) The aim of Morton's analysis is to have the *mesh*, to have *relationality*, but also have something irreducible, singular, testifying to each...other. And here, let me be bold and tickle Graham Harman a bit, by asserting that his work could be the "vanishing

mediator” between Heidegger and Levinas, precisely since he seeks a non-relatable *interiority*, which as *non-relatable*, is unnameable. Though he would critique Morton’s relationism, this would be a welcome conversation to begin.

What Morton, for his part, provides in the end is both a “realism” and an ethics of certain humility given our place in the world: “perhaps the ecological art of the future will deal with passivity and weakness; with lowliness, not loftiness” (109). In this way, we are forced from our place as sovereigns over nature, returning us to an “animism” that Morton puts under erasure (“animism”). What he means is not thinking of trees and the grass and books as having an animating soul, the mark of vitalisms and panpsychism—terms thrown about in critiques of variants of speculative realism—but rather as having a “sentience” marked by an openness to the very interconnectedness under discussion. As he does throughout this book, Morton himself shows an abundant openness to a variety of discourses, from Darwinian theory to Romantic literature to treatises on cybernetics, that make up the de-centered “ecological thought” as well as the thinking that is itself ecological.

But this is not simply a *thought* or even a *praxis*. It is what Derrida calls in *The Animal that Therefore I Am* the “undeniable”: the reality that enmeshes us in a world in which I “follow” and simply “am” (he plays on the homonym of “*je suis*,” meaning both “I am,” and “I follow”) related to unspeakable cruelties and movements in, around, and beyond us. Before all denials is the undeniable, in a manner symmetrical to Morton’s claim that deeper than any “deep ecology” is the mesh. He writes: “We are only beginning to think the ecological thought. Perhaps there is no end to its thinking. T.S. Eliot declared, “Human kind/ Cannot bear very much reality” (*Burnt Norton*, lines 44-45)” (134). Eliot himself turned to his own forms of “sovereign cruelty” and mysticisms as a means for “bearing” any reality at all. It is undeniable the mesh offers another way.

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### Response to Peter Gratton

Tim Morton

I'm very grateful for Peter Gratton's thoughtful review of *The Ecological Thought*. I'm putting myself through Speculative Realism (SR) and Object oriented ontology (OOO) boot camp at present as I return to the Deleuze that everyone but me has been seeing in my work since I stopped writing in a Deleuzian style! SR and in particular OOO are refreshing, powerful and very good for thinking with. I'd certainly rather be thought of as part of SR than as part of posthumanism—even if posthumanism is anything other than just a label in a record store. There is some real rigor there. And almost everyone seems to write so beautifully. *The Ecological Thought* is in very good company then. The funny thing is I kind of backed into SR via deconstruction. It seems to me that there's a lot more to deconstruction than the dreaded correlationism. For instance, deconstruction provides a view of language as non-human—even when humans are using it. It would be a big mistake to think that deconstruction is a form of nominalism or idealism. The concept “strange stranger” is a way to think about life forms but as Peter Gratton and Levi Bryant have argued, there is no problem with thinking non-life this way too.<sup>8</sup> There's a sense in which the strangeness of the stranger is precisely the withdrawal of objects according to OOO. I'm particularly pleased with Gratton's use of *Mitsein* as this had been occurring to me recently—right after the presses started whirring...

OOO seems to have a little more trouble with the other concept in *The Ecological Thought*: the *mesh*. Contemporary physical theories of matter tell us that the entire Universe is what in chapter 3 I call a hyperobject, massively distributed in spacetime in ways that far outstrip human capacities to know or imagine it. In this sense the idea is Spinozan—there is really only one substance, modulated in different ways. This doesn't appear too dissonant with some thinking in OOO. I'm not sure I am a relationist if that means that relationships are real, or more real than other things. For instance, relationality might go all the way down, which means that



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we are living in an infinite Universe. In a strict sense there would no single solid substance that could truly “relate”: relations are always a kind of abstraction. I think this brings me in line with OOO, who probably see relationism as a mode of correlationism (well it’s in the word, isn’t it?). I might differ from OOO to the extent that for me relationality and unicity go hand in hand. Yet relating is epiphenomenal. I believe I was careful to say that the mesh doesn’t exist apart from the entities that directly *are* it.

The question of objects is a matter of supreme ethical and political urgency, not just a good idea, and we need as much thinking about it as possible. The BP oil spill is evidently a hyperobject. How we allow plutonium into social life will be an issue for the next 24,100 years—the time it takes plutonium’s radioactivity to decay.

Some issues remain in thinking what I do alongside SR and OOO. Hyperobjects are a good way to understand my concept of *mesh*. Of course one of the aspects of the hyperobject called Universe is (human) consciousness. Until OOO is able to account for “mind” (did I say “human”?) it will be incomplete from the standpoint of contemporary physical science. The concept “wild” that Peter Gratton juxtaposes with *mesh* fits with a conclusion I’ve been drawing about some forms of SR—that they’re sophisticated versions of the kind of environmentalist language that I’ve critiqued in various places. In essence “wild” is something that happens beyond our control and/or awareness “over there.” The “beyond our control” part is not so much of a problem for me—it’s self-evident. The “over there” part is, because it reproduces an aesthetic distance that is precisely the subject-object dualism that we are all trying to think outside of at present. It’s a way to reify objects and it imagines them precisely in a correlationist way. There is an aspect of the “beyond our control” meme that fits well with the resignation and defeatism expected in this phase of advanced capitalism. Substitute *automated* for *wild* and you will see what I mean. It’s not so much the idea itself as the attitude it codes for. The recovering Marxist in me sees this as a big problem with SR. Some SR thinkers have already critiqued my notion of “responsibility”—the more

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nihilist SR says, “Why wouldn’t an accurate view of reality bankroll irresponsibility? After all, it’s beyond our control.” The only big difference between this mode of SR and eco-phenomenology is that the latter is somewhat theistic, while the former is nihilistic. Both are forms of belief, except that one believes that it’s not a belief (guess which one). That’s not honest. If we truly want to think beyond correlationism we must think beyond belief.

One final word: the real problem is not humans but selves.

### NOTES

<sup>1</sup> Tim Morton, *The Ecological Thought*, p 7. Henceforth all citations from this book are indicated in parentheses. Other citations will be provided in these endnotes.

<sup>2</sup> Here, I’m left to wonder about the status of this mesh vis-à-vis the human/nature split. At times, Morton can sound like Merleau-Ponty, who argued that overcoming the dualism of man and world meant enfolding them in on one-another—thus his flesh of the world where time is always “correlated” to human being-in-the-world. Linguistically, this is a tough conceptual distinction to make: not to enfold the old dualism in a hybridized human-world reality while also not naming some extra-human reality that reifies a “nature” Morton rightly critiques.

<sup>3</sup> This raises the question of whether an “ecological thought” can provide something of a “method” for new forms of reading and taking on texts. Morton at times suggests that it is, but he is more apt to perform this than to cite an explicit *modus operandi* that he is following.

<sup>4</sup> I take this up soon enough, but here Morton moves quickly between a quasi-epistemology (what we “perceive”) and the ontology of the mesh as such. I think he is making a double claim: (1) the ecological thought is *new* in history and is a disseminative perception of the things themselves; (2) that *reality* is itself mesh-y and we’ve finally caught up to this fact of existence.

<sup>5</sup> Here, he explicitly joins his work to the “vibrant materialism” of Jane Bennett. See her *Vibrant Matter: A Political Ecology of Things* (Durham, NC: Duke University Press, 2010), as well as Tim Morton’s “Materialism Expanded and Remixed,” presented at a March 2010 conference on Bennett’s book (available at <http://www.scribd.com/doc/25830212/Materialism-Expanded-and-Remixed>).

<sup>6</sup> Morton, “Materialism Expanded and Remixed,” 3.

<sup>7</sup> Morton, “Materialism Expanded and Remixed,” 4.

<sup>8</sup> Levi Bryant, “The Ecological Thought,” larvalsubjects.wordpress.com/2010/06/16/the-ecological-thought/, accessed June 23, 2010.

*After the Postsecular and the Postmodern:  
New Essays in Continental Philosophy of Religion*

edited by Anthony Paul Smith and Daniel Whistler

Newcastle: Cambridge Scholars Publishing, 2010.

409 pages

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IN THE “EDITOR’S INTRODUCTION,” Anthony Paul Smith and Daniel Whistler declare that this volume is “concerned with contaminations” (2). In a Deleuzian sense, it might be stated that this volume is about connections. However, the connections enacted in *After the Postsecular and the Postmodern* are not concerned with treading a familiar line of critical thought in the field that is largely understood as “philosophy of religion”; neither are these connections merely alluded to. Instead, the book itself embodies an alternative and peculiar manifestation of “speculative philosophy of religion” as a discipline that is eminently concerned with the “practice of philosophy which avoids dissolving into theology or becoming a tool of theological thought” (2).

Throughout the twenty essays (including the “Editor’s Introduction” and the “Afterword”) a consistent (though sometimes silent) theme is that the field designated “Continental Philosophy of Religion” has, in many respects, been contaminated by theological thought, which has since peppered said literature with commitments to religious superstition and metaphysical transcendence. With the increased popularity of the French Phenomenological tradition’s attention to theology, philosophers such as Merold Westphal, James K. A. Smith, Richard Kearney, John Caputo, and Bruce Ellis Benson

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have attended considerably to philosophers in said field (as well as others) in order to bridge the divide that (supposedly) exists *tout court* between philosophy and theology. The oft-seen result is a “theologisation” of philosophy, with the latter performing a supportive role to the principle characters of God, liturgy, and the church. This is seen most explicitly in those outspoken opponents of modern secular thought—the loosely affiliated group known as Radical Orthodoxy. The result of the connections and contaminations of the essays contained in this volume however skirt such “postsecular” tendencies in favor of a renewed and vigorous approach to the future hope of a true Modernity; one that retains the hope for the New that lit the West afire post Descartes, that has learned from its postmodern critics, but that doesn’t fall into either crude reductive materialism or fideism. The result is a collection of essays that gel together to create a symphonic piece that resists the pitfalls of the “theological turn” (while often critically engaging with those who carry said mantle) and that embodies an alternative understanding of philosophy of religion itself as a speculative philosophical discipline.

Divided into three sections, this volume is self-professedly modeled upon Deleuze’s “account of the liberation and automation of philosophy of religion” (6); and as such stresses *modernity, secularity, and speculative philosophy*. The first section therefore stresses “the significance of the early modern period for philosophical thinking about God” (6). For example, the first essay by Rocco Gangle outlines the “chimerical” sense of Spinoza’s *Ethics*, whereby the latter employs medieval Scholastic and early modern philosophical terminology in new ways (i.e. through new connections) to the end that “new syntactical practices and systematically constructed relations” (26) might alter presupposed philosophical methods and assumptions. Two such terms that undergo the chimerical process in Spinoza, according to Gangle, are *individuation* and *affect*. The former term had been generally understood as a process arising at (what Deleuze would call) the molar level. However, Gangle demonstrates the radical move of Spinoza toward immanence: “For Spinoza...individuation

is conceived independently of any witnessing consciousness and without reference to any transcendental unity of experience...[Individuation] is an event immanent to the unique causal order of universal Nature, or God, and is not a function of any subjective-objective or noetic-noematic correlate or polarity” (33). By placing individuation pre-subject-object, Spinoza sketched an affective metaphysics of dynamic physical processes within the Real (in a Lauruellian sense, by whom Gangle’s reading of Spinoza is greatly influenced). Therefore, while there are differences among bodies, at the core there is “an underlying continuity of nature” (34). This interplay of dynamical processes allows us, Gangle claims, to better understand the sense of affects in *Ethics*: “Spinozist affects are defined as capacities of bodies to affect and to be affected by other bodies in all specifically determined ways... It is impossible to distinguish what a thing is from what it does...The essence or nature of a thing, for Spinoza, becomes understood as the sum of its internal and external affects” (37). According to Gangle, the resultant affective monism that Spinoza advances disorients the transcendental presupposition that has shaped most of the philosophical tradition, “namely the very presupposition that thought is itself governed transcendently” (38). In this disorientating chimerical project, Gangle sees hope for thought itself. Through a “strategy of the chimera,” Gangle envisions that it would be possible to overcome, for example, the duality of theological orthodoxy/heterodoxy altogether, in favor of a “new instrument of affectivity and a new employment of thought” (41). As he summarizes in the closing paragraph, “Immanence does not realize one possible figure of thought. It is not a framework, template, or schema. It does not interpret. It unlocks. And thought’s every real future remains foreclosed if thinking itself is not first made truly free” (42).

Throughout the remaining five chapters in the opening section, similar excursions are taken through modern thinkers such as Irish Philosopher John Toland, Schelling, Kant, Bergson, Rozenzweig, Kierkegaard, and Heidegger. Though the specific task changes, each essay in this section functions

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very much like the task outlined by Gangle in Spinoza's *Ethics*: an unlocking of thought that (1) highlights the oft-neglected speculative intent of modern philosophy of religion and that (2) challenges the notion and content of the "secular" in modern philosophy of religion. The goal of the first section is to therefore rethink and reenact key modern thinkers through creating new connections in order to allow the resultant philosophical machines of "Modernity" to affect anew what Continental Philosophy of Religion might become.

The second section continues the process of disorientation by reformulating the sense of secularity. Thus, the claim is that the modern "secular" is only "secular" to a degree because of its emergence from a profoundly Judeo-Christian heritage. Instead, the essays in this section attempt think anew the secular which "takes up the modern emancipation of philosophy in the service of a new speculative construction of a true secular. This requires a reconsideration of discussions of the secular in modernity so as to take up what is most powerful therein, and recast it in a new critical form" (15). While the second section continues the process of the first, there is a substantial leap forward by way of the overall project of the volume. It might be best to view the first section as the opening act, where characters are introduced, plots are developed, and dynamic tension is established. In other words, there is a clear script that is followed (for the most part, although some improvisation is included). The second section however is where the actors break script and begin to create. The essays in this section bring together a cacophony of voices: Asad, Deleuze, Bergson, Hegel, Agamben, Badiou, Jambet, Foucault, Feuerbach, Virno, Häggglund, Bataille, and others are all employed to architect a secularism that is "located equally in all religious traditions" rather than the present post-Christian secularity that subversively insists in the hands of Western powers (16). With great articles by Daniel Barber, John Mullarkey, Clare Greer, Adam Kotsko, Albert Toscano, Nina Power, and Alex Andrews, this section (for me) is the strongest and most intriguing section, as well as the most explicitly political.

The final section of the volume is by far the most audacious

of the lot. If the second section is where the actors begin to create, then the final section can only be considered “philosophia dell’arte.” Contributing to the burgeoning speculative movement in contemporary philosophy, this section follows a similar vein to the work of Harman, Grant, Brassier, and Meillassoux. Of particular notice for readers of *Speculations* are the essays by Anthony Paul Smith, Michael Burns, and Daniel Whistler, who all engage with figures who have had considerable influence on the current speculative trend in philosophy. Smith’s essay considers the radical immanence of François Laruelle’s non-philosophy and the possible implications the latter might have on constructing a non-theology that thinks *from* the Real (rather than *of* the Real) and what such a non-theology might be able to offer the future of a truly secular philosophy of religion that resists succumbing to the sufficiency of religious material. As one of the few English-speaking expositors of Laruelle’s non-philosophy, Smith’s essay is a real treat for those interested in teasing out the former’s thought as developed in Brassier’s *Nihil Unbound*. Likewise, Michael’s Burns’ essay spends considerable time developing a Kierkegaardian reading of Meillassoux’s *After Finitude* that attempts to supplement the shortcomings of the latter’s “divinology” (i.e. God-as-possible) with a Žižekian-Kierkegaardian inspired materialism that posits God as possibility itself. Then arguing against the “radical atheism” of Martin Hägglund, Burns turns to Badiou’s concept of “materialist dialectics” in order to advance a philosophy of infinitude that both escapes the drab “bio-material struggle for life” (of Hägglund) and that remains committed to Meillassoux’s notion that “anything is possible.” Finally, Whistler’s article addresses in what a speculative approach to religion might consist. The path he takes to answering this question is through the work of F. W. J. Schelling. Engaging with the work of Ian Hamilton Grant, Whistler asks of speculative philosophy in general and of Grant’s philosophy of nature in particular: “Do [they] have the range and capacity to provide an adequate account of religion” (339)? Through a “physics of language” and geology, Whistler develops Schelling’s

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*Naturphilosophie* to show how religious studies, philology, and geology are *physically related* and therefore “have the same ground (the unruly) and are generated by the same subject (productive nature)” (354). This leads to the conclusion that both “language and religion are subjected to the speculative process: they are incorporated as regional subjects of an overarching, unconditioned *Naturphilosophie*” (354).

Although only a select few of the essays were highlighted above, each one of the essays in the volume offers a considerable amount to the overall project of *After the Postsecular and the Postmodern* and to the future of Continental Philosophy of Religion. Whether or not one agrees with the various writers of the volume, the “chimerical” process of the project will surely provide fodder for future debate. That said, I highly recommend this volume for anyone interested in current developments in “Continental Philosophy.” Whether it’s read straight through or used piecemeal, this volume is a necessary tool for thinkers interested in the future of speculative philosophy. (For those interested, the editors have provided open access to the “Editors Introduction” online at [www.scribd.com/doc/32287542/Editors-Intro](http://www.scribd.com/doc/32287542/Editors-Intro))









