

Interview with Peter Wolfendale

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Dr. Wolfendale was interviewed by Laureano Ralón. September 11th, 2016.

Peter Wolfendale is a Postdoctoral Research Fellow in the Philosophy Department at the University of Johannesburg in South Africa. He studied philosophy at the University of Warwick, earning his PhD in 2012. His thesis, *The Question of Being: Heidegger and Beyond*, was an attempt to reformulate the question of the meaning of Being after Heidegger, using some decidedly non-Heideggerian tools to provide a methodological framework for doing post-Heideggerian metaphysics. During his time at Warwick, he edited Volumes 19 and 20 (co-edited with Becky Mahay) of *Pli: The Warwick Journal of Philosophy*. His first book is *Object-Oriented Philosophy: The Noumenon's New Clothes*.

What attracted you to philosophy and how did it shape your view of the world?

I came to philosophy somewhat by accident. I've always been inclined towards abstract questions, ever since I was a child, and from around the age of seven until my early teens all I wanted was to be a particle physicist. I wanted to understand the fundamental stuff out of which the world was made. This desire was snuffed out by a bad physics teacher, who seemed to view my innate interest as an obstacle rather than something to encourage (he wasn't necessarily a bad teacher for everyone else, but he was a bad teacher for me). I then got interested in politics, and I had every intention of studying politics and economics at university, and maybe even pursuing a career in it. My desire for anything like a career in a political party was crushed by the then Labour government's response to

the protest movement against the war in Iraq, and replaced by a more abstract desire to understand why such a movement could have no effect. My desire to study politics was then frustrated by my own decidedly mediocre A level results. However, having applied for various mixed politics degrees, including politics and philosophy at Warwick University (there was no PPE at the time), I was contacted to see if I would like one of the spare places in the pure philosophy program there. I had known a few philosophy students from Sunderland University, and decided that it might be interesting. Serendipitously, it turned out that philosophy was a perfect fit for me.

It's hard to describe how philosophy has shaped my view of the world without also saying something about how the world has shaped my view of philosophy. I've already mentioned that I came to university with what I felt was a *relatively abstract* question: how was it possible for something like the biggest peace protest in history to have absolutely no effect on either government policy or the political discourse through which that policy was determined? I could see that it had something to do with the underlying mechanisms through which political consensus was maintained and thereby the difference between the sorts of arguments that were had in private and the sorts of arguments that motivated our choices at the ballot box, but I didn't really have the resources to articulate this intuition and explore it further. How did I go from this *relatively concrete* question to working on logic and metaphysics? The answer is that I started on a meandering path of abstraction that wended its way deeper into foundational questions or higher into conceptual abstraction, depending on how you look at it: What are *arguments* exactly, and how do they relate to *choices*? What precisely do we mean by *consensus*, and what might it be to talk about *discursive structures* that maintain it? What are *social systems*, to what extent are they different from other kinds of thing – from physical particles and biological populations, to mathematical

abstractions and fictional characters? How are the *disciplines* that study these systems – from sociology and geography, to economics and political science – different from the natural sciences and the arts/humanities? What is *Being*? What is *Reason*? What exactly are *metaphysics* and *epistemology*? What is *logic*?

That's a very simplistic reconstruction of the path I've hewn through the philosophical landscape, which misses out the contingencies of specific topics and historical thinkers that played important roles along the way, not to mention the wrong turns, mea culpas, and existential dilemmas any such journey of intellectual self-discovery tends to include. Nevertheless, it gives some impression of the way in which the various concrete issues that motivate our intellectual pursuits tend to intersect with one another in interesting ways once one rises through the strata of abstraction. What the world has taught me about philosophy is just how much of it is about navigating these levels of abstraction, by exploring the intricate networks of dependencies between the concepts we're working with. What philosophy has taught me about the world is just how important it is to be able to pick the right level of abstraction for the issue you're concerned with, or the importance of understanding the general scope of the problem for which you're seeking a specific solution. It often seems like an exercise in self-indulgence to climb to the heights of conceptual abstraction: as if one is ignoring important matters by hiding one's head in the clouds. However, if we shift our perspective, we can see that it is sometimes rather a matter of circumventing obstacles in the problem space: descending to conceptual foundations in order to secure a better path of ascent to concrete solutions. I can't claim to have a definitive analysis or solution to the political problems that started me down this path, but I do feel that I understand them, and a whole bunch of related problems, a good deal better than when I started.

You have been highly critical of speculative realism and object-oriented ontology. Your recent book, *Object-Oriented Philosophy: The Noumenon's New Clothes*, presents a systematic critique of Graham Harman's object-oriented philosophy. That said, much of your 'para-academic' activity through your resourceful blog ([here](#)) sprung out in the context of the online community that grew up precisely around 'speculative realism'. On the one hand, you denounce the 'vacuousness' of that term "speculative realism" and are quick to remind us that the different positions (Harman's, Meillassoux's) are not consistent enough to amount to an overarching "movement". On the other hand, you seem to acknowledge a kind of communal spirit stemming from SR and OOO, which somehow contributed to the development of your own thought, partly by bringing the philosophical conversation outside the bounds of the university – a democratizing move indeed. I wonder if you think there is something of a legacy to SR and OOO that reaches beyond their ontological commitments into the political sphere?

I started *Deontologistics* when I was part way through my PhD in 2009. There had already been a small first generation of philosophy blogs associated with the UK Continental philosophy scene, including Mark Fisher's *k-punk* and Nina Power's *Infinite Thought*, but the increasing popularity of blogging across the internet led to the emergence of a new generation of blogs, such as the *Speculative Heresy* group blog, Paul Ennis's *Another Heidegger Blog*, and a panoply of other loosely connected sites run largely by graduate students working in Continental philosophy and related areas. There are several reasons that interest in SR catalysed the growth of this small region of the blogosphere, not least of which was the active involvement of Graham Harman (*Object Oriented Philosophy*) and Levi Bryant (*Larval Subjects*), who then edited *The Speculative Turn* (RePress 2011) with Nick Srnicek of *Speculative Heresy*. However, it's worth emphasising that the excitement SR engendered was in many ways a result of a more general malaise

in Anglophone Continental philosophy that many graduate students felt quite acutely. This seemed like an opportunity not only to return to doing speculative metaphysics, following on the heels of Deleuze and Badiou, but an opportunity to engage in original thinking that didn't have to be wrapped up in exegetical fawning over master figures, or elaborate genuflection to older generations of scholars caught in their sway. The SR blogosphere was less united by common ideas than by a shared desire to break with the bureaucratic over-coding of Continental philosophy and various strands of 'theory' downstream from it in the arts and humanities. The interesting question is why we would want to call any of this, and what has come out of it 'para-academic'?

I personally never identified as a 'speculative realist', but began defending a roughly Deleuzian position in metaphysics attached to some more Brandomian ideas in semantics and epistemology. It's somewhat apposite that the first two conversations I ever had with Ray Brassier were about Deleuze (at Middlesex, while he was still working on *Nihil Unbound*) and Sellars and Brandom (in Bristol, during the *Speculative Materialism* conference). This is a combination that still strikes many people as deeply weird, even if Ray and myself have since had some limited success in persuading Continental philosophers to read Sellars and Brandom. It's precisely the fact that this sort of weirdness was entertained in online discussion that made the SR blogosphere not just interesting, but welcoming, and thus made SR seem like a name for a new vector of philosophical inquiry. What went wrong? Well, just because you're all weird by the standards of the mainstream doesn't mean you're actually capable of having productive disagreements. How do you discuss the concrete constraints that natural science places on metaphysics with someone who thinks that metaphysics shows that science can tell us nothing about the nature of the world? This is the main fault line that gradually became apparent in the loose assemblage of ideas that SR was supposed to label. The four thinkers at the

original SR conference (Meillassoux, Grant, Brassier, and Harman) were loosely unified by Meillassoux's critique of correlationism, but this ultimately proved insufficient to fix the meaning of 'realism' let alone 'speculation': Meillassoux has always refused the label of 'realism'; Grant has always refused to reject idealism in the name of 'realism'; Brassier has consistently critiqued Continental philosophy's refusal to take seriously science's epistemic claim on the 'real'; and Harman literally defines 'real' as that which is beyond all such epistemic claims. The truth is that, as the superficial disagreements were exhausted, this deeper disunity increasingly came to the fore, and what was once merely weird began to turn positively ugly.

Harman was indisputably the most authoritative public voice for SR (the others not having, or wanting, an internet presence), and the initial promise of the label evaporated as something resembling an official definition congealed around 000 – which by this time had at least four distinct variants (Harman, Bryant, Bogost, and Morton) – and those positions with whom they had manageable metaphysical disagreements (e.g., Steven Shaviro's Whiteheadian process philosophy, Jane Bennett's new materialism, Markus Gabriel's new realism, etc.). This worked in tandem with a number of epithets designed to conveniently dismiss those who thought that perhaps there is an important connection between metaphysics and science, most notably 'scientism', which is almost as vacuous as 'realism' in this context. As a pejorative it means something like: 'too much deference to science'. But how much is *too much*? Is there a debate to be had on the *extent* of our responsibility to pay attention to science? No. It seems that *any* deference commits one to 'scientism' much as *any* commitment to the possibility of knowing reality is incompatible with 'realism'. When confronted with this sort of rhetorical impasse, it's no surprise that many of us abandoned the hope that SR could index anything resembling a productive research program. Of course, this didn't stop the words

'speculative realism' from appearing in CFPs, conferences programs, papers regarding its consequences for X, Y, or Z topic, and occasional ill-tempered articles by more mainstream thinkers denouncing its presumed challenge to said mainstream, but I'd contend that much of this activity, whether pro or anti-SR, was largely grist for the same old academic mill, rather than anything interestingly para-academic. Where is para-academia in all this?

I'll return to that question later on. However, you're right to point out that, para-academic or not, there is a wider legacy of SR and OOO that reaches into the political sphere. I think there are roughly two strands of this legacy, and they both involve trends that either precede or are in some way independent of the specific debates that SR originally clustered around.

On the one hand, the existing connection between OOO and Bruno Latour's 'actor-network theory' (ANT) has been integrated into a wider nexus of positions that aim to think through the consequences of radical anti-anthropocentrism for political and social theory: most notably producing dialogue with 'new materialism' (e.g., Jane Bennett, Karen Barad, Elizabeth Grosz, etc.), engaging with nascent 'new realism' (e.g., Maurizio Ferraris, Markus Gabriel, Mauricio Beuchot, etc.), and bordering on 'critical posthumanism' (e.g., Rosi Braidotti, Cary Wolfe, Catherine Hayles, etc.). I wrote a little about this nexus in my book, focusing mainly on the OOO/ANT/new materialism convergence. In a nutshell, I think that the anti-anthropocentrism of these positions tends to collapse into anthropomorphism, with the result that many of the most important concepts required by political and social theory are evacuated of useful explanatory content. If everything is already an agent, and everything that happens is already an action, then the question of how we create and cultivate something like collective agency through political action ceases to have any meaning. Nevertheless, one can't

deny the popularity of these ideas, or the fact that they speak to certain contemporary political concerns. The conceptual figures around which these concerns are articulated – e.g., ‘the Anthropocene’, ‘hyperobjects’, and ‘the posthuman condition’ – deserve a more thorough critical examination than I can deliver here.

On the other hand, the connections between the work of Ray Brassier, Reza Negarestani, Mark Fisher, and the earlier work of Nick Land, Sadie Plant, and the CCRU has catalysed a very different nexus of positions less concerned with rejecting anthropocentrism than articulating a radical inhumanism: most (in)famously producing a political tendency that has come to be known as ‘left-accelerationism’ (cf. Nick Srnicek and Alex Williams’s ‘#Accelerate: Manifesto for an Accelerationist Politics’), intersecting with issues of sex/gender/identity in ‘xenofeminism’ (cf. Laboria Cuboniks, ‘Xenofeminism: A Politics for Alienation’), and interacting with a set of emerging tendencies in philosophy of technology that reactivate some form of ‘cosmism’ (e.g., Benedict Singleton’s idea of ‘design as generalised escapology’ and Benjamin Bratton’s idea of ‘geopolitical philosophy as a core sub-discipline of synthetic astrobiology and computer science’). It’s important not to collapse these positions into one another. However, I think that their common commitment not only to *knowing* ourselves and the world we live in, but *actively using* this knowledge to cultivate our agency and engage with the world’s problems, makes for a stark contrast with OOO/ANT/etc., whose generalised skepticism and universalised voluntarism seem designed to provide an intricate apologia for ignorance and inaction. For those who are interested, I recently gave a talk at Goldsmiths on the connection between ‘Prometheanism’ and ‘rationalism’ that explores these common commitments ([here](#)). I should also add that the term ‘accelerationism’ has suffered a fate not dissimilar to ‘speculative realism’ in the wider discourse, and that I wrote a short response to a critical review of the

#ACCELERATE reader published by Urbanomic that attempts to clear up some common confusions ([here](#)).

You are an independent scholar working on the edges of the academy. To build on the previous question –that is, on the idea of a conversation that exceeds the limits of institutional life – what are the pros and cons of being a para-academic player, especially in the context of an increasing privatization of post-secondary education?

Thankfully, I'm no longer an independent scholar, having just taken up a postdoctoral research fellowship at the University of Johannesburg. However, given that I spent over four years without stable academic employment post-PhD – writing, speaking, and occasionally teaching on the periphery of the academic world – I believe I can say something useful about what it is to be a 'para-academic player'. I still have business cards with 'freelance philosopher' and 'conceptual consultant' written on them, which are basically just more ambitious and less embarrassing ways of saying 'unemployed philosopher'. The important thing is to make sure that 'para-academic' isn't just another one of these synonyms. To that end, I want to pick up the question I left hanging in my last answer: how should we understand 'para-academia' in the context of SR? I think there's roughly two sources of what you might call 'para-academic drift' associated with SR and its milieu: *internal exile* of graduate students who were involved with it, and *external involvement* of groups outside philosophy and academia more generally, such as artists, architects, geographers, and others.

It's pretty obvious that the academic job market is pretty awful these days. There are a lot of people with PhDs and no chance of getting a job researching and/or teaching in their area of study, and this isn't restricted to philosophy let alone the margins of Continental philosophy. However, the intensification of competition for academic positions has made it even harder to be weird in the way that the SR blogosphere

welcomed. As I've already suggested, the mixture of excitement and hostility that SR engendered produced much grist for the academic mill, but that didn't necessarily translate into job prospects for those who were involved with it. It may have been a net positive for many already established academics, but it was mostly a net negative for those graduate students looking to establish themselves. It's sad to say, but career-wise most of us would have been better off churning out another half dozen articles on Derrida that no one but reviewers will ever read than trying to get involved in a genuine conversation about the future of philosophy. This isn't how things felt at the time though. The cognitive dissonance of being involved in something that is simultaneously supposed to be both cutting edge and insufficiently established can force a choice between following your interests (para-academia) and pursuing a career (academia). Yet for some this choice comes too late to make a difference. This is what I mean by internal exile. I once asked why I wasn't shortlisted for a teaching job, and was told: "we really warmed to your interest in speculative realism/materialism. However, we were a little concerned that this approach is still 'pre-paradigmatic' and, overall, we felt that this was not the right position for you at this stage of your career." The important thing to note is that my CV did not contain the words 'speculative realism' anywhere, but this didn't stop them from putting me in that box and then explaining that the box was insufficiently well defined. I don't wish to present my own case as too representative – I've made many unique mistakes, and been uniquely lucky in many respects – I simply wish to emphasise how easy it is to retrospectively characterise work as 'para-academic', as if it was always intended as such. Para-academia is not always voluntary.

Nevertheless, there are benefits to working on the edges of academic philosophy. This is where I think it is important to talk about the opportunities provided by external involvement

of groups outside philosophy and academia more generally. A large part of the interest in SR, 000, accelerationism, and similar trends has come from these directions. Despite not having a philosophy department, Goldsmiths College in London has played host to a number of important interstitial events over the last decade. There are then a number of more specialist art schools that have shown an interest in and actively cultivated work in these areas in ways that provide unique opportunities for people such as myself. For example, I recently gave a paper at an event organised by the Dutch Art Institute in Arnhem, and while there had the opportunity to do a series of one on one tutorials with students, discussing everything from the philosophical implications of cognitive neuroscience and contemporary shifts in market research, to the use of legal instruments as an artistic medium. There are also a number of art institutions, such as der Haus der Kulturen der Welt and der Akademie der Kunst in Berlin, das Fridericianum in Kassel, Performing Arts Forum in St. Erme, the Tate Britain in London, and others, who not only invite people such as myself to speak, but are willing to pay our expenses and even modest honorariums. This is in marked contrast from academic workshops and conferences, where the prevailing assumption is that your home institution will cover your costs, further alienating those without academic positions. I should also mention The New Centre for Research and Practice, run by Mohammad Salemy and Jason Adams, for whom I have taught several online courses over the past two years. They have done an incredible job of connecting peripheral thinkers such as myself with an audience of students who want to learn about our research (thenewcentre.org).

Finally, it's worth emphasising that there's more to these opportunities than the financial support they provide. There's a certain diversity of interests and ideas in these spaces that is valuable in its own right. These encounters not only force you out of your intellectual comfort zone, they also force you to communicate your ideas in ways that people with

different backgrounds can understand and appreciate. There's a certain conceptual narrowness and stylistic blandness encouraged by writing for an audience of peer reviewers, which can make writing for a broader audience somewhat liberating. There's also a certain lip service paid to 'interdisciplinarity' in universities that rarely involves sincere encounters between people working in different fields, which can make interactions outside of the university context quite invigorating. I think I'm a better writer, speaker, and indeed thinker for having engaged with audiences, experts, and practitioners outside of academic philosophy. This is 'para-academia' at its best, and it would be amiss of me not to mention the exemplary work of Robin Mackay and Urbanomic Press in connection with it. *Collapse* is probably the only journal I am inclined to buy and read from start to finish, combining as it does a curated selection of pieces from thinkers of diverse backgrounds (philosophers, scientists, authors, etc.), on a unique and fascinating topic in each issue (mathematics, contingency, horror, etc.). There are English translations of incredibly significant philosophical works, such as Fernando Zalamea's *Synthetic Philosophy of Contemporary Mathematics*, Quentin Meillassoux's *The Number and the Siren*, and Gilles Châtelet's *To Live and Think Like Pigs*, which wouldn't exist without Urbanomic. Last but not least, I don't think any other publisher would have taken the risk of putting out my *Object-Oriented Philosophy: The Noumenon's New Clothes*, let alone turned it into such a well crafted and easily available paperback. I thoroughly recommend giving them some of your money ([here](#)).

In your 'Essay on Transcendental Realism', you claim that "we still have not yet come across a good definition of 'the real structure of the world'". You also claim that "the notion of reality is actually supposed to make sense of what ontology is, not vice-versa." Contra speculative realism and object-oriented ontology, you seem to be suggesting a return to metaphysics, understood as a theory of the world as a whole...

The current renewal of metaphysics in the Continental tradition, of which SR/000 is merely the most obvious expression, is not entirely dissimilar to the renewal of metaphysics in the analytic tradition that began in the 1970's and has since snowballed. There was an anti-metaphysical tendency dominant in each tradition from their beginnings in the first half of the 20th century. Although there were always metaphysical outliers (e.g., Bergson, Sellars, etc.), the influence of phenomenology/post-structuralism in the Continental tradition (e.g., Heidegger/Derrida) and logical positivism/ordinary language philosophy (e.g., Carnap/Wittgenstein) in the analytic tradition cultivated a pronounced skepticism about the very possibility of metaphysical inquiry. Figures like Habermas and Rorty were even able to exploit this 'post-metaphysical' consensus as a means to build bridges between the traditions. The problem with the ongoing collapse of this consensus has been that the desire for renewed metaphysical speculation has rarely been accompanied by a response to the methodological problems posed by metaphysical skepticism. If you ask someone in the analytic tradition working on, say, the metaphysics of causation (e.g., Russellian eliminativism, Lewisian counterfactual analysis, causal law realism, powers metaphysics, etc.) what precisely 'metaphysics' is, they'll likely say something like "the attempt to describe 'the real structure of the world', 'what there really is', 'the fundamental constituents of nature', etc.", but they're unlikely to be able to define these phrases with any degree of methodological precision. I think that if you ask someone in the Continental tradition working on, say, the metaphysics of agency (e.g., Zizekian/Badiouian ontologised Lacanianism, Deleuzian neo-Spinozism, Latourian actor-network theory, new materialism, etc.), then you're apt to get a similar response, maybe using slightly different language. What this means is that 'metaphysics' has come once more to signify something like 'first philosophy', not in the sense of providing a methodologically perspicuous foundation for other fields, but in the sense of naming the place where

we keep our foundational assumptions, whatever those assumptions happen to be. I think that this absence of methodological self-consciousness is precisely what Heidegger would call 'the forgetting of Being' (*Seinsvergessenheit*).

I once went to a really excellent conference on *The Metaphysics of Evolutionary Naturalism* at the American University of Beirut, which had an excellent line up of speakers – including Dan Dennett, Ruth Millikan, and Paul Horwich, among others – and I asked every speaker who used the word 'metaphysics' to define it. No one could give me a remotely precise answer, let alone a consensus definition, but equally, no one seemed all that bothered by this. The most significant response came from Tim Crane, who reached for Sellars's famous phrase about understanding "how things in the broadest possible sense of the term, hang together in the broadest possible sense of the term." (PSIM, I) The telling thing is that this as a definition of *philosophy*, not a definition of *metaphysics*. Even if one thinks that metaphysics is the foundation of the rest of the philosophical enterprise, one must still be careful not to identify it with the whole enterprise. One must be willing to distinguish metaphysical questions from other sorts of philosophical questions, such as those of epistemology, ethics, and aesthetics, even if one thinks that answers to the latter depend upon answers to the former. If nothing else, this is a condition of defending the priority of metaphysics against those who think we can do epistemology, ethics, and aesthetics without having to do metaphysics. This is the difficult thing about trying to define metaphysics: there might be a sense in which it is about 'the world as a whole', but this sense must be specific enough that most questions – e.g., 'Where did I put my keys?', 'Why is the weather sunny today?', 'What causes pancreatitis?' – need not be metaphysical questions, even though they are concerned with bits of the world. This difficulty goes all the way back to Aristotle, who defines the methodologically perspicuous sense of 'first philosophy' (*prote philosophia*) as

that which inquires into beings *as such* and beings *as a whole*. This is equally the origin of what Heidegger calls 'onto-theology', insofar as Aristotle unites the two halves of the inquiry into beings *qua* beings (as such/as a whole) by subordinating them to the inquiry into a specific being (the divine, as first and final cause of all other beings). I don't wish to recapitulate the whole of Heidegger's analysis here, but simply to suggest the philosophical and historical depth of this problem of what it is to think about the whole *qua* whole.

The reason I refuse to return to pre-critical metaphysics and the reason I insist on the importance of the concept of 'reality' are closely linked. As I've already indicated, I think that it is important to actually respond to metaphysical skepticism, rather than simply dismissing it. It is important not to confuse Kant's transcendental idealism with metaphysical skepticism. Hume is a metaphysical skeptic. He provides an epistemological definition of metaphysics as inquiry into that which lies beyond the bounds of experience, and then uses this definition to argue that metaphysics is impossible, because such inquiry is impossible. Kant responds to Hume's skepticism by providing a revised definition of metaphysics that demarcates between those traditional metaphysical problems which cannot be solved (i.e., the illusions of reason in the *Transcendental Dialectic*) and those which can (i.e., the subject matter of *The Metaphysical Foundations of Natural Science*). I do not endorse Kant's transcendental idealism, but I agree with him that there is an important difference between metaphysics and the critique of metaphysics. The former aims to answer certain sorts of question – e.g., 'What is time?', 'What is causation?', 'What are properties?', etc. – and the latter aims to clarify the very meaning of these questions – i.e., the difference between 'What is time?' and 'What do we mean by 'time', here?' – and thus what metaphysics is as such. The role of the concept of 'reality' in my work derives from this critical demand to be

able to explain to the metaphysical skeptic what metaphysics is without circularity, i.e., without appealing to metaphysical assumptions. It is for this reason that I reject the definition of metaphysics as first philosophy entirely: the only way to articulate what metaphysics is in a way that can respond to the skeptic is articulate it in non-metaphysical terms, which requires that there is something over which metaphysics does not have priority. The aim of my *Essay on Transcendental Realism* was to provide an epistemological definition of 'real' that could then be used to divide a question such as 'What is time?' into the questions 'What does 'time' mean?' and 'What is it, really?', thereby articulating an excess of the 'real structure of the world' over the structure of our thought about it.

In the above-mentioned essay, you sketch out your own 'transcendental realist' position, which you define as any position that shows that the structure of thought itself implies that there is a real structure of the world in excess of the structure of thought. However, you are quick to point out that such an excess is not ontological but epistemological. Indeed, contra speculative realism, you speak of "Kant's Revenge". Your essay is available on the web, of course, but I think it would be of value for our readers to get a general sense of your position in plain language...

The *ETR* was written in just under two weeks in July 2010, and hasn't been updated since ([here](#)). It was not just too large (~24,000 words), but in many respects just too weird to publish as is (too Continental for analytics / too analytic for Continentals), and there hasn't been enough incentive to revise and extend it for publication as a monograph, given how much work it would take and how uncertain the outcome would be. Some of the ideas about the relationship between logic, metaphysics, and science make an appearance in the latter half of my *Object-Oriented Philosophy* book (§3.4-§3.6), and other aspects have been developed more thoroughly in a few recent

talks I've given, but, despite its flaws, it remains the most systematic statement of my views on metaphysics.

I've already described the basic aim of the essay in my answer to the last question: to provide an epistemological definition of metaphysics that is both broadly Kantian and yet provides an alternative to Kant's transcendental idealism and the various strands of 'correlationism' and genuine metaphysical skepticism that are its intellectual descendants. I do this in roughly three stages: i) I reconstruct Meillassoux's account of the dialectic of correlationism in order to show that it essentially revolves around questions regarding relations of ontological dependence between the 'structure of thought' and the 'structure of the world', ii) I reconstruct a similar dialectic in the analytic tradition in which the term 'real' plays a crucial role, teasing out a common position which I call 'deflationary realism' that, when generalised, offers an alternative to correlationism by conceiving the dependence relation between the 'structure of thought' and the 'structure of the world' in epistemological rather than ontological terms, iii) I then show how it is possible to radicalise deflationary realism, much as Meillassoux attempts to radicalise correlationism, by showing that this epistemological dependence can be asymmetric – understanding the structure of thought can be a *necessary* but *insufficient* condition of understanding the structure of the world – thereby identifying metaphysics as the inquiry into how the structure of the world exceeds the structure of thought. There's obviously more to the *ETR* than this brief and still too technical summary, but it gives an impression of the overall strategy of the essay. Now, let's see if I can flesh some of the details out in plainer language...

Let's start with a metaphysical question and watch it ramify: What are *properties*? What is it for the sky to be blue? What is this 'blueness' and how should we understand its attachment to the sky? Is it something that exists in the same sense that

the sky exists? Is the sky 'blue' in the same sense that Harry Potter *is* a 'Wizard', that the number 1729 *is* 'the smallest number expressible as the sum of two cubes in two different ways', or that hadrons *are* 'composed of quarks'? How should we tame this expanding thicket of questions? Well, I've suggested above that we need to get some handle on what we mean by 'property' here, and it might seem that the way to do that is by understanding the logical structure of *predication*. This isn't a bad intuition, but it might force our answers to these questions if we're not careful. We can easily represent the statements 'Harry Potter is a Wizard' and 'the sky is blue' as having the same *logical form*, but we want to know whether they have different *metaphysical import*. However, this raises the question of what it is for these statements to have such import over and above their logical form, and indeed, whether they have such import at all. I'm inclined to say that even if 'the sky is blue' has metaphysical import, that 'Harry Potter is a Wizard' does not, insofar as I believe that fictions *aren't real*, and metaphysics should only be concerned with *what is real*. On the one hand, there are those who resist this inclination by insisting that fictions are real, or that they have their own special metaphysical status. These 'ontological liberals' tend to think that everything we can think or talk about is subject to metaphysical inquiry that exceeds logical analysis of the way we think and talk about it (see section §3.4 of my book). On the other, there are those who reject this inclination by casting doubt on whether we can even make sense of the word – 'real' – that we need to articulate it. These are the 'deflationary realists' that think there is essentially nothing more to metaphysical inquiry into what we think and talk about than logical analysis of the way we think and talk about it.

Transcendental realism is an attempt to defend this inclination against both liberals and deflationists by explaining the difference between thought about the real and thought about the unreal at the level of logical form. This

means that I follow Kant in drawing a distinction between *general logic* and *transcendental logic*: there is the structure of *generic predication* that both types of statement have in common, but there is also the structure of *real predication* that only one possesses, insofar as it involves relation to *real objects*. This allows us to parse the question 'What are properties?' as the question 'What are real predicates?', or if you prefer 'What is predication, *really*?'. 'Real' and its cognates thereby index something like the excess of metaphysical structure over even this transcendental logical structure. How does this work though? Well, the aim is to use certain epistemological ideas about the structure of discursive practices that aim at objective truth in order to explain what it is to talk about real objects, so that the relevant logical distinctions can then be articulated in terms the connection between objectivity and reality. Putting this in more accessible terms, I think that we can precisely define 'reality' as that which is studied by the natural sciences, not metaphysically, by characterising the 'real' as 'material' and the 'unreal' as 'immaterial', but epistemologically, by describing the function of observation and experiment in securing the in principle revisability of our models of the world, and thereby articulating its independence from these models.

How exactly we understand scientific inquiry as integrating its models into a picture of the world as a whole is a tricky question: how do we see the overlapping patchwork of referential systems through which the special sciences individuate *real objects* as giving us purchase on *beings* as such and as a whole? However, it isn't too hard to sketch how metaphysics engages with this whole *qua* whole. There is a distinct continuity between metaphysics and science, which becomes apparent once one recognises that scientists are often already doing metaphysics. Natural science always proceeds with some more or less *implicit* understanding of beings, properties, essence, causality, space, time, and so on. This

implicit understanding is then subject to revision in the ongoing process of scientific inquiry, in more or less *explicit* ways. Einsteinian relativity fundamentally challenged our implicit metaphysical understanding of space and time, and subsequent developments in physics have raised serious questions regarding how we should understand causality. The Darwinian revolution in biology has forced us to rethink the very way in which we understand the idea of types, and thus the notions of essence and property. Dynamic systems theory has provided us with alternative ways to conceive of possibility, necessity, and tendency, and its development and extension in the field of complexity theory is forcing us to reconsider our understanding of part/whole relations. This is all before we even begin to consider the conceptual puzzles generated by the counterintuitive logic of quantum mechanics. What all this reveals is that the integrated picture of the world produced by the natural sciences has an abstract conceptual core, which not only regulates the more concrete fringes of scientific inquiry, but is subject to revisionary pressures from these fringes. The transcendental logical structure of the search for objective truth might be *a priori* and universal, but the manner in which this logic is given over to objectivity demands an interpretation within the scientific enterprise that is *a posteriori* and revisable. This dividing line between the *a priori* and the *a posteriori* is nothing but the distinction between what I earlier called the critique of metaphysics and metaphysics itself.

Interestingly, the concept of 'withdrawal' plays a crucial role both in Harman's OOP as in your own brand of 'transcendental realism', albeit the meaning of the concept differs radically across systems. Whereas Harman uses the term to describe the autonomous behavior of objects, thus positing a kind of ontological excess, you deploy it in an epistemological sense to speak of a "withdrawal of authority". Would you elaborate on the distinction for us?

The contrast really is about whether one takes metaphysics/ontology or epistemology to have priority. Harman essentially understands knowledge in metaphysical terms, which is why he is able to make the central feature of his metaphysics of objects their complete unknowability. His account of withdrawal combines this *epistemic excess* with a more general *ontological independence* of objects from one another, by modelling all relations between objects on the sorts of intentional relations we have with things in perceiving and knowing them. I won't go into Harman's arguments and their flaws in depth here. If people are interested, I'd recommend that they consult my book or even just the paper that originally spawned it ([here](#)). By contrast, in aiming to understand metaphysics in epistemological terms, I have endeavoured to identify the domain of metaphysical inquiry ('the real') by means of an epistemic excess that is not itself metaphysically circumscribed ('objectivity'). The crucial difference between our uses of the word 'withdrawal' is that for Harman epistemic excess is a function of something the object does, whereas for me it is a function of something we do. It's a matter of perspective I suppose: do you think that the difficulty of knowledge consists in the way the world retreats from us, or do you think it lies in the way it demands we open ourselves to the world?

What I call the 'withdrawal of authority' is the essential structure of all claims to truth. In order to allow the possibility that a claim is true, one must also allow the possibility that it is false, and this means that one has to abandon whatever right one has to *stipulate* that it is true or false. For those who are skeptical that we even have such authority in the first place, it's worth considering the extent to which the meaning of a claim is independent of whether it is true or false. If I claim that 'quantum mechanics has nothing to do with consciousness' and you insist that this is false because it contradicts the centrality of 'observation' in QM, then I am entitled to respond by saying

something like 'what I mean by 'consciousness' is more than mere 'observation'.' This is a pretty good example of the entanglement between meaning and truth, as we want to maintain that I have *some* authority over what I mean when I use words like 'consciousness' and 'observation', but equally that this authority cannot be so strong as to simply *define* the disagreement away. There's a delicate balance between agreeing upon what 'consciousness' *means* and disagreeing about what consciousness *is* that must be maintained in order for anyone's claims about it to be true or false. This is precisely the sort of delicate balance I've been trying to capture when it comes to metaphysical questions regarding 'properties', 'existence', 'time', and the like. The crucial innovation of the *ETR* is to recognise that there are different forms of authority withdrawal, and thereby different forms of truth.

The crucial difference between the statements 'unicorns can interbreed with horses' and 'the earth's climate is undergoing rapid warming' is that, even if we enable disagreement about the biology of unicorns, the truth or falsity of the relevant claims does not fully *transcend* our collective attitudes about unicorns. This is another way of saying that there isn't anything in the world that normatively constrains our attitudes. There is nothing to unicorns *in themselves* over and above how they are *for us*. There *really aren't* any unicorns whose biology we could be wrong about. By contrast, though the meaning of the terms 'the earth's climate' and 'undergoing rapid warming' are to some extent dependent on our attitudes, whether or not the earth's climate is undergoing rapid warming is *absolutely* independent of them. There is a difference between the state of the climate *in itself* and how it seems *to us*. There *really is* a climate that we can be wrong about. This is what it is for the details of climate change to be a matter of *objective truth*. The question remains: how is this difference manifest in what we do? The answer is roughly that we accept different sorts of reasons for different sorts of truth claims, and that the absolute attitude independence of

objective truth claims is secured by systematically excluding appeals to attitudes. There are a number of difficulties in articulating the role of observation in this exclusion. However, the most important thing is to make sure that, when we ask questions about the world, not only do our theoretical frameworks and experimental apparatuses allow the world to provide a clear answer (e.g., 'What are the effects of atmospheric carbon dioxide?'), but that they also allow the world to tell us when we are asking the wrong sorts of question (e.g., 'What are the effects of phlogiston?').

You write that "...Meillassoux's indifference to the distinction between presentation and representation, and Harman's dependence upon a phenomenological, and thus presentational, account of thought, is what leads them to adopt the ontological understanding of the in-itself. By contrast, the Hegelian model of thought enables us to adopt the epistemological understanding of the in-itself, and thus to undercut the arguments for their respective ontologies." So, you find presentational thought problematic to the extent that it reduces rational beings to passive agents, thus renouncing responsibility. But at the same time, you postulate the necessity of a "non-representational periphery" founded upon "perceptually acquired objectual commitments" in the articulation of conceptual content. Isn't non-representational kind of thought already a form of presentational thinking?

This is one of the points on which my thinking has become a lot more subtle since the *ETR*. I introduced the distinction between *presentational* and *representational* accounts of thought in order to capture a perceived affinity between the reasoning underlying arguments for correlationism and what Sellars calls 'the myth of the given'. I still think that one can trace Meillassoux and Harman's sympathy for correlationism to a way of thinking about thought that is rooted in Husserlian phenomenology, and thereby Cartesian conceptions of the relation between thought and experience. However, a deeper

engagement with Kant and Sellars has shown me that we must not be too quick to dismiss givenness, even if we must be careful to avoid its mythic forms.

It's thus worth making a distinction between two different uses of the concept of representation which are often elided: to talk about *discursive representations* that we evaluate in terms of *truth* (e.g., spoken assertions, written texts, program instructions, etc.), and to talk about *non-discursive representations* that we evaluate in terms of *accuracy* (e.g., cartographic maps, neural simulations, the dance of a bee communicating distance/vector to a source of pollen). Sellars would call this the difference between *signification* and *picturing*. I think that a good many of the controversies that abound in the philosophy of mind and language revolve around this distinction, from the awkwardness of those who attempt to reduce the semantic content of linguistic expressions to the informational content of neural states in the visual cortex, to the backwardness of those who simply understand the latter as if it already were the former.

In the *ETR*, I use 'representation' to refer exclusively to discursive representation, which I then analyse in terms of the *normative structure* of truth evaluation: withdrawing one's authority to stipulate the truth of one's assertions by undertaking a corresponding responsibility to justify them. By contrast, 'presentation' does not so much refer to non-discursive representation as it does to certain a way of understanding the relation between representation, justification, and responsibility. Consider the difference between *hallucinating* an evil presence at the foot of your bed and *believing* that there really is something there. The hallucination involves something being non-discursively represented in some informational strata of your sensorium, in such a way that you are 'presented' with an opportunity to believe that there is an evil presence, even if you reject that opportunity (e.g., because the fact you've taken LSD is a

good reason to believe you're hallucinating). Presentational accounts of thought hold that the *active* representations that one is responsible for (the commitment that 'there is not an evil presence before me') are somehow derivative upon the *passive* presentations that one is not responsible for (the experience that 'there is an evil presence before me'), because the latter are evidence for the former. These accounts then tend to elide the difference between the complex non-discursive representations that constitute sensory experience and the simple discursive representations that we are inclined to endorse thereby, on the basis that both are essentially passive. This enables them to suggest that *conditions* of the possibility of experience (e.g., Euclidean space-time) function as *constraints* on the possibility of knowledge (e.g., the unknowability of non-Euclidean phenomena). This is the basic structure of what Meillassoux calls 'the transparent cage' of correlationism.

Sellars's important insight is that there is a disconnect between the *justification* you have for believing you are hallucinating (i.e., the knowledge that you have taken LSD) and the *evidence* that the hallucination is supposedly presenting you (i.e., the experience of there being an evil presence). The former is a reason to believe that your visual system is *malfunctioning*, and thereby not to endorse the candidate beliefs it presents, which implies that the latter is not a reason to endorse a candidate belief unless you assume that your visual system is *functioning*. If we shift from first to third person perspective, we see that precisely the same sorts of reason are at issue when we consider endorsing someone else's perceptual judgments (e.g., have they been taking LSD too?). By default, we may assume that our own perceptual mechanisms and those of others are functioning, and thereby question neither our own experiences nor those of others, but these assumptions are sensitive to challenges based on context in both cases. If we wish to talk about anything like *perceptual evidence*, then we must do so on the

basis that it is defeasible, and that this defeasibility is to be understood in terms of the role of the relevant non-discursive representational mechanisms in producing reliable perceptual judgments (e.g., the visual cortex). At the end of the day, this is essentially indistinguishable from talking about the *observational evidence* provided by our most advanced experimental apparatuses, whose reliability is not entirely independent of the scientific theories that fix the inferential roles of the concepts they non-inferentially apply (e.g., the particle detectors at the LHC in Cern). What all this suggests is that the content of our active representations cannot simply be derived from that of our passive presentations, and thus that contingent *experiential* conditions cannot constitute insurmountable *conceptual* constraints.

I recently explored some of these points in more detail at the Continental Kantianism conference organised by Fabio Gironi at University College Dublin, in a paper titled 'Copernicanism Without Correlationism' ([here](#)). This involves a much more subtle analysis of how Kant's Copernicanism leads to his transcendental idealism, and how this is bound up with the sorts of normative questions with which the *ETR's* presentational/representational distinction was concerned.

I appreciate your attempt to bridge analytic and continental philosophies through the work of Heidegger. In particular, I found useful – indeed, quite a nice break from the neo-pragmatist interpretation of the tool analysis as a kind of blind form of “skillful/mindless” coping – that you take our practical understandings led by operative intentionality as the source of “implicit concept revision”. Still, I’m not entirely clear on how the process of concept revision occurs in the context of the tool analysis. At times, especially in *The Noumenon’s New Clothes*, you seem to suggest that there is a kind of intermediate modality between the *zundhandenheit-vorhandenheit* dyad, or at least a “transition” between

modalities. Is that where the source of implicit revision lies – in the useless tool that fails but is not quite yet a present-at-hand object with properties?

I think that Heidegger's contrast between *Zuhandenheit* and *Vorhandenheit*, and the parallel distinction between existential and scientific forms of spatio-temporality, converges with Sellars's distinction between the manifest and scientific images. Both thinkers are concerned to show that there are two distinct referential frameworks in terms of which we individuate and engage with entities: one grounded in our understanding of ourselves as agents engaged in various everyday activities and personal projects, and the cultural horizon that defines and contextualises them; and one founded on the attempt to systematically decontextualise and theoretically analyse the components of this everyday world, in order to uncover unexpected causal relationships that give us greater practical purchase upon them. Moreover, each thinks that these frameworks are entwined: on the one hand, the scientific image must be bootstrapped out of the manifest image, which then provides the referential scaffolding required to co-ordinate the patchwork models of the special sciences on an ongoing basis; on the other, the *zuhanden* tends to confront us with the *vorhanden*, as the myriad frustrations and failures of the everyday world provide opportunities for understanding and explanation. What you're interested in is how the latter is bound up in the former, or how Heidegger's story about our encounters with broken tools feeds into Sellars's story about the ongoing revision of our empirical concepts. Furthermore, you want to know whether this involves something like an interstitial zone between frameworks. I'm going to have to do a little bit more work before I can answer these questions.

First, I need to say a little bit more about integrating Sellars and Heidegger. There is some debate about the extent to which Heidegger has a developed theory of concepts. There

is undoubtedly some very subtle work done in *Being and Time* on the pragmatics of assertion that can be usefully related to the Sellarsian/Brandomian account of the game of giving and asking for reasons, but I don't think that there is a systematic theory of conceptual content that could compete with their semantic inferentialism. However, the Sellarsian idea that the content of propositions/concepts is given by the *functional role* of the corresponding sentences/words in the general economy of language-entry transitions (perception), language-language transitions (inference), and language-exit transitions (action), can be usefully extended with Heidegger's account of "skillful/mindless everyday coping." Even if we accept that there are no concepts without *inferential roles*, insofar as it is only through the mediation of inference that sensation and behaviour are transformed into perception and action, we must agree with Heidegger that most of what we do is not in fact guided by reasoning. The process of driving a car involves a systematic transformation of sensory inputs (e.g., the resistance of the pedals, the position of other cars, the colour of traffic lights, etc.) into behavioural outputs (e.g., changing gears, steering, signalling, etc.) that need at no point involve any linguistic processing (i.e., perception/inference/action). The important point is that this process *can* be fed through such processes if the need arises. If something goes wrong with my car, or in the surrounding context of roads, pedestrians, and traffic, I can begin to make perceptual judgments, draw out their consequences, and use them to infer optimal courses of action. Kant might say that the practical understanding involved in driving my car is *conscious* because there is the possibility of it becoming *self-conscious* in judgment and reason.

Our understanding of the concepts that compose the manifest image (e.g., 'car', 'hammer', 'school', etc.) is largely *implicit* in our understanding of norms for coping with the corresponding things (i.e., driving, construction, education, etc.), and need only be made *explicit* on the fly as it becomes

relevant. This means that concepts in the manifest image tend to change as the corresponding practices change. By contrast, our understanding of concepts that compose the scientific image (e.g., 'mass', 'lymphocyte', 'apex predator', etc.) largely consists in grasp of *implicit norms* for using the relevant words in more formalised contexts of perception/inference/action, the learning and revision of which depends on their articulation as *explicit rules* (e.g., 'mass = force x acceleration'). However, this contrast permits complex gradations and interstitial zones to be carved out between the two conceptual regimes. While Heidegger thinks that it is the capacity of assertion to decontextualise entities that enables us to encounter things as *vorhanden* – e.g., to see the hammer as possessing certain extant properties such as shape, material composition, and mass, whose meaning is independent of their practical significance – he claims that there are layers of such decontextualisation – e.g., as evidenced by assertions such as 'the hammer is too heavy', 'this hammer is my most beloved tool', and 'building bookshelves is good for the soul', whose meaning remains thoroughly enmeshed in norms of everyday practice. This fits nicely with Sellars's insistence that the manifest image can and has been conceptually refined throughout history, as the arsenal of concepts used to articulate these norms has been systematised by successive generations of thinkers.

If I understand you correctly, you are less interested in the systematisation of everyday practice in the manifest image, than the way in which everyday practice feeds into the revision of the scientific image. Heidegger's thoughts on this matter are often rather holistic. He prefers to discuss epochal shifts and periodic ruptures in the global horizon of possibility within which entities appear than to describe specific changes and unexpected anomalies in the local horizons of the natural sciences. Sellars often displays a similar holistic bias. If we recognise the patchwork character of science and the function of the manifest image in co-

ordinating the overlapping models produced by the special sciences, we get a more nuanced picture of how theory and practice are imbricated within the scientific image. It is often the job of engineers and the applied sciences to stitch overlapping models together in ways that work in practice, and we should be as sensitive to the failures and frustrations that occur along these edges as we are to broken hammers. Technologists trying to make use of materials science and technicians trying to calibrate experimental apparatuses have their own peculiar 'everyday', and their own characteristic forms of practical significance. In these contexts it is not simply a matter of 'useless tools', but errors and anomalies that perturb our expectations without quite fitting into our existing referential frameworks. I cannot recommend the work of Mark Wilson highly enough on these points. He does an incredible job of demonstrating that the devil is in the practical details when it comes to tracing the history of conceptual changes within the sciences (cf. *Wandering Significance*).

Prior to writing your thesis on Heidegger you had an interest in Deleuze. In fact, you defined yourself as a Spinozist off the record. What did you find in Heidegger that you couldn't find in Deleuze?

In a word: methodology. I originally wanted to do my thesis on Deleuze's metaphysics, which I still think is incredibly innovative and important. However, although I thought I could describe Deleuze's picture of the world, I could not see a way to systematically justify it to those who weren't already sympathetic. There are certain themes in Deleuze's writings that one can work with – his commitments to the univocity of Being and the principle of sufficient reason – but there isn't a clear foundation from which one can begin to motivate his position in a direct way, as one can with Spinoza, Kant, or Hegel. I have always found Deleuze's willingness to present his metaphysics as an attempt answer to the question of Being

to be quite refreshing, given how many of those influenced by Heidegger, and eventually even Heidegger himself, seem to be uninterested in actually answering the question. So, I decided to return to the question of Being and articulate constraints upon an adequate answer to it that would lead in a Deleuzian direction. Needless to say, what was supposed to be the first chapter grew to encompass the whole thesis, a process that is not all that unusual all things considered. The *ETR* and the work on methodology of metaphysics in my book are further chapters in this long process, which will eventually lead back to a critical engagement with Deleuze's metaphysics if I'm lucky.

I am happy to be counted as a Spinozist on the record! I still feel that the best way to frame Deleuze's metaphysical system is as an attempt to rewrite Spinoza's metaphysics after Heidegger's critique of onto-theology. There is more to it than this, as the famous list of other thinkers he appeals to attests (e.g., Leibniz, Kant, Nietzsche, Bergson, Whitehead, etc.), but Spinoza remains the pole star of Deleuze's philosophical firmament. By contrast, Heidegger is one of the thinkers that Deleuze goes out of his way either to avoid or to denounce, preferring to praise Sartre over Heidegger even when he disagrees with him. Nevertheless, there are some significant references to Heidegger in *Difference and Repetition*, and one can see the implicit engagement with Heidegger's readings of the history of philosophy in his own works, such as the book on Nietzsche and perhaps even more so in the book on Kant. I think there is something similar to be said about the relation between Deleuze and Plato: we must recognise that the desire to invert Platonism is not really a form of anti-Platonism, but a concrete extension of it. Returning to Spinoza though, much as there are aspects of Deleuze's thought that go beyond him, there are equally aspects of his thought that can be distinguished from Deleuze. I think there is a certain strand of contemporary thought influenced by Deleuze and Guattari (e.g., affect theory, neo-

vitalism, etc.) that attempts to separate Spinoza from his uncompromising rationalism, to which my own Spinozism is concretely opposed. It's all well and good to promote the proliferation of joyous passions, but it must not come at the cost of the emancipatory promise of reason.

To what extent can Philosophy contribute to the resolution of concrete worldly problems on a political/social level?

In my answer to your first question I talked a bit about the relationship between philosophy and problems. I think I might go further and describe philosophy as the art of posing problems. It is not so much concerned with solving problems as it is with defining them correctly. Of course, these definitions are at best a necessary but insufficient condition of solving problems, but they can orient our search for solutions, clarifying important questions and banishing misleading assumptions. This is all very general though, and I think you would like me to be more specific. Which concrete problems do I think philosophy can most usefully engage with in the present? I'll limit myself to two that I think are interestingly related.

There is a storm on the cultural horizon and its name is *artificial intelligence* (AI). It is easy to understate the variety and overstate the power of the techniques that are the current state of the art in the field. The combination of deep learning neural networks and big data has produced massive advances in automating various tasks, from text to speech translation to facial recognition, and begun to make inroads into limited forms of artificial creativity as an unanticipated side effect (e.g., [here](#)). Nevertheless, the amount of data required to train up an artificial neural network for effective natural language processing is orders of magnitude greater than that required for a human infant to become fluent. This is no reason to be complacent, however. The maturation and implementation of the technologies we already have will cause massive cultural changes, completely

transforming the economic landscape as some professions adapt and others are automated out of existence. This will force us to reappraise many features of our own intelligence that we are used to taking for granted, not least our creative capacities, be they in the arena of problem solving or of aesthetic invention. As we begin to outsource more of our own cognitive functions the social and political questions regarding augmented intelligence will become increasingly sharp. This is nothing compared to the questions surrounding *artificial general intelligence* (AGI), or the creation of machines that can think as well as us or near enough to raise questions about whether they should count as persons. I think that philosophy can help prepare us for these questions, by giving us the tools to think about the broader cultural consequences of the societal changes these advances will bring. But more than this, I think that philosophy can help clarify questions that are central to the research program of AI, such as what precisely what 'general intelligence' means ([here](#)).

AI is not alone in threatening to disrupt the conception of *agency* at the heart of the current social order. We are heading for a confluence of technological, ecological, and political developments that herald the dissolution of liberalism in the West and stranger ideological mutations elsewhere. It is worth remembering that neoliberalism really is a form of liberalism, and that its core normative principle is the freedom of contract. We're all vaguely aware of this principle fraying at the edges every time we click through an end user licence agreement (EULA) that we have neither read nor understood. We're now in the early stages of the automation of litigation ([here](#)) and the use of smart contracts ([here](#)), both of which will upend our conceptions of *liability* and *consent* as the difference between our ability to anticipate and dispute the consequences of our actions is systematically outstripped by that of legal organisations and distributed software. It is also worth thinking about the ways

in which scientific developments will challenge our conceptions of *bodily* and *reproductive autonomy*, as technologies that enable us to modify ourselves and our children become more powerful and accessible. The relatively recent discovery of CRISPR/cas9 promises colossal changes all on its own, simultaneously opening up possibilities of targeted genetic therapies and bespoke genetic sculpting ([here](#)). This is accompanied by new waves of psychopharmaceuticals and associated experiments with cognitive function and neurophenomenology ([here](#)). All this before we even begin to consider the possible impacts of experimental advances in gerontology ([here](#)). I think that philosophy has a role to play in shepherding us through these disruptions by disentangling what it is to be *free* from the implicit assumptions tied up in our understanding of what it is to be *human* ([here](#)). This is perhaps the most significant area where asking questions about artificial general intelligences (e.g., ‘what is it for *them* to be persons?’) can give us answers about ourselves (i.e., ‘what is it for *us* to be persons?’).

What are you currently working on?

As usual, the answer is: too much! I’m somewhat of a generalist. My work is driven by my own curiosity and enthusiasm, which means that I tend to leap between topics and projects a bit too freely. However, it equally means that I sometimes uncover connections between philosophical areas that others overlook. As such, it’s worth mentioning three interlocking projects that engage with a number of themes I’ve already discussed:

Computational Kantianism: There are many ways to describe the purpose and significance of Kant’s critical philosophy, but it is clear that the project of transcendental psychology, or the conditions of possibility of having a mind, or being capable of thought and action, lies at the core of this work. My crucial claim is that this project is essentially the same as

the program of artificial general intelligence (AGI), and that by reading Kant's work through contemporary developments in logic, mathematics, and computer science, we can use this work to provide important methodological and technical insights for the AGI program. The surprising thing is not that Kant was doing artificial intelligence, but rather how much he got right. Furthermore, there is a direct connection between Kant's transcendental psychology and his account of freedom, which provides a framework for exploring the issues regarding personhood – e.g., autonomy, desire, and selfhood – raised by my last answer. I recently gave a talk on this topic titled 'Towards Computational Kantianism' at the New Centre for Research and Practice's *Accelerate General Intellect* residency in NYC, organised by Tony Yanick.

Transcendental Logic: Inspired by Zalamea's *Synthetic Philosophy of Mathematics*, and at the urging of Reza Negarestani and others, I have spent a good deal of the last two years improving my understanding of mathematics (esp. category theory) and delving deeper into formal logic (esp. Jean Yves Girard's work). This has allowed me to sharpen the Kantian distinction between general logic and transcendental logic that I appealed to in the *ETR* in a way that feeds into my computational reconstruction of Kant. I now think we can get purchase on the logical difference between mathematical and empirical objects by asking how the duality between *intuitionistic* and *co-intuitionistic* logic at the level of propositional calculus, which has a neat algebraic interpretation, is reflected at the level of predicate calculus, where the absence of a neat interpretation invites a number of interesting questions. If one sees classical logic as modelling cases in which every question we can ask has a well defined answer (e.g., database queries), then one can view intuitionistic logic as modelling those cases in which we can ask questions that we have no way of answering (e.g., open mathematical problems) and co-intuitionistic logic as modelling those cases in which we can get answers that invite

us to ask better questions (e.g., experimental anomalies). This can equally be seen as capturing the manner in which the duality between *proof* and *refutation* is refracted in the duality between the mathematical and empirical, as something like the primacy of proof or refutation, respectively. My hope is that this can shed some light on the relation between mathematical and empirical cognition in Kant's transcendental psychology.

Beauty and Freedom: I have been attempting to develop a general account of beauty (qua value) as the *enhancement* of freedom (as opposed to Hegel's account of it as the *expression* of freedom) capable of unifying various concerns from aesthetics and the philosophy of art within a single framework. At its most abstract, the account identifies Beauty as the genus of unconditional value, before dividing it into two distinct, but not mutually exclusive, species – *relatively unconditional* value and *absolutely unconditional* value – with the aim of incorporating the favoured cases of both theories that take beauty to involve interest and those that take it to be disinterested. These abstract categories are then fleshed out as modes of enhancing freedom – *supererogation* and *inspiration* – with the aim of both identifying what is common to nature and artifice, and distinguishing between craft and 'fine' art as activities aiming principally at different modes of enhancement (which are nevertheless almost always mixed to some extent). My account of inspiration aims to distill the essential features of Kant's account of beauty and the sublime, so as to make possible an account of the cognitive role of art that can refuse to reduce it to its communicative role ([here](#)). This is thus relevant both to my reconstruction of Kant's transcendental psychology and the account of freedom based upon it.

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< <http://figureground.org/interview-with-peter-wolfendale/> >

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