Is there an Object-Oriented Architecture?

GRAHAM HARMAN

Edited by
Joseph Bedford

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Architecture Exchange:

Engagements with Contemporary Theory and Philosophy

Series editor: Joseph Bedford, Assistant Professor, School of Architecture and Design, Virginia Tech, USA

The purpose of the Architecture Exchange series of books is to deepen intellectual exchange between architecture and other fields of contemporary theory. We are perhaps too familiar with the disappointment that can follow even the best of academic conferences when after 'no more time for questions' attendees disperse into the night. The ambition of this series of books is quite simply to prolong that curtailed moment of questioning, to extend the time and space for debate and to see what ideas, fissures and fault lines emerge that might reveal new understanding.

In each book, a prominent contemporary theorist is invited to share their work with a group of 'architects' (more precisely, architects, architectural educators, architectural historians and architectural theorists). The architects are then invited to spend several months reading from the theorist's body of work to prepare thoughts on how that oeuvre may have consequences for architecture. The exchange proper is then catalysed by an event in which both the theorists and architects come together to present their thoughts and respond to one another. But instead of dispersing into the night, the debate continues in the months that follow: through conversations between each participant and the editors to further unpack the connections and conflicts that begin to arise, through the further development of their arguments in print and additional commentary printed as marginalia.

The resulting book presents the work of a contemporary thinker to architectural audiences and explores its relevance to architecture through a specifically dialogical exposition that simultaneously seeks to introduce new theoretical ideas to architecture, to introduce the enduring problematics of architecture to readers in contemporary theory and to encourage students of architecture (of all ages) to explore new ways of viewing their discipline.

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Engaging Graham Harman

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BLOOMSBURY ACADEMIC
LONDON • NEW YORK • OXFORD • NEW DELHI • SYDNEY

BLOOMSBURY ACADEMIC
Bloomsbury Publishing Plc
50 Bedford Square, London, WC1B 3DP, UK
1385 Broadway, New York, NY 10018, USA

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First published in Great Britain 2020

Series design by Twelve Studio

A catalogue record for this book is available from the British Library.

A catalog record for this book is available from the Library of Congress.

ISBN: HB: 978-1-3501-3345-7
ePDF: 978-1-3501-3346-4
eBook: 978-1-3501-3347-1

Series: Architecture Exchange: Explorations in Contemporary Theory and Philosophy

Typeset by Integra Software Services Pvt. Ltd.

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Joseph Bedford

1.1 Joseph Bedford, Is There an Object-Oriented Architecture?

Since his earliest invitations to speak to architects over a decade ago, Graham Harman's work has elicited increasing interest among architects.[1] With his recent appointment to the faculty at the Southern California Institute of Architecture (SCI-Arc), especially, the encounter between Harman's philosophy and architecture has picked up pace and promises only to continue. Having recently published a book on art, Harman has indicated his further interest in architecture by promising a book on the subject.

Even at this early stage in the encounter between Harman and architecture, it is possible to ask what potential Harman's thought holds for architecture; whether on an intellectual and abstract level or on a more concrete and aesthetic level.

How might Harman's thought offer a new intellectual paradigm for architecture that challenges those once provocative but now cliché? How might it facilitate the re-appraisal of currently unfashionable episodes of previous architectural thought? What ways might it offer to architects to think beyond centuries-old philosophical assumptions and the ethical legacies linked to them? How might it enable architects to engage more skilfully in urgently needed forms of global or ecological thought through their ability to think and work within the increasingly imbricated realms of the human and non-human?

Or might Harman's thought, for example, offer a new aesthetic paradigm for architecture in which a new form of object-oriented poetics emerges? Might it spark an awakening among architects to appreciate and seek to represent the strange depths of reality itself? Might it help architecture better position its mode of knowledge among the sciences in the university?

And might the exploration of all these possibilities, whatever their outcomes, in the process help to invigorate intellectual work in architecture in general?

The answer to these questions will largely rest on the future path of Harman's intellectual project, which he is continually developing before his readership in a prolific list of publications – seventeen in as many years – and a continuous stream of lecture appointments often available to view online.[2] Beginning from metaphysical speculation of which, as a philosopher, he has a measure of surety, he is continually seeking to 'expand outwards … to cover a wider and wider circle of human affairs',

with ethics, aesthetics, politics as an ultimate goal.[3] Yet the very natality and openness of Harman's endeavour, combined with the rapid and widespread circulation of his discourse, also risks the pitfall of him joining all-too-soon the ranks of past philosophers whose engagement with architecture was (albeit productively) 'misread' when they were rapidly translated into metaphors for architectural form.[4]

The aim of this book is to stave off such a risk as long as possible and to promote understanding of the encounter such that other possibilities for reading his work might emerge, before it is enclosed into a particular image or style. In the pages that follow, the reader should find the terms of the debate laid out with sufficient depth to be able to judge for themselves what potential Harman's thought might hold for architecture.

Before turning to the exchange itself, let us first outline a number of central ideas in Harman's work that form the basis of that debate, that will likely endure in his work and that will likely inform future interpretation of the relevance of his work for architecture.

First among these is the idea that *objects* are the basic ontological unit of the universe. Harman defines objects as any durable unified entity. While a random collection of objects placed on a table might not endure for long as a unity and thus would not constitute an object in any significant sense, other complex aggregates of things, despite alterations, or variations in effect, such as all the ships, crewmen, legal documents that compose the Dutch East India Company (VOC), would constitute a unified object in a significant sense because they have stood the test of time.

Harman contrasts his philosophy of objects to materialist or social constructivist philosophies that he claims fails to understand objects. Materialist philosophies that attempt to reduce objects downwards to their parts in order to explain their nature fail to grasp that objects are more than the sum of their parts. Similarly, social constructivist philosophies that attempt to reduce objects upwards to their effects in order to explain them, equally fail to grasp that an object is also more than its effects. The horticultural scientist does not know what the flower truly *is* by analysing its molecules. As Gaston Bachelard once put it, 'you cannot explain the flower by the fertilizer'. Yet Harman would also say that the sociologist and economist are also in no better position to know what the flower really *is*. He would add, 'you cannot explain the flower by its social role or its price either'. Flowers, boats, cities, nation-states, etc., exist as objects at a level that is between their parts and their effects. It is this level of relatively stable unified entities that Harman believes best explains the ontological composition of the universe.

Because Harman defines objects in such abstract terms as these, his philosophy can easily be applied equally to every scale and type of unified entity and to those that are merely sensed (and not real) as well as those that are real.[5] This inclusivity – illustrated by the eclectic and incongruous litanies of objects that populate Harman's books, from dust, numbers, cockroaches, unicorns, empty plastic bottles, diamonds, wishes, rope, neutrons, business partnerships, blackbirds, railway platforms, the European Union, mailboxes, copper wires and bicycles, to mermaids, marriages, pace-makers, ghosts in a Japanese Temple, triangles and signals flashing from the moon – is one of the most distinctive aspects of his philosophy.

While Harman's philosophy is able to evoke every scale or type of object, it is his claim to be able to account for the interaction between non-human objects in the same terms as the interaction between human consciousness and non-human objects that makes his philosophy a candidate for having broken free of what Quentin Meillassoux calls the 'correlationist circle', in which human thought is unable to think about a reality external from the correlation of thought and being for the limitations imposed by thought itself.[6] Harman's writings ask us to picture his philosophy (paradoxically) as having gained access to a level of reality (of things in themselves, interacting with one another), which he himself tells us is inaccessible by definition.

How is it that Harman can speak confidently about the nature of objects light-years away in distant galaxies, at scales so small as to be inaccessible to human perception or residing at the beginning of time before human beings evolved? The answer seems to be that, by learning from phenomenological descriptions of how things appear to human consciousness, it is possible to derive a metaphysics able to interpolate how things that no human consciousness can experience must necessarily appear to one another. Though phenomenology traditionally has been antagonistic towards metaphysics, Harman, through aesthetic devices such as metaphor, aims to rethink metaphysics and deploy aesthetics towards a different end, to know reality *in itself* rather than just the human world.[7]

Harman's greater ambition may be the thoroughly new definition of knowledge, which situates aesthetics as *philosophy*, *first*, above epistemology.[8] Harman tells us that philosophy never was a form of knowledge but only ever the *love* of knowledge or wisdom (*philo-sophia*). He reminds us that while neither Socrates nor anyone after him has ever defined justice or seen a just world, justice nonetheless remains an enduring unified object, to which human thought approaches by indirect, aesthetic means, such that it is possible to momentarily glimpse the essence of a unified entity despite its changing appearances. For Harman, of the things that appear through aesthetic means, there is more than what phenomenologists have described, our world, our historicity, our freedom or our existential condition; there is the enigmatic and infinite noumenal and phenomenal depths of objects themselves.

Harman's realist metaphysics of objects, irreducible to their parts or effects, inclusive of all scales and types of objects, real or sensed, human or non-human, interacting indirectly with, and always infinitely withdrawing from, one another, was taken up by our six architects in the exchange: Adam Sharr, Lorens Holm, Jonathan Hale, Peg Rawes, Patrick Lynch and Peter Carl. Whether approaching his philosophy from a background in Heideggerian phenomenology, Lacanian psychoanalysis or Spinozist Feminist materialism, each architect wrestled with the potential of Harman's philosophy for architectural understanding and practice, and each discussed on different points of conflict, focusing on topics such as language, world, consciousness, space and the unity or multiplicity of the Real or nature.

Because architecture has already had a long-standing relationship with phenomenology, and because Harman's realist modification of Heidegger's work, or metaphysical extrapolation of his methods, is so controversial, and because this contention lays at the heart of the debate between Harman and Peter Carl, Patrick

Lynch and Jonathan Hale, let us begin reviewing the rough outline of the exchange by unpacking the nature of Harman's relationship to phenomenology.

Edmund Husserl and Martin Heidegger in their respective transcendental phenomenologies of consciousness and practice were, according to Harman, the first to observe – even if they were unaware of it – that objects have depth and that this depth is in principle inaccessible to human beings; that is, the full nature of objects is always located at an infinite distance from any encounter with them, either by a human or by a non-human object.[9]

Husserl had observed the human consciousness of things (perceived or imagined) as able to approach their true nature over time through a shifting relationship to their observer. By playing with an object in one's consciousness, revolving it and varying it in one's mind (if it was a purely imaginary object) or by rotating it in one's hand or moving around it (if it was, in addition, a real object), one could come to understand what it was about that object that was not immediately present in the first instance that one encountered it. Because movement in time and space is required to approach this true nature, and because the totality of time and space is unknowable, no final or absolute knowledge of objects is ever possible. As a result, there is always a kind of hierarchy or depth-structure between the more essential and the more accidental aspects of things. Harman adopts Husserl's insights in what he describes as 'sensual objects', including both those that are purely imaginary like unicorns, which are independent of any real, material things, and those that are the sensed impressions of real objects as encountered by humans or other objects and are thus attached to real objects.

Heidegger, by contrast to Husserl, had observed that, within the practical relations that human beings have towards the things that they use, there is another kind of hierarchy or depth-structure within the world of habits, rituals, practices and social institutions. Heidegger analysed this depth by focusing upon the difference between engaging with things with close attention and circumspectly using them in an inattentive, habituated or semi-forgetful manner. When analysed on an individual level looking at one human being at work, like the carpenter in her workshop, one might, at first, think that the depth that Heidegger observed was between minds and bodies; between thinking intently about something and being absorbed in using it. In the flow of typing this sentence, it is as if my fingers appear to know exactly where the letters on the keyboard are. Yet, if you were to ask me to name the exact order of the letters on the bottom row from left to right without looking at them, I would not be able to do it. Thus, our bodies appear to have a kind of 'know-how' different from the 'knowing-that' of our minds. Indeed, the majority of movements and activities have a quality much like this, and explicitly noticing things, as Harman tells us, is a fairly minor occurrence in our lives.

Heidegger's analysis of using things, however, had implications that go far beyond the individual. If the carpenter is in the flow of making a chair, he argued, the full conditions of possibility that one has to account for in order to explain the habitual level of her activity is much more than just her individual ability at any particular moment to reach out and grasp her hammer without having to look at it. For Heidegger, the level of habit includes motivations, customs and the history and culture that shaped the situation of carpentry. It includes, for example, the facts that she is making the

chair because she desperately needs the money to keep her workshop open; that this chair will be a prestigious, royal chair, bringing in more business when displayed to the public; and that she has always dreamed of being a carpenter have made her to recently quit her job in banking at the age of fifty-five to pursue her dream, which she feels to be the last chance she has to do so. For Heidegger, every little activity that human beings are engaged in is thus silently haunted in this way by their mortality, and the collective cultural and historical world is shot through with the significance of the existential dimension of projects human beings engage in. Thus, when Heidegger's carpenter reaches out skilfully picking up the hammer, the depth-structure in question was a depth between the whole historical and cultural world, in which the practical activities that human beings are engaged in have their meaning.

If, today, this is the orthodox reading of Heidegger, Harman offers his readers an unorthodox reading, accusing Heidegger of correlationism due to his emphasis on the primacy of the human world, which he argues is a form of Idealism implicated in imperialism, colonialism, racism and speciesism. Realism, by contrast, promises to shift the balance between human and non-humans towards an equitable centre ground, in which philosophy addresses all things in the universe with equal weight and promises a new ethical accounting as a result.

The unorthodox reading of Heidegger that Harman has developed argues that the hammer too, like the carpenter, has a freedom of its own to be otherwise than it is. When the carpenter's hammer breaks, she might, Harman suggests, see not only the depth of her world and her freedom within that world but also the depth of the objects all around her *in themselves* independently of her. Rather than being defined by the world in which it is related to the nails and the wood and the carpenter, her hammer contains the potential to extract itself from this situation and enter an entirely new situation.

Heidegger had attempted through this example to contrast the relative merits of the theoretical gaze of science – which aims to know things epistemologically at the risk of forgetting their hermeneutic context – to the practical knowledge of use that preserves the hermeneutic involvement with things. In Harman's view, however, this contrast is less interesting than the fact that both equally fail to grasp the *thing in itself*. Or more precisely for Harman, because he maintains the Heideggerian critique of scientism, a metaphysics of the thing in itself is a better candidate to counter scientism than practice, because it operates on the same plane as science in its relation to nature. Through this fundamental shift of perspective from the carpenter to the hammer, Harman lays out the core of his philosophy. The difference between the ethical implications of Heidegger's concern for the depth of world and the metaphysical implications of Harman's concern for the depth of *things in themselves* lies at the core of one of the central contentions in the exchange, between mainstream interpretations of phenomenology maintained by Peter Carl, Patrick Lynch and Jonathan Hale and Harman's effort to extract a metaphysics from Heidegger's work.

Harman tells us that making this shift of perspective is important for several reasons. Firstly, it is important for the sake of philosophy as an independent discipline. Even if it is unclear where it will lead, Harman tells us that it is important to aim for the broadest accounting of things in order to advance the discipline, without limiting

that accounting from the outset to ethical and social concerns. Still unsure of what the final consequences of the metaphysics that he is developing will be and how it will be applied to other fields or situations, he is of the opinion that one can proceed from first principles in metaphysics, building outward with the ultimate goal of reaching politics or ethics.[10]

The traditional Heideggerian view as represented by the positions of Carl and Lynch in particular finds Harman's focus upon realist metaphysics to be a disavowal of the historical, cultural and social conditions that make thinking possible and to which thought is ethically obliged. Or, as Adam Sharr concurs, echoing their concerns: 'Where, in this picture, is human perception, cognition and psychology? Where are the long histories of deep cultures? Where are the habits and practices presumed to emerge from them?'[11] While it is possible to extract a realist metaphysics from Heidegger's writings (or to project one on to them), several of the architects in the exchange question the motivation for such an approach, as well as its purpose. Thus, just as Harman would say that from his point of view, theory and practice are equivalent because they miss the reality of things in themselves, Carl and Lynch would say that from their point of view, theory and metaphysics are equivalent because they miss the world and its ethical importance.

If Carl and Lynch were the most resistant to Harman's position, Jonathan Hale – an equally orthodox phenomenologist, having published an introductory volume on Merleau-Ponty's philosophy – nonetheless sought to grapple with a number of specific issues within Harman's philosophy. Hale questioned, for example, the way that Harman appears to be able to access a reality that he himself defines as inaccessible, by being able to name something called 'real qualities' – such as '4000 degrees Kelvin' as a real quality of fire. As a result of this probing, Harman clarified that, in fact, this access is indeed more difficult than he makes out and that while it is technically more accurate to speak about 'that occult property in the fire that translates in the presence of instruments into what is known as 4000 degrees Kelvin', he prefers the short-hand '4000 degrees Kelvin'. For Hale, the fact that the real qualities of an object can never be differentiated from one another without the presence of a second interacting entity suggests that until such time as an object interacts with another object, we can never know whether its reality is unified or differentiated.[12]

Hale also challenged Harman's idea that objects switch, in a binary fashion, between total appearance and total withdrawal. His critique was based on the fact that Harman himself frequently illustrates his concept of withdrawal using examples relating to practical involvement. Harman's agreement with Hale that indeed there is a gradation of 'all sorts of peripheral semi-awareness' involved in practical involvement, elicited from Harman the further clarification of his position, that his argument about the withdrawal of 'things-in-themselves' has little to do with our practical relations with them. For Harman the withdrawal of objects as things-in-themselves 'is total by definition'. Harman's withdrawn object as posited metaphysically 'by definition' risks being the product of a tautology, that one knows the thing-in-itself to be absolutely withdrawn because one's metaphysics defines it as such.[13]

While it was primarily some of the more committed phenomenologists in the exchange that had reservations about the motivations behind metaphysical

speculation, others less committed to Heidegger (and thus less antagonistic to Harman's unorthodox reading of Heidegger), such as Lorens Holm, focused instead on the consequences of his metaphysical speculation for such things as our understanding of human consciousness. In particular, Holm addresses Harman's idea that inanimate objects possess a proto-consciousness of their own. When fire burns cotton, it interacts only with one accidental feature of the cotton, such as its flammability at a certain temperature. Fire does not interact with other qualities of the cotton such as its colour or smell. Similarly, a caterpillar interacts only with the cotton's nutritiousness; a human interacts only with its softness, and a cotton picker interacts only with its tensile strength. The cotton's real being as a unified entity transcends the grasp of any other being that encounters it. What Harman suggests is that objects, as it were, 'know', are 'conscious', 'perceive', 'intend', 'sense' or 'understand' one another insofar as they only have this partial relation to one another.[14]

Because human consciousness of things for Harman is always partial, and because non-human objects exhibit the same partiality in their relationship with one another, he argues that the relations between non-human objects also constitute a kind of consciousness. Whatever the ethical implications of placing human consciousness on the same level as the imagined 'proto-consciousness' of rocks colliding with rocks, the gesture is said to contain the promise of destabilizing the overly lofty admiration that human beings have had for themselves for centuries and might help to undermine the ideological narratives that have too often legitimated the ill-treatment of other species, other human beings and the planet.

Yet from Holm's Lacanian perspective, non-human objects are fundamentally different from human beings because they do not participate in language, and, without language (whether verbal or gestural), they do not participate in the inter-subjective desires that move through language. Non-human objects may adopt a structural relation to the world that one might call 'intentionality', metaphorically speaking, but they are far from having what we might call self-consciousness. Non-human objects do not relate to one another through a system of representations, by which they could store and process complex and subtle actions and behaviours within a social group. Without this, they cannot develop feelings and emotions between one another, such as trustworthiness, suspicion, love, envy, desire, etc., that are the product of complex, social relations. Holm, as a Lacanian indebted to a conception of the subject as a being within language, challenged Harman's inferences regarding the proto-consciousness of inanimate things, emphasizing the degree to which human consciousness as self-consciousness differs in kind and not just degree from inanimate objects.

A further topic of contention addressed by Holm in the exchange involved Harman's conceptualization of space – a key concept for architectural thought since, at least, the nineteenth century. Harman's philosophy aims to reposition space, not as one of the two 'peerless continua'[15] underlying all human action but as one of four 'tensions' animating a more fundamental ontology of real and sensual objects and their respective real and sensual qualities. In Harman's fourfold diagram, the term 'space' names a tension between the deepest inaccessible, noumenal realm of the real object, and the shallowest phenomenal surfaces of our momentary sensory perceptions. Space appears to have a special place in his seemingly symmetrical schema along

with the fusion of allure. Allure and space are thus paired together as the terrain and mechanism respectively by which the most transcendent depths of real objects can be sensed within the world of appearances. Space, for Harman, however, is not a singular oneness from which all objects emerge and to which they all return. Space is internal to objects, a condition of an allusive process within them.

By contrast, for Holm, space names the 'precondition for arrangement' of objects. It is a background canvas that enables all things to relate to one another. It is conceived as an undifferentiated oneness, like the Real in Lacanian psychoanalysis. Space makes differentiation (and thus symbolization) possible. Yet, as such, it also haunts the symbolic world and the human subject with the menacing threat of its potential collapse back into a pure oneness.

Though Holm and Harman are, perhaps, in unwitting agreement that space is the name of the tension between one object and another object, whether inside it (like being in a building or a city) or outside of it, their disagreement revolves around *how* such a tension is experienced, whether as a proto-conscious being in Harman's terms or as a fully fledged subject of language and space in Holm's terms.[16]

For Holm, space, as the distancing structure of finitude, is only significant because it structures the subject's relationship between the symbolic and the Real and because this relationship ultimately defines subjectivity. In this sense, for the Lacanian psychoanalyst, the subject's relationship to architecture – as a subject in relation to its object(s) – plays a constitutive role in forming the nature of being human as we know it. Yet for Harman, psychoanalysis's conceptualization of the Real underlying all differentiation (and thus Holm's conceptualization of space) is a phantom conjured only in the minds of human beings tied together in a web of language and not a property of things in themselves. He argues that things in themselves, unbound by a web of language, would contain a plurality of nodal points of infinite depth, such that the real is multiple from the outset.

A further axis of the debate between Harman and his interlocutors centred upon the differences between his philosophy and that of Deleuzian-inspired, materialist interpretations of Spinoza as represented by Peg Rawes. Rawes drew from Spinoza in her defence of the progressive, political potential of materialist, relational philosophies as leading to a rich understanding of architecture suited to 'increasing global pressure for architecture to address environmental issues of sustainability'. For Rawes, because material and immaterial modes of production are forms of *relation* central to architectural practice, that relational philosophies are more useful to architecture than those oriented towards objects. Rawes found in Spinoza's writings a more radical non-human philosophy than that proposed by Harman, whose basis in Heidegger she found questionable for specific, political reasons regarding Heidegger's personal biography. While she shared Harman's suspicion of the current forms of architectural Parametricism – which is often presented as a relational approach to architecture – her critique of Parametricism is that it is not relational *enough* because it fails to embrace true difference in all its forms, including ecological difference and gender difference, specifically.

Rawes claimed that Spinoza's concept of Substance – which she described as naming the force of immanent self-becoming that creates the diversity and plenitude of nature

and the world – is the cause of all things including human subjects, geometric figures, trees, horses, buildings, psychic expressions of architectural ideas, etc. All these things are the unique expressions of Spinoza's one 'substance' which causes them all.

Harman's position is in agreement with Rawes's Spinozist materialism in terms of the balance between a diverse set of non-humans and humans. Where Harman's position is in disagreement with Spinozist materialism, however, is primarily around its conceptualization of a single deep cause of all diversity in the divine substance of nature.[17] Harman's contention with contemporary Spinozists might seem like splitting hairs from the perspective of architecture in that both lead to a similar respect for the plurality of non-human things in the universe, but from a philosophical, or, perhaps, even theological point of view, more is at stake.

Furthermore, Rawes views an emphasis on *becoming* over *being* as complementary with the development of identity politics, by showing all 'essences' underpinning constructs like race and gender to be so internally diverse as to be as unique as every particular instance of them. By contrast, Rawes views an ontology of objects as committed to the problematic constructs of such essences.

Against Rawes's view, Harman argued that one must be cautious about linking ontology and politics. As much as social constructivism might currently appear left wing and essentialism might currently appear right wing today, the situation was, as Harman reminds us, the reverse during the French Revolution, when it was progressive to call for the universality of human dignity against the chains of socially constructed customs and particular traditions. The example which Harman uses to defend essentialism is that of Arab culture. Having lived for years in Cairo, he remarks that the problem is not that Arab culture has some stability as a unified entity different from other cultures but that the West claimed to know Arab culture absolutely in order to colonize and govern the Arabs. Elsewhere, Harman develops the same example and argues that the same relativizing gesture which seems progressive when used to deconstruct what Edward Said called 'Orientalism' in other instances can be deployed for opposite political ends, such as in Margaret Thatcher's attempt to dismantle the universal support of the welfare state in the 1980s, through her claim that there is 'no such thing as society', only particular individual people.[18]

Finally, Adam Sharr's response to Harman's work aimed to develop its potential lessons for architects to better understand the role of the imaginative or fictional dimension of architectural practice. As an advocate of a realism without materialism, Harman is equally interested in immaterial objects such as fictional entities, stories and myths as he is towards material objects such as bottle tops, hammers and carburettors. Harman gives a strong example of this in his own writing style filled as it is with a carnival of vivid images and myths, as in his books, *Circus Philosophicus*.

Sharr imagined that a canonical universe called *Circus Architectura* – of architectural concepts, canonical projects, unbuilt or since demolished, mediated in images, mythologized, reconstructed, reinterpreted etc. – also exists in architects' minds. It is rarely thematized as such in the world of architectural practice, but it is a crucial way architects design and communicate with one another and with their clients. His example of Christian Kerez's House with One Wall is a building in which even its seemingly most material aspect, its concrete structure, is nonetheless

surrounded by fictional associations, utopias, ideal geometric figures and canonical buildings operating as references and precedents. This, as many other buildings, thus quickly becomes a sensual object in the imagination of individual architects and the architectural community; able to endure, travel across space and time, become incongruously juxtaposed to, interact with and change architecture's many other sensual objects.

Sharr's response to Harman's work thus identified one of the existing affinities between Harman's philosophy and contemporary architectural design culture in its 'post-digital' moment. In this post-digital moment, digital techniques are no longer novel and are thus simply assumed. They are no longer made thematic as ends in themselves and are instead deployed as means by which architecture can be pursued as a symbolic enterprise. Architects such as Andrew Kovacs, Jimenez Lai, Kyle Miller, Carrie Norman, Thomas Kelley, Elly Ward, Joseph Altshuler and James Tate, all mobilize animated populations of caricatured images from the *Circus Architectura* in their work. One might say the incongruous juxtaposition of different kinds and scales of objects, liberated from the semantic order of their historical context, captures a general sensibility common to architectural design today;[19] and, one can imagine that the historical conditions for the emergence of such an aesthetic are in part the technical conditions of the digital revolution, and the power of algorithms to shuffle digitized content into endlessly surreal *fabula*, as a now-ubiquitous cultural condition produced by big data and information capitalism.

Another feature of this work seems apt, that the fictional objects that populate today's *Circus Architectura*, like Harman's objects, also appear to have their own souls, working as we might imagine to 're-enchant the world' in our 'post-secular' age.[20] Harman's vision of a world without singular, transcendental depth or an ultimate, final cause conjures instead a pluriverse of infinities housed within each thing in the world with the source of its potential transformation lying within each object, and with each object imagined as conscious, perceptive, intentional and capable of understanding. This re-enchanted vision is curiously compatible with the current reappraisal of postmodernism in architecture, its fragments, ambiguities, poetic revelations, complexities and collisions, as well as its urbanistic emphasis upon enclosure and the density of an urban ground or fabric.

*

Since this exchange took place, Harman's intellectual encounter with architecture has continued to develop. A group of architects including David Ruy, Mark Gage, Tom Wiscombe, Ferda Kolatan, Todd Gannon, and Michael Young have engaged with his work in a series of conferences, publications and panel discussions, including 'Speculations on the Real' in New York City in 2014, a series of articles addressing architecture's 'object turn' in *Log* in 2015[21] and the conference panel 'The Aesthetics of Equality: Object Oriented Ontology and Social Theory' at Yale University in 2016. This group has been quick to read Harman's books, adopt his vocabulary of key terms and begin to search for ways to understand their own design work as expressive of notions such as withdrawal and allure.

Yet this early adoption has risked the pitfall of a literal interpretation. Any reading has the potential to be a creative mis-reading. Harman's own philosophy might allow itself to be caricatured by those who encounter it, as any object always is. That is, because no reading will ever grasp Harman's philosophy as a real object, all partial readings are deemed equal. Yet a literal reading that seeks to illustrate philosophical concepts through architectural form would limit the dialogue by seeming to extrapolate a set of final implications.

The exchange that follows should orient any interested reader to the many tensions and fissures between Harman's philosophy and architecture rather than offer support to any pre-defined programme of architectural form-making. Yet, even as a broader intellectual guide to the debate, the reader should proceed with caution. Despite Harman's insistence that he is not against history, language, worldhood or politics, his arguments over the primary place that other philosophies give to these matters suggest a sharper opposition than he would perhaps wish, and might lead the student to feel them to be unnecessary, or lead the architect already disinterested in such matters to legitimize their disinterest.[22] As Lorens Holm put it in his remarks to Peter Carl, 'we're left with a moral problem really, and that is, which approach to the world will produce a better world'.

Whatever the outcome, at the very least, Harman's energy has already rubbed off on architecture, producing a desire among architects to rethink their assumptions and the ongoing potential for philosophy to shape the field of architecture. Even if one remains cautious about the various claims as they stand, awaiting their further development, the pleasure of reading Harman's philosophy today and the vast intellectual world of issues and ideas he navigates is an education in itself, which will leave the reader better off than when they began and is bound to catalyse unforeseen transformations in architectural thought and practice in ways that take architecture forward.

Notes

1 One of the first appointments occurred just prior to the infamous Goldsmiths Conference 'Speculative Realism' in 2007, when Harman was invited to speak at the Architectural Association by Diploma 14 during the same trip. Subsequently in 2011, the New York architect David Roy invited Harman to contribute to the Pratt Art Institute Architecture Journal *TARP: Architecture Manual*, On Nat. The following year, when invited by a group of architects in Brazil, namely Pedro Duschesnes, Juliano Monteiro and Gustavo Utrabo, to give a lecture, Harman remarked on his 'surprise' to find his work already being read so widely by architects. See Graham Harman, 'Non-Relationality for Philosophers and Architects', in *Bells and Whistles: More Speculative Realism* (Winchester, UK: Zero Books, 2013), pp. 198–218.

2 As Jeff Kipnis put it in a conversation with Harman at SCI-Arc, unlike Kant, who 'stay[ed] quiet for ten years, never published a single thing, and then published three critiques in one go, what Graham is doing is unfolding his thinking in public, over time'. see https://www.youtube.com/watch?v=VDUNEGM12B0 (accessed 30 March 2018) (38:09–38:49 mins).

3 As Harman has put it, 'Philosophy is a specific theoretical enterprise that has its own value within certain limits and it tries to expand outward from those limit. And that's what I try to do. I try to cover a wider and wider circle of human affairs all the time … You have to build outwards from what you know.' Cultural Technologies Podcast. http://bernardg.com/podcast/graham-harmans-object-lesson-episode-4 (accessed 28 February 2018) (43:00–46:00 mins).

4 This is the risk highlighted by Bryan Norwood in his excellent review of the dialogue thus far between Harman's thought and architecture. See Bryan E. Norwood, 'Metaphors for Nothing', *Log*, vol. 33 (Winter 2015), pp. 107–119.

5 Harman discusses the equal reality of the object of a celebration as much as the material objects involved in the celebration in *Circus Philosophicus*: '[T]he celebration is no mere aggregate: instead, it is every bit as real as the physical piece of cloth or the human workers themselves. We admit that the celebration is unlikely to last for more than a few hours, while the flag and the workers may endure for decades to come. But this familiar criterion of durability is irrelevant to the metaphysical question of what can be regarded as a substance. For as everyone knows who has taken part in especially intense gatherings, a celebration is a force to be reckoned with: a new entity to be taken into account by many other things. The workers may find themselves carried away by the mood of the party – a mood that exists somewhere beyond each of the individuals as a reservoir of surplus … If we provisionally accept that reality equals resistance (an idea I reject for other reasons) then the steelworkers' celebration is very much a substantial reality, as any riot officer will testify.' Graham Harman, *Circus Philosophicus* (Winchester, UK: Zero Books, 2010), pp. 5–6.

6 The so-called 'correlationist circle', or simply 'correlationism', is the name given by Quentin Meillassoux in his book *After Finitude* to characterize the philosophical assumption, ever since the philosophy of Immanual Kant, that things in themselves can only ever be thought through the mediation of human thought, that when we try to think about reality we are only ever *thinking* about reality. In this view, the world is always trapped within the human-world correlate, placing human beings in the unduly privileged philosophical position of granting access to reality. As Meillassoux writes: 'By "correlation" we mean 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 one another. We will henceforth call *correlationism* any current of thought which maintains the unsurpassable character of the correlation so defined.' And '[c]orrelationism consists in disqualifying the claim that it is possible to consider the realms of subjectivity and objectivity independently of one another'. See Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. Ray Brassier (London and New York: Bloomsbury Academic, 2010).

7 '[A]s long as we remain absent from the real world, the natural sciences will continue to feast upon its delicacies without our being able to share in them.' And while the sciences feast, 'we will remain stranded in a self- constructed ghetto of linguistic turns, hermeneutic horizons, and power plays'. Graham Harman, 'Plastic Surgery for the Monadology: Leibniz via Heidegger', *Cultural Studies Review*, vol. 17, no. 1 (March 2011), p. 217.

8 As Harman put it in 2016, 'Art and design are cognitively valuable activities that do not aim at producing knowledge and we have to give up the idea that only knowledge is important.' Graham Harman, '"The Other Sense of Mimesis": A Talk in the Yale Conference "Aesthetic Activism"', 13–15 October 2016, https://www.youtube.com/watch?v=07mSNQQreS4 (accessed 14 March 2018) (29:29 mins).

9 In Husserl's case, however, depth was limited to the grasp of a conscious reflecting mind. And in Heidegger's case it was limited to practical human involvements. As we shall see, Harman's claim is to have located, against Husserl and Heidegger, the depths as objects *in themselves*.

10 When asked whether an object-oriented approach has anything by way of offering a social or political order, Harman responded, '[W]hat's the hurry? … I see the role of the philosopher as to create novel alternatives to existing intellectual trench wars. You want to be able to offer something fresh and new … And most of those things for me, currently, personally, involve ontology, involve metaphysics, and I try to build outward. I get more and more requests to write about things like literary criticism or art criticism. When that happens, I try to rise to the challenge each time and I work really hard to try to apply my ideas to that context and do some background studying, but I can't do it all at once, and I'm not that old yet, so I've not had all this time to fully develop this theory. So there needs to be a bit of patience … Some people want to start with the politics. For me that's a finishing point. That's something you try to *get to*, eventually … You have to think in terms of the long-view. I take a long time to translate an ontology into immediately politically useful terms … Philosophy is a specific theoretical enterprise that has its own value within certain limits and it tries to expand outward from those limits. And that's what I try to do. I try to cover a wider and wider circle of human affairs all the time … That's the way you have to do it. You have to build outwards from what you know.' Cultural Technologies Podcast. http://bernardg.com/podcast/graham-harmans-object-lesson-episode-4 (accessed 28 February 2018) (37:25–46:00 mins).

11 See Adam Sharr, 'The Circus, the Canon and a House with One Wall,' in Joseph Bedford (ed.), *Is There an Object-Oriented Architecture?* (London: Bloomsbury Press, 2020), pp. 39–51.

12 Hale's questioning mirrors that of Ray Brassier who writes: '[I]f we cannot specify the essential qualities that distinguish one real object from another, how can we be sure that the discrete multiplicity of sensual objects does not mask the underlying continuity of a single, indivisible real object?' Brassier thus questions whether it is 'possible for us to describe the quiddity of objects independently of our intentional relation to them' and answers that 'we have no reliable way of distinguishing between the eidetic or real features of objects and their accidental or sensual qualities'. Ray Brassier, 'Speculative Autopsy', in Peter Wolfendale (ed.), *Object-Oriented Philosophy: The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), p. 420.

13 Brassier, following Wolfendale, also challenges Harman, to account for how his metaphysical assertions could ever be proven right or wrong with respect to all the various other metaphysical assertions about the nature of reality in philosophy. 'Harman does not try to provide a rational rebuttal of Kant's edict that all metaphysical assertions about the noumenal are equally arbitrary. He simply ignores it.' And he questions Ray Brassier, 'Speculative Autopsy', in Peter Wolfendale (ed.), *Object-Oriented Philosophy: The Noumenon's New Clothes* (Falmouth: Urbanomic, 2014), p. 419.

14 Graham Harman, 'Everything Perceives insofar as It Relates', *Circus Philosophicus*, pp. 73–74.

15 Graham Harman, *The Quadruple Object* (Washington, DC and Winchester, UK: Zero Books, 2011), p. 99.

16 Holm's remark that 'the subject of architecture is always within architecture' is, for example, in some agreement with Harman's examples of not touching an object such

as a city even if one is within it. As Harman put it, 'even when I travel to stand in the exact center of Osaka I will not exhaust its reality'. Harman, *The Quadruple Object*, p. 100.

17 As Harman puts it elsewhere, the 'danger' for Deleuze's Spinoza 'is that objects are liberated from slavery to the human gaze only to fall into a new slavery to a single "matter-energy" that allows for no strife between autonomous individual things'. Although it is true that Deleuze rescued us in the mid-1990s from an endless repetition of text-centred philosophies, it is less clear in 2011 whether he remains the liberator we need.' Graham Harman, 'Autonomous Objects', *New Formations*, no. 71 (2011), p. 130.

18 'The problem with that I think is that that is also what people accuse neoliberal capitalism of doing. People get mad when Margaret Thatcher said that society doesn't exist, there is only a bunch of individuals. There actually is a society, they say, against Thatcher. But then when said wants to defend the Arabs he makes the opposite point, and says no there are just a bunch of individuals. You can't have it both ways … So I think essentialism should have a rebirth … as dangerous as it might seem at first … as much as it seems like playing with Fire, you learn to handle the fire and not get hurt I think'. Graham Harman, 'Strange Objects Contra Parametricism', SCI-Arc, 19 September 2013 (59:50–1:01:33 mins).

19 Harman writes in *Tool-Being* that 'what philosophy now needs above all else is … the innate candor with which circus clowns handle everything from cowbells to puppies to dynamite'. Along the same lines, architects seem to be arguing the same thing. See Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Peru, IL: Open Court, 2002), p. 238.

20 Slavoj Žižek, for example, describes Harman as 'opting for a directly religious (or spiritualist, at least) panpsychism' and situates Harman's perceived opting for the religious within the current discourse of 'post-secular thought', the idea that the process of 'disenchantment' is being reversed and the Sacred is returning in a new form based on finitude rather than the absolute. See Slavoj Žižek, *Less Than Nothing: Hegel and the Shadow of Dialectical Materialism* (London: Verso, 2013), p. 640.

21 For the debate, see Todd Gannon, Graham Harman, David Ruy and Tim Wiscombe, 'The Object Turn: A Conversation', *Log*, vol. 33 (2015), pp. 73–94; for advocates of such an object-turn, see Mark Foster Gage, 'Killing Simplicity: Object-Oriented Philosophy in Architecture', *Log*, no. 33 (Winter 2015), pp. 95–106; and for detractors, see the critique offered by Bryan E. Norwood, 'Metaphors for Nothing', *Log*, no. 33 (Winter 2015), pp. 107–119.

22 As Mark Foster Gage put it at the conference Speculations on the Real, 'I don't have any explanation [for this project] which is a great thing [about object-oriented ontology] … I don't need one. And if you don't like it. Fuck you. That's my object-oriented explanation. There's no arrows. There's no dove flying out of my hands. This is what it is and it's certainly, hopefully, alluding to something'. Recording of Speculations on the Real, Conference, New York, 27 August 2014, from the 10:00 a.m. session (24:56–25:07 mins).

2

Graham Harman

2.1 Graham Harman, What Objects Mean for Architecture

Object-Oriented Ontology

Let me start by speaking about what object-oriented ontology is. A brief introduction is essential if my responses to the architectural theorists are to make sense. So, what is object-oriented ontology? I began using the similar term 'object-oriented philosophy' in about 1997. I stole the term from computer science but was not especially inspired by object-oriented programming. Object-oriented ontology – or 'Triple O' – is a term coined by Levi Bryant in 2009. Object-oriented philosophy was too specific to my philosophy, and so Triple O refers to several philosophers working in a similar vein, but with different philosophies.

What motivated this object-oriented turn on my part? Philosophy, of course, has to have a universal subject matter. We are like the globe-makers compared to the mapmakers. We do not always deal with things in detail. We attempt, at least in principle, to account for everything that exists, and I started with the notion that objects – whether fictional, real, natural or artificial – are the most universal kind of thing that exists. Everything is an object in some way. This is not an especially new idea. There have been several trends in the history of philosophy that have claimed this.

Now, there are a number of people – in architectural theory as well as in philosophy – who do not like the fact that we are putting objects at the centre of philosophy. Why? There are all kinds of reasons, but two predominate. I call these 'undermining' and 'overmining'. (They also come in a combined form that I call 'duomining'.)

Undermining

When you say that we should not talk about objects like microphones, podiums, stages, people but go deeper, to their tiniest pieces, you are undermining the object.

Pre-Socratic philosophers tended to be underminers. They can be divided into two basic kinds. The first tries to find the most basic physical element of which everything is made. Thales of Miletus said the first principle of everything is water. Anaximenes said the first principle must be air. Empedocles said there must be four fundamental elements: air, earth, fire and water. Then there were Democritus and Leucippus, who said there were these tiny little particles called atoms that everything is made of.

The second are the theorists of what is called the *apeiron*. This means the boundless, but you can think of it as a giant indeterminate lump from which everything particular emerges. The *apeiron* helps explain why there are pairs of opposites (such as fire and water, good and evil etc.). They are said to come out of this more primordial *apeiron* and pass back into it. The argument among these second type of Pre-Socratics was about when this *apeiron* existed. Did it exist in the past? Does it exist now? Or will it exist in the future?

Pythagoras and Anaxagoras thought it existed in the past. Parmenides thought the *apeiron* exists right now – only we do not know it. His word for it was 'being'. It was the view of Anaximander of Miletus, the original *apeiron* theorist, that the *apeiron* will exist in the future, once all opposites are destroyed. We have so many opposites in our world, but he thought that over time they will slowly cancel one another, leaving a neutral, lukewarm, blob-like *apeiron* at the end of cosmic history.

Both of these theories are still with us today as basic forms of anti-object-oriented philosophy. The ones who talked about water, air and atoms are the ancestors of present-day scientific materialists, with their ultimate strings or quarks and electrons, or neuro-philosophers, with their ultimate neural activation patterns. This theory is popular in Anglo-American analytic philosophy, but it is slowly creeping into Continental philosophy as well. The descendants of the *apeiron* theories can be seen in a number of relatively recent philosophers who claim that energy and matter are a single thing and everything emerges out of a holistic fluid network. We might read Gilles Deleuze along these lines.

There is nothing inherently wrong with undermining. It is a method that we need at times. For example, we can undermine diamonds and graphite by saying that they are both made of carbon. That is obviously very useful for chemistry. We can say that the morning star and the evening star are both the same thing. They are both Venus seen at different times of the day. They are useful for astronomy.

What I am opposed to is saying that there are no macro-sized objects at all and that everything has to be boiled down to the ultimate tiny powder of which it is made.

The problem with undermining is that it cannot explain emergence. And it cannot explain why larger things retain their qualities even though their parts are changing constantly. We replace all the atoms of our bodies every seven years but we still speak of our body as the same body, and this has a meaningful sense for us. You can say that London is still partly the same city as it was in the time of Dickens. There have been changes, but it is not meaningless to refer to London as a durable unit. Objects are robust with respect to changes in their parts. They remain the same even when their parts change. They generate new parts in many cases, so that London can annex territory and hire new police officers, and it is still the same London. Objects also have a retro-active effect on their parts. By moving to London, for example, one adopts a certain London style, a certain way of living, a certain rhythm of behaviour. Undermining cannot account for macro-sized objects of this sort, such as a body or a city.

Overmining

Overmining is the opposite dogma, the more modern one. If undermining says objects are too superficial and you have to go deeper and get down to the small things

of which they are made, overmining says objects are too deep. It says that there is nothing hiding behind appearances, and to think so is to have a naïvely gullible belief in the real world. Overmining says that you have to realize that things are just appearances to the mind; things are just power relations; things are just networks; things are just events; things are just cultural constructions and there are no more real things hiding behind these appearances. You can see this throughout modern philosophy, but especially in the German Idealist rejection of Kant's things-in-themselves. Kant, of course, made his big step in philosophy by saying that there are things-in-themselves that can be thought but not known. We are restricted to knowing the world through the twelve human categories and time and space, which are also structures of human experience, but not necessarily of the world itself. We cannot say whether these really apply to things as they are in-themselves, only that they define the structure of human finitude; that is, how humans experience the world.

What the German Idealists say is that if you try to think of a thing outside of thought, you are thinking about it and therefore there is a contradiction, so you can never escape this circle. A lot of contemporary philosophy is still saying this. Slavoj Žižek says this. He says you cannot speak about a real thing outside of the subject. Instead, the very difference between real and ideal is produced within the subject as a disruption. It is a classic Hegelian way of dealing with Kant's thing-in-itself. Žižek would say that it is naïve to say that there is a real world beyond the subject.

You can also see this in Quentin Meillassoux, who believes in the correlationist circle. Correlationism is a term first coined by Meillassoux to refer to a kind of philosophy that says we cannot talk about the world-in-itself or subjectivity apart from the world, but only the relations between human and world. This has been the central dogma of Continental philosophy at least since phenomenology. Speculative Realism was meant as an attempt to find some way to talk about the world-in-itself apart from the human-world correlation. Meillassoux accepts the idea that you cannot talk about a thing-in-itself without turning it into a thing-for-us in the very process of talking about it. At the beginning of his book *After Finitude*, he talks about the arche-fossil, the Big Bang, the earth congealing before humans were here, before any thought was here. People sometimes misread that as if Meillassoux were saying: 'See, science disproves the correlational circle – because of science we know there is a real world', but he was actually saying that there is a *tension* between science and correlational philosophy. He accepts the starting point of correlational philosophy and searches for a very complicated backdoor route to return to the real. In contrast, I am the one who says it is not that hard: there is a real, independent of thought, and one should not overcome this reality by reducing it to the human-world correlation.

Bruno Latour is another overminer. He says that actors – which I take as just his term for objects – are nothing more than whatever they transform, modify, perturb or create. This is discussed in *Pandora's Hope*. In other words, there is nothing hidden behind an actor's actions. A thing is what it *does*. I am opposed to this too, for reasons that will become clear in a moment.

Again, overmining is a method that is sometimes justified. I am not saying you should never do it. I often give witchcraft as an example of an object needing to be explained away by overmining. If someone have tried to explain a plague, dead babies, cackling in the night, blood on somebody's doorstep by saying that it is all because

someone in the village is a witch and then you burn an innocent woman, then of course this is a situation where overmining is in order. You should say that there is nothing deeper behind the coincidental appearance of these things. But the overminers go too far when they say there are *no* real objects, and *everything* should be overmined. This is my problem with Patrick Schumacher's theory. It views architecture as a system of communications. I think that is wrong. I do not think *anything* is a system of communication. There has to be something that withdraws from the communications in order to communicate.

So the problem with overmining is that it too cannot explain change. If I am nothing more than my immediate set of relations, why would I ever be different an hour from now? I cannot be identical with what I am doing right now. Aristotle introduced the concept of potentiality (which I reject for other reasons) to try to address this problem. He argued with the Megarians, who said that nobody is a house-builder unless they are building a house right now. If they are currently sleeping, then they are not a house-builder. Everything is only what it is right now. Aristotle said that that was nonsense. Of course the sleeping house-builder knows more about house-building than somebody who is awake who does not know anything about house-building. So you also have to speak of potential: somebody is able to do something that they are not doing right now. Where I differ from Aristotle is in thinking that potential is better thought of as an actuality that is hidden; it is just not exerting that actuality fully on other things at the moment. Things are actual, even if they are not fully expressed.

Duomining

Duomining describes how overmining and undermining usually are not separate, but parasitical on each other, joined in league against objects together. There are plenty of examples of duomining in human thought. Scientific materialism, for example, starts by saying that we are going to find the tiniest particles from which everything is made. But as soon as we get to this bottom layer, the undermining flips into overmining, because we can supposedly also know this tiniest layer mathematically.

The Third Table

For *Documenta* last summer I wrote a text called 'The Third Table', referring to the great English physicist Arthur Stanley Eddington, who said in his Gifford lectures that there are always two tables: there is the table described by physics which is mostly empty space with electrons spinning around and all these particles whirling all over the place, and there is the practical table that I am writing on. My thesis is that neither of Eddington's tables are real, since they only represent the undermined and the overmined table. The real table is in between these two. The real table is not just the pieces, nor is it just the practical table.

Art

I think that the arts are unusually well equipped to give us access to this third table. With the exception of very special Dada-esque cases, an artwork does not tell us what

the physical composition of its materials is, nor does it present itself as a piece of practical equipment. Nobody *uses* Duchamp's urinal, so it is not an everyday tool, but has been specifically decontextualized from its tool-use. The arts have something to teach philosophy here because they are not about paraphrasing art objects. You cannot replace a gallery full of artworks with typed prose descriptions of them.

Now I have probably made it sound like everyone is aligned against objects and that we object-oriented philosophers are persecuted and paranoid, but no, there are actually at least three traditions in the history of philosophy that have upheld the rights of objects in the sense that I am speaking of: those of Aristotle, Husserl and Heidegger, and Latour and Whitehead – though I think they are all wrong in some way.

The first is the Aristotelian tradition. Aristotle thought that the primary substances were individual things, while ideas (like white and justice) were secondary. The whole medieval tradition of philosophy follows Aristotle in this. Leibniz is one of the greatest Aristotelians. The problem I have with this Aristotelian tradition is that it tends to fetishize 'nature' as the criterion of reality. Leibniz even goes further saying that all substances are eternal, that God created them at the beginning of time and that they last forever. At least Aristotle thought that substances can be created and destroyed. A horse, for example, would be a substance for Aristotle, but you can kill a horse and its body degenerates. There is no sense that for Aristotle the horse has an eternal soul. So we can respect what the Aristotelian tradition did for objects, while rejecting its one-sided emphasis on the natural and simple over the artificial and composite. After all, we live today in a world filled with composite and artificial objects. There is no reason why we cannot talk about aeroplanes as objects, or a circle of men holding hands, the Dutch East India Company, or two diamonds glued together.

A second tradition is that of phenomenology, which is not often viewed as an object-oriented position, but it is the one I came from. I contend that Husserl and Heidegger place objects at the centre of their respective philosophies in different senses. What is important here is that all human knowledge overmines, but if you think you know something exhaustively, then you reduce it to its qualities, and if you create a mathematical model of something, you replace the thing with its traits. Any attempt to formalize or mathematize things inevitably loses many of their properties.

A third pro-object tradition, as I have already suggested, is that of Latour and Whitehead. Both Latour and Whitehead can be said to take individual entities as the centre of their philosophies, and that is one of the reasons I have always been attracted to Latour's writings. After the many years I spent reading Heidegger, with his utter contempt for specific individual beings, Latour is refreshing because he lets you talk about absolutely anything: cartons of orange juice, Adidas shoes, medical operations. I only reject this tradition because it tends to reduce things to their relations and effects, whereas I view objects as a surplus beyond all relations and effects.

Speculative Realism is almost there in its attempt to reject certain portions of the Kantian legacy. Philosophy moves very slowly, and we all still live in Kant's shadow. We are all still Kantians in one way or another. Meillassoux and Badiou are trying to break from Kant by getting rid of the finitude in Kant; that is, from his idea that you never know reality in itself. They are trying to reverse that and say that you can get reality in itself and it happens through mathematics as a privileged discourse. I believe that finitude in Kant is irreversible because there is a difference between knowledge and

things. Even if you knew all the billions of facts about a tree, that perfect knowledge of the tree would still not turn into a tree. It may sound like a frivolous objection, but it is quite serious. You need to be able to account for the difference between perfect knowledge of something and the thing itself. I do not think Badiou or Meillassoux have yet worked out what the difference is between perfect knowledge of the things and the things themselves.

For me, philosophy has never been about knowledge (mathematical or otherwise) and that is why I regret the recent mathematical turn expressed in Meillassoux's books. Philosophy is *philosophia*, not *sophia*. It is the love of wisdom, not wisdom itself. The claim to wisdom or *sophia* is closer to the sophists – they were the ones who claimed to have wisdom. Socrates never claimed that. In Meno's paradox, in Plato's *Meno* we learn from the sophists that there is no point asking what virtue is, because either we already know what virtue is or else we do not know what it is and therefore will not recognize it when we find it. I would replace that with what we might call *Socrates's Paradox*, which would say that we both know and do not know what virtue is. We have some idea what virtue is, and we can only approach it without reaching it. This is what *philosophia* means; this is why philosophy is the love of wisdom – it is the getting closer to the reality. And here again I think architecture (and the arts in general) is in a good position to help us. Architecture does make use of knowledge just as everything else does. But its ultimate products are not knowledge but *things* that are not entirely transparent to knowledge. We can paraphrase electrons by replacing them with lists of their qualities, but we cannot paraphrase a work of architecture in this way.

German Realism

I try instead to reverse Kant's *second* main idea, that the human-world relation is privileged above all others. Kant says that the human-world relation is the explicit topic of philosophy, because we cannot jump outside the categories of time and space. For Kant, we cannot talk philosophically about what happens when one rock smashes another rock or when fire burns cotton. All we can talk about is what it is like for a human to *experience* fire burning cotton, according to the twelve categories of the understanding and space and time. I think that is wrong. *I think we need to place the human-world relation on the same level as the world-world or object-object relation*. Bruno Latour, in *We Have Never Been Modern*, attacks the idea that there have been two zones, one called world and one called human, with the 'world' side working according to rigid, mechanical, clockwork laws, and the 'human' side involving arbitrary, cultural values with no grounding in reality. This taxonomic division between two zones of being is the central feature of modernity according to Latour, and I think he dismantles it quite wonderfully.

This is why I think that what we needed after Kant was not so much a German Idealism but a German *Realism*. This hypothetical German Realism would have said that Kant made a great step forward in talking about finitude but was wrong in thinking that only humans experience the finite. We poor humans are not unique in our inability to see the things-in-themselves. Fire and cotton also do not exhaust each

other, and neither do raindrops and stones. These inanimate entities also translate or distort or caricature each other. *Object-oriented philosophy is all about treating object-object relations the same as object-human relations*. It is not about saying that objects have souls or that political rights need to be given to wood. It is about saying that any kind of relation distorts its terms in the same way. Object-oriented philosophy is really just late-born German Realism. We are here to finish the job!

Heidegger

Let us turn to Heidegger. My reading of Heidegger is unorthodox. I happen to think that Heidegger's tool-analysis is the most exciting moment of twentieth-century philosophy. It first appears in published form in *Being and Time* in 1927 but appears even earlier in his lecture courses in 1919. Heidegger originally came from the school of phenomenology. The simplest way to describe phenomenology is to say that it is a way of bracketing scientific theories about the world and describing what we see in exact detail. If I am trying to describe what I see in the room, I should not talk about rods and cones and the eyeball and the optic nerve and the retina, because we do not see these directly – they are just things we know from our theories, however well-founded. Instead, we should start more basically from what we encounter directly, what we perceive in our everyday lives. We can describe that in exact detail. For example, as a phenomenologist, I might notice for the first time that I am only seeing the front side of all of you. I assume you have backs, though I cannot see them, so those backs of you are 'co-present'.

Heidegger's Tool-Analysis

Now, Heidegger makes what might look at first like a counter-revolutionary twist on phenomenology. He notices that for the most part, things *are not* directly present to us. This is actually a fairly rare case. Heidegger develops this insight from what he calls the tool-analysis, with the hammer being the most famous example. While you are using a hammer, you do not notice it. The hammer simply performs its function while you focus on the house that you are building or what you are going to do with the house once it is built. If the hammer breaks, however, it suddenly becomes visible. This is not limited to cases of tools like hammers, drills or chisels. It holds for any object that is partially hidden and partially noticed from time to time.

For example, in your experience right now, only a small amount of what you are doing is conscious to you. You are relying on the floor to hold you up. You are relying on your bodily organs to keep functioning fairly effectively (unless you are having a health problem). Most of you know English pretty well, so you are not thinking too hard about my grammar. You are simply processing my words pretty quickly without having to struggle through the verb conjugations. We are all breathing oxygen; if the oxygen disappeared, we would all suffocate. Until things break, you tend to take them for granted.

My first step in reading Heidegger was to say that Heidegger's entire philosophy is about nothing but this.

Theory and Practice

Heidegger is often misread as privileging practice over theory. According to Heidegger, all theory is grounded in practice. We perceive things or think about them, but actually it is all grounded in background practices that we do not think about very much. Hubert Dreyfus, the most popular commentator on Heidegger in analytic philosophy circles, gets even more specific and says that the deepest thing of all is our social conditioning by a given context – American babies are raised in one way, Japanese babies in another, and ultimately this is what is deeper than all theory and perception. The problem with that is that practical activity distorts things every bit as much as theory and perception do, because by sitting in a chair, you do not exhaust the qualities of that chair anymore than by looking at it or by making a theory about it. Mosquitoes and dogs are going to find qualities in that chair that you cannot perceive. Raindrops hitting that chair are going to encounter properties of that chair that we cannot really conceptualize.

So both theory and practice are on the same level. They *both* distort the chair-in-itself. Heidegger might even agree with that point if he were still alive to hear it. But what he would never agree with is that object-object relationships are basically of the same sort as human-object relations. When fire burns cotton, fire is not interacting with the smell or colour of the cotton; it is simply interacting with the flammability and features related to the burning of the cotton. The smell and the colour of the cotton are invisible to the fire; it does not matter if the fire is 'conscious' of them or not. It interacts only with some parts of the cotton, not with the cotton directly.

The Problem of Causation

The idea that an object only interacts with a part of another object and not with the object directly and exhaustively has always led to a problem of causation, of how one thing encounters another thing directly and causes a change in it. This problem is why some of the early Continental philosophies had to say that God is the medium of all these interactions. Since fire and cotton cannot touch directly, their interaction must somehow pass through God. This idea entered into French philosophy in the seventeenth century from 'Occasionalism', but we are not so different today. Instead of appealing to God as the universal causal medium, we in philosophy still tend to use the human mind as the universal causal medium. The problem with Occasionalism was not that it talked about 'God' in some naïve pre-Enlightenment fashion, but that it gave *one* particular entity a monopoly on all causation.

Bruno Latour tries to rectify this, because the greatest philosophical influence on him, Whitehead, has the same problem. Whitehead also thinks that relations are all routed through God, so he brings back Occasionalism. Latour is probably even more religious in person than Whitehead. Latour is a practising Catholic, with a straight face, but he does not bring God into his philosophy to solve problems. He tries to solve them in a more secular fashion. Latour proposes that you need a mediator between any two things. In *Pandora's Hope* he asks, because politics and neutrons have no inherent connection, what links them? His answer is that it was Frédéric

Joliot-Curie that connected them because he tried to convince the French government that they needed to start investing in an atomic bomb programme very fast because the *Wehrmacht* was massing across the border. Joliot failed in completing that effort before France was knocked out of the war. The problem with Latour's theory is that if politics cannot touch neutrons and it requires Joliot as a mediator, then the same question recurs: How can Joliot touch politics? And how can Joliot touch neutrons? You need another mediator. You can say that Joliot got into politics through his friend at the ministry and met the friend through his wife. But then how does he know his wife? There is an infinite regress. You keep going backward and there is no ultimate answer. How does he know neutrons? Through a microscope. How does he know the microscope? Through his eyeball. How does he make contact with his eyeball? Through his nervous system.

Latour's answer to this infinite regress is a pragmatic one that I find disappointing: he says you stop when it gets boring. Go as far as you want and then stop. That is fine for methodological purposes, but the problem, if you are doing metaphysics and ontology, is that you have to be able to show how any two things can make contact at all. I have a solution to this problem, but I will not get into that now. I have written about it more extensively in my book on Latour, *Prince of Networks*.

So in my view there are real objects that withdraw from us; they withdraw from our perception; they withdraw from our theory; according to me, they also withdraw from our practice; they even withdraw from each other. Things do *not* touch each other directly. There is no direct causal relationship in the universe.

Husserl's Objects

In stage one of my account, Husserl looked like just a naïve simpleton who thought everything is an appearance in the mind, while Heidegger went a step deeper. But that is not entirely fair, because Husserl did something that had never been done before: he noticed, *within the realm of experience*, a rift between objects and their qualities. This contrasts with the empiricists (such as Hume, Locke and Berkeley), who think that the apple is not an object, but just a bunch of qualities such as red, cold, hard, sweet, juicy and spherical. The empiricists would say that you see those qualities come together as a group so often that you start naïvely assuming that there is an underlying object there called 'apple', but all you are really experiencing are these qualities.

Husserl's lasting contribution to philosophy is his reversal of this prejudice against objects and to say that we do indeed encounter objects. Husserl gives an example of how you primarily see objects by talking about what happens when you see your friend walking down the street. He says, your friend might be wearing this or that clothing, standing in whatever physical posture and in whatever mood, but these details do not really matter, because you look straight through them and simply see that it is your friend approaching you. The object comes first, so there is a tension between what I call the *sensual object* and its *sensual qualities*.

In Heidegger's tool-analysis you had the real object and sensual qualities. I call these time and space, and I think this is where time and space are generated. People always talk about time and space as though those are the two peerless features of

cosmic structure. But once you interpret space as the rift between real objects and sensual qualities and you see that this rift appears again both between real objects and real qualities, and between sensual objects and their real qualities, then you notice that you have two other tensions to add to time and space, which I call 'essence' and 'eidos'. So there are four features of cosmic structure: time, space, essence and eidos. I write about this in my book *The Quadruple Object*.

Architecture

What could the use of all this be for architecture? The object-oriented model could be useful for architecture because architecture talks about individual enduring entities and their qualities, or objects and their relations. In architecture there is a question about what are the real elements that endure as autonomous actors and what is derivative of these actors? How does a thing differ from its specific qualities that can be measured and noticed and that change at different times? We have been in a very relation-loving period where people have thought that it was always the fresh and innovative method to talk about things in relational terms rather than substantial terms. I understand why, because the old philosophies of substance, the old realisms, have started to look very crusty, middle-aged and boring. So the relational approach has seemed very fresh by contrast. My claim is that this relational approach is an idea that is no longer as liberating as it once was. The liberating energies are now on the other side of the fence. We need to go back to autonomous objects.

2.2 Graham Harman Interview: Zero-Form, Zero-Function

Jessica Reynolds: What would you say are the problems of our current historical moment that you see your own philosophy addressing?

Graham Harman: There seems to be a general collapse of the human-centred model of the world that emerged during the basically idealist period known as modernity. Climate change is the most glaring example of a case where anthropocentrism is challenged: the word 'anthropocene' means that humans are the *cause* of climate change, not that they are the centre of all reality in this era. Despite the frequent baffling criticism that object-oriented philosophy regards humans as 'worthless', this is not the case. We just think that humans should not be the centre of philosophy.

Joseph Bedford: It seems that what you are saying is exemplary of a recent realist or empiricist trend within the humanities. What would you say about the human sciences becoming increasingly interested in the terrain that once belonged to the natural sciences?

Graham Harman: There will always be a division of labour between the humanities and the sciences. But I see no reason why this division should be based on a *taxonomy*, with the hard sciences talking about inanimate stuff and the humanities talking about people and their cultures and languages. In his 1991 book *We Have Never Been*

Modern, Bruno Latour destroyed the modern idea that there are two different *kinds* of being: (1) nature, which is mechanical, inert and follows iron-clad laws; and (2) culture, which arbitrarily projects relative cultural values onto an otherwise cold, grey matter. When the humanities accept this particular division of labour, what they are saying, first of all, is 'we can't talk about nature because the natural sciences are already doing that. We will confine ourselves to the limited area of normativity or human thought, which the sciences cannot touch'. But then of course neuroscience comes along and tries to assume control of the human sphere as well. Philosophy is therefore stuck with a smaller and smaller area of activity, and eventually we will just be sitting on ethics panels – until someone invents software that can make ethical decisions more efficiently than humans. It was always a mistake for philosophers to accept this division of labour. We should also be talking about all the things that the sciences are talking about, only in different terms.

How is it possible for philosophers to speak of the inanimate world in terms different from those of science? Well, the sciences must talk about things in terms of their discursively available qualities. An electron is nothing more than all the things that you can verifiably say about an electron, and in the sciences, there is nothing over and above that. By contrast, philosophy needs to talk about nature in terms of the surplus of objects beyond their qualities, their withdrawal from all forms of relation. We should keep a certain division of labour: not in the usual taxonomical sense, but in the sense that the sciences talk about things insofar as they are mathematizable and philosophy talks about things insofar as they are not. Philosophy must not abandon the inanimate world to the scientists, because there are also specifically philosophical means for discussing the inanimate world.

◀ **Lorens Holm:** *Let's not conflate the distinction between an object-oriented and a subject-oriented philosophy with the distinction between the natural and cultural worlds, or between the quantitative and a qualitative aspects of things.*

Graham Harman: And conversely, we need to bring the non-human back into the humanities because focusing only on humans is a form of what I call 'overmining'. Instead of saying that the lowest level is all that counts, the humanities are now accustomed to saying that the highest level (that of human accessibility) is the only thing that counts. But if nothing is anything more than how it registers itself to humans, why does it register itself differently in different moments? If I am nothing more than my circumstances and my experiences, how can I be in different circumstances a minute from now or a year from now? Change is possible because there is something in me, and something in every object, that is not currently expressed. So the turn towards objects is very important for *philosophical* reasons, because philosophically speaking, there is no way to reduce a thing to its current manifestations. And that includes humans and their cultures.

Joseph Bedford: Another related context within the humanities that suggests a certain timeliness to your work is the general sense that an older model of critique has, in Latour's words, 'run out of steam'. What do you think the relationship is between the humanities and critique?

Graham Harman: Critique is an intellectual technique that goes hand in hand with idealist philosophy. It comes from the idea that I am something different from the world, alienated by it, and so I must rise above the world instead of gullibly believing in it. As a result, I should have a basically adversarial relationship towards all the things that I encounter and should not believe any of it too seriously. Not believing in anything becomes the ultimate gesture of intellectual supremacy. Descartes had a notion that everything could be a deception: everyone I see out the window could be automata covered in coats walking down the streets.

Those who feel especially intelligent tend to think that this is so because they *believe less* than other people. They tell themselves: 'These poor naïve people who are still religious and still believe in inherited social customs, while we ourselves have risen above all that and believe in less.' In the first place this is not even true, since we are now perhaps the most naïve believers in human history. Just look at the sciences. Is it really the case that science enables us to embark on a progressively more radical nihilism? In fact, we believe in more objects now than anyone has in the history of the human race. Think about all the distant astronomical bodies in which we believe, and all the different languages we believe exist because we have catalogued them in linguistic folders. In fact, science multiplies entities more than any other human invention that has ever existed. We are certainly more naïve than animals, who in the end seem to believe in a fairly narrow range of entities.

But there is another form of critique that has exactly the opposite sense of the first. I am referring to literary criticism, food criticism, wine criticism, theatre criticism, in which you do not *denounce* anything even in cases where you are very negative. Instead, you try to cultivate a connoisseurship that appreciates the unique virtues (and vices) of each thing. The primary aim of this sort of criticism is to detect and appreciate or criticize the specific qualities of a thing. You have an abundance of this kind of critique in architecture, but we do not really have it in philosophy yet. In philosophy we are too quick to reach a verdict on who is right and wrong, whose ideas we like and dislike. There is not much connoisseurship in philosophy yet, and we need more of it.

Jessica Reynolds: What would you say is the relationship then between your philosophy and politics?

Graham Harman: The first task is not to rush into generating a concrete political programme. Philosophy is primarily about conceptual innovation, and if you're too quick to find shelter in a ready-made political platform, you'll probably just end up caving in to some extant version of Left theory, because the social pressures among intellectuals these days come heavily from that direction. This may be better than a rightward wind, but Left discourse too often just sounds like a stale version of Christianity and tends to replace politics with an unquestioned egalitarian faith that people too often use to jockey for moral superiority. Criticizing the rich Western nations becomes almost an end in itself: Who can do it the most vehemently? But philosophy must not become the handmaid of the Left any more than it needed to remain the handmaid of theology or needs to become the handmaid of neuroscience.

So, I have been deliberately slow in my approach to dealing with politics, a topic that every comprehensive philosophy must eventually address. In October 2014 I published

my first political book, *Bruno Latour: Reassembling the Political*. Even though I mostly write about Latour in that book, the reader can also get a sense of my own trajectory from it. The first thing that struck me when researching this book was that Latour is very difficult to place on the usual Left/Right political spectrum that, since the French Revolution, has dominated our collective political thinking and our everyday social judgements of individuals. Some on the Left call Latour a 'neo-liberal', but that is what they call virtually everyone these days, so there is no reason to take this epithet seriously. Clearly Latour is not a radical revolutionary, but you also cannot call him a conservative, since social *stability* is not the goal of his actor-network approach.

In fact, the Left and the Right as we know them are rooted in different modern theories of human nature, of the so-called 'state of nature'. If you think as Rousseau did that the state of nature was primarily a place of caring and sharing equality, then any presence of inequality or injustice on the planet immediately becomes a degenerate, unnatural outrage for which someone or something must be to blame. But if you think as Hobbes or Machiavelli did that human nature is basically vile, then the present situation is never really so bad, since it is automatically much better than the hypothetical prehistoric war of all against all, of which Hobbes speaks in the *Leviathan*. But what is Latour's theory of human nature? Interestingly enough, he does not really have one. And while he enjoys quoting Hobbes and Machiavelli and rarely cites Rousseau, this has nothing to do with Latour thinking that humans are innately dangerous, and everything to do with Latour's ontology – in which an actor is what it *does*, and therefore we can speak only of the *success* or *failure* of various actors, not of the deserving or undeserving moral status of the actors that win or lose.

Eventually this led me to see that Latour is occupied with a completely different polarity also found in modern political theory: that between Truth and Power. By no means does this simply replicate the Left/Right distinction, since there are Left and Right versions of both Truth Politics and Power Politics. What all Truth Politics has in common is the notion that the political truth is basically known but is unfortunately prevented from coming into being due to corruption, class interest, imperialism, stupidity or some other benighted or ignoble force. It is easiest to see this on the Left, with Rousseau and Marx.

Yet it can also be found on the Right, as for example with Leo Strauss and his disciples. This tradition tends to read Socrates and Plato not as searching for an unattainable truth but as *possessors* of a truth that is opposed to the truth of egalitarianism: namely, a truth concerning the eternal hierarchy of human types, regardless of the historical era. The main political question becomes: 'How can the philosopher survive, unlike Socrates, by persuading the masses that philosophy is not a dangerously destabilizing activity?' The answer is that the philosopher must maintain esoteric doctrines and behave in shrewdly prudent, sometimes disingenuous fashion to remain safe from the violent stupidity of the many. In some ways it is just an upside-down version of Rousseau. And I would say that it is wrong for precisely the same reason: namely, we *do not have* political knowledge. Such knowledge eludes us, as all other knowledge does. Politics is not the application of truth to an obviously corrupt situation but is itself the search for political truth, given that we *do not* possess it and often err badly in trying to determine it.

Latour starts to recognize this as his career goes on. He realizes that his early delighted Hobbesian and Machiavellian rhetoric about there being no difference between might and right (though he meant it mostly in reference to non-humans) is politically problematic. It implies that the sovereign cannot go wrong, and this simply is not true. In 1991 he finally tells us, in *We Have Never Been Modern*, that 'Hobbes was wrong!' – a big step forward for Latour. He thus tries to incorporate some form of transcendence into his politics and assigns both to scientists and to moralists the role of detecting entities that have wrongly been excluded from the polity. This period culminates a decade or more later in Latour's interest in Walter Lippmann and John Dewey. Dewey, in particular, defends democracy from the critique that the citizenry are mostly ignorant and play no part in politics. This problem can be solved, in part, by saying that each issue generates its own public of interested parties; there is no need in a democracy to become excited about each and every issue.

The problem is that Latour calls his political transcendence a 'mini-transcendence'. He is enough of a Hobbesian that he is suspicious of any claim to truth that would go beyond the process of *negotiating* the truth in a political context. So for instance Latour thinks that Gaia, our earth, does not yet exist and cannot exist until it is politically composed. Yet that is obviously not what James Lovelock meant when he introduced the concept of Gaia. Lovelock is talking about the real earth as a real organism that exists and acts whether we realize it or not. This is why Latour is susceptible to the influence of Carl Schmitt in a way that I am not. Latour sees the 'state of exception' (when all question of right and wrong is bracketed and a political decision is simply made) as the normal state of all politics, not as an occasional dictatorial episode in sad moments of human history. For my part, I think that politics is neither about truth nor about power, but about *reality*, and reality is what is there in front of us but can never be adequately known. This is why I am not convinced by the claim of Marxists or Straussians to possess that truth. From an object-oriented standpoint, truth can never be had but must always remain contested.

Joseph Bedford: If object-oriented ontology escapes correlationism and we try to bring this gesture to bear upon architecture, does it make any sense to no longer think about buildings as being for humans, and instead just only think of them in terms of object-object relations? In the end, buildings *are* for humans, to a large degree.

Graham Harman: The objection has arisen in several different fields, but only recently did I come to understand the root of the problem. There are actually two different senses of the human that are easily conflated.

Let's start with the first page of Manuel DeLanda's 2006 book *A New Philosophy of Society*. DeLanda is a realist philosopher like I am, and he begins his book by asking what the reality of society is beyond humans. In one sense this is impossible, of course, since human society is made of human beings as its *ingredients*. But DeLanda is obviously not asking what human society would be like if all humans were extinct. He is simply asking what that society is like in itself, beyond any particular human conception of it. He is complaining about the distorting influence of human *observers* of society, not demanding that all human ingredients be removed.

A serious form of this conflation occurs in art criticism, in Michael Fried's famous early dismissal of the 'literalism' and 'theatricality' of minimalist art. I am with Fried and Clement Greenberg when they insist on the autonomy of the artwork, that it cannot be reducible to its social function or its exact position in a gallery or the subjective impressions any individual might have of it. Science demands literal statements about its objects, but for art this would be a fiasco. But it does not follow that the human spectator is not an essential part of the art experience. If all humans were extinct, it would be hard to imagine our artworks existing *qua* artworks. This is an impossible kind of autonomy, just as impossible as human society continuing to exist without humans. I therefore conclude that Fried is right to attack literalism but wrong to attack theatricality. The human actor must always be found in the theatre of art. And the same holds for architecture.

Joseph Bedford: You have mentioned the importance of Heidegger to your work. Heidegger has been quite influential upon the way architects have approached architecture in the past fifty years. Can I ask you about your reading of Heidegger's Fourfold, because this has been central to many of the interpretations of Heidegger's work by architects? And what do you make of the way architects have understood Heidegger's Fourfold and have understood terms like 'gods', 'sky', 'earth' and 'mortals'?

Graham Harman: First, I am against any literal interpretation of these terms; Heidegger does not work with taxonomies in this way. He is not the sort of philosopher who says 'there are four kinds of things in the world, and here they are'. Instead, he works at a certain level of ontological abstraction. Heidegger's Fourfold concerns two kinds of objects and two kinds of qualities – real objects that withdraw from access and sensual objects that are there only in relation to us.

◀ **Lorens Holm:** *The sensual object that is only there in relation to us. This is a form of inter-subjectivity, especially if you accept that something is always missed in the encounter with the real object, and hence left out of the inter-subjective field. It is not clear if the real object shadows the sensual object, as its other half, in the sense that we encounter the sensual object, and the real object is that part of the object that escapes our encounter with it. Or if Harman intends there to be two independent objects, and the real and sensual objects exist independently of each other. In which case, I might encounter the sensual me, and then, a bit later, the real me.*

Graham Harman: And then you also have qualities at both of those levels. The object is distinct from its qualities at both the real and sensual levels. That is where the Fourfold comes from.

Most of my friends in architecture seem hostile to the phenomenological approach. They take it to be a conservative vaunting of individual human experience. That said, I have looked at some of the buildings of Peter Zumthor and find them quite striking. I do not know if they are considered conservative in architectural circles or not, but they are certainly something that we can enjoy experiencing. So I do not want to condemn all phenomenological architecture on that basis. But I do think that there needs to be attention to the depth of reality and not simply to the human perception of it.

Jessica Reynolds: Another major thinker who was prominent in the exchange, due to Lorens Holm's interests, was Lacan. Lorens discussed the idea that architecture can be understood as the 'structuring of space' that keeps us from a consciousness of the un-symbolizable Real that lies below it. This Lacanian interpretation of the real suggests that the depth beneath the surface level of things is a single unified whole that returns in moments of such collapse. Lorens used the World Trade Center towers as an example of such collapse. Can you address the issue of whether depth is a one or a many, and where you stand with respect to Lacan?

Graham Harman: In Lacan there is too much of a sense of the Real as simply being an excess beyond symbolization. It is never clear if this Real is anything more than a negativity immanent in what is already perceived, as we find in Lacan's admirer Badiou, for whom the Real is not something that exists autonomously prior to the count but is only a void inherent in each counted unity.

◄ **Lorens Holm:** *A minor clarification, if I may. My example was the collapse of the Trade Towers, whereby something comprising multiple components becomes an undifferentiated cloud of stuff. The real retreats beyond what is accessible to our senses or our comprehension. It is therefore neither one nor multiple, because both these are conceptual categories placed in a binary opposition, which are imposed by comprehension upon the world. I am not a monist. The real is quite strictly neither one nor not one.*

Graham Harman: This is the idealist side of Lacan, who misses any genuine depth that eludes the subject. But I think we need such a depth for purely philosophical reasons, since you cannot explain change without it. I have a similar problem with Derrida. People sometimes claim that Derrida is a realist insofar as he does not want to reduce appearances to their place in any fixed structure, but he really just gives us infinitely many different structures where appearances slip and slide. For Derrida there is nothing hidden behind the appearance of things any more than there is for Lacan or Badiou. Derrida begins by saying wrongly that the great thing about Heidegger is that he realizes that there is no Being aside from its appearances in different historical epochs. That's not Heidegger; that's Derrida! For Heidegger there is indeed a Being apart from its various historical epochs. That Derrida says otherwise proves his direct complicity with idealism, derived from his ultimately Husserlian starting point.

Lorens made a great contribution to the discussion, but I still cannot agree with his Lacanianism. I do not think you can make a philosophy work when you treat the Real as doing nothing more than exceeding our grasp of it. If you only do this, you are left unable to describe the world itself in convincing terms.

Joseph Bedford: Perhaps another way to broach a similar question about whether depth withdraws to a *multiplicity* or to a *oneness* is to ask you about Heidegger's idea that our practical involvements are structured, and therefore in some kind of hierarchical sequence. Heidegger writes, in *Being and Time*, of the sequence that connects 'pen, ink, paper, desk blotter, table, lamp, furniture, windows, doors, rooms', to which we could add building, street, block, neighbourhood, city etc. If we view relations in structured

sequences like this, do we end up with the extreme ends of the sequence orienting towards an all encompassing *one*? Heidegger posed this in terms of the 'for-the-sake-of-which' being oriented towards the 'ultimate stand I take on my life', which connects all particular involvements in a whole.

Graham Harman: That is how Heidegger tried to do it, but it does not work. He tells us in *Being and Time* that 'strictly speaking, there is no such thing as "an" equipment', because all tools fit into a holistic system that finally gains their meaning from human Dasein. But let us not forget that Heidegger is not just the philosopher of tools. He is also, and more importantly, the philosopher of *broken* tools.

◀ **Jonathan Hale:** *But – and I think even more importantly – beyond this binary opposition of 'working tool versus broken tool', he is also the philosopher of the in-between state of 'flow' (to borrow a term from Csikszentmihalyi) – that state of bodily knowing essential to the ongoing operation of a tool in the fulfilment of a particular task. This to me seems closer to the kind of partial encounter that you have suggested objects have with each other – which is perhaps also close to what Hubert Dreyfus has called 'coping'.*

Graham Harman: The fact that a hammer can break and disrupt the tool-system proves that it was never reducible to its position in this system in the first place. It is a mystery why Heideggerians continue to miss this.

Jessica Reynolds: You suggested elsewhere, though, that objects can be understood as embedded or nested within one another. Would this not point to something like a hierarchy?

Graham Harman: I do not think the universe exists as a *whole* and do not accept the argument that the tool-analysis is just stage one, so that from there you have to go into a deeper horizonal structure, and from there into a deeper structure, and from there into a still deeper structure, so that each of the levels is disempowered in favour of the ultimate layer. This is not what is really going on in Heidegger's philosophy. I want to focus attention on the concrete beings that he talks about, such as hammers and nails and so forth. In that sense there is a chain, but a chain of real things, not just a chain of analyses as in the usual reading of Heidegger, in which you start with the hammer but are really just trying to get to even deeper horizonal structures. Every layer of the world is equally real for me, and thus there is no ontological hierarchy. There is still a *political* hierarchy, of course: I am not saying that blades of grass should be involved in politics in the same way as humans.

And I also think that entities are infinitely decomposable. There is not a final point of reality without articulation or structure. There has to be an endless chain downwards. But it does not follow that there has to be an endless chain upwards. Objects are formed of relations between smaller objects, so that any time two objects relate, they form a new object. It might be transitory, but it is still a new object. To say that the world goes infinitely upwards would be to say that everything keeps on relating to everything else and it never stops. But that is not the case. There are some objects that are real even though they do not relate to anything at the moment or might never do so, but which might relate to other things in the future.

Joseph Bedford: You seem critical therefore of Heidegger's emphasis on time consciousness and the idea that practical life is oriented towards death. I wonder if your idea that the world does not keep going infinitely upwards is related to your preference for reading the tool-analysis such as to ignore time consciousness, death and historicity?

Graham Harman: Death will always be of interest to humans for obvious reasons. That does not necessarily give it a special *ontological* significance. The attitude towards death is also culturally conditioned. Lawrence of Arabia remarked in his book that the Arabs are 'the least morbid of peoples', meaning that life for them is viewed as a gift, and when it is gone, it is gone. Dwelling morbidly on death may be a cultural peculiarity of the West. Being-towards-death is one of the idealist aspects of Heidegger: the notion that in anxiety you can rise above the world as a whole and ask why there is something rather than nothing. When everything seems meaningless, you see the whole universe projected against the background of nothingness. But I do not think Heideggerian *Angst* is possible. You simply never get to a position from where you transcend everything. When you step beyond something, you step into something else. Death has a deep practical and biographical significance for all of us, and there is still a lot that philosophy can say about it, but death is not the centre of thinking.

Jessica Reynolds: To shift the conversation to architecture, can you address the coincidence between the term 'object-oriented' as you use it and the way that architects have encountered the term through object-oriented programming?

Joseph Bedford: Yes, people like Patrick Schumacher and Alisa Andrasek in the United Kingdom and David Ruy and others in the United States have been quick to take an interest in your work. Most of these people come from computational backgrounds and some explicitly have an interest in object-oriented programming.

Graham Harman: I simply stole the term from object-oriented programming because I liked the sound of it, and the metaphor quickly caught on. But I only know the barest facts about object-oriented programming, though what I know of it makes it seem like there are some analogies. Concepts such as 'encapsulation' and the idea that the elements of the program are split off from the program as a systematic whole seem clearly related to my thinking. It may be the case that object-oriented programming feeds into 'capitalist rent' by allowing software companies to close off the internal aspects of the programming, as Alexander Galloway rather irrelevantly claimed in his well-known attack article 'The Poverty of Philosophy'. But object-oriented philosophy is simply an attempt to talk about the way things are cut off from their environment in some fashion, and in some ways even from their own components. I have always seen my work as being on the opposite side of the fence from computational architecture. It seems to me that people doing computation in architecture are more interested in Quentin Meillassoux than in my own work. My impression has been that people doing computation sometimes misread object-oriented ontology as a formalistic project, one that can treat things in terms of exact mathematical models or even eternal platonic forms. But that is closer to Meillassoux and Badiou.

Joseph Bedford: The interpretation of your work in this formalist way seems to limit it to only the level of representational objects created in language such as symbol systems and code, whereas your philosophy has a lot more to say about a whole different range of kinds of objects from symbolic objects, to institutional objects, to concrete material objects to ephemeral objects like happenings and events. Your philosophy seems more expansive than its current reception within architecture by those who have interpreted it from the vantage of computational work so far.

Graham Harman: This is true. The whole point of object-oriented philosophy is to allow every level to be equally real, not to choose some privileged computational level such as cellular automata, as in Stephen Wolfram's conception. Wolfram has us follow simple rules, and starts with very simple shapes, and has us end up with complexity. But that is not what object-oriented philosophy is about. Instead, it is about trying to say that every level has an autonomous reality that is partly cut off from the conditions that gave rise to it. Object-oriented philosophy is not interested in saying that complexity can be accounted for in terms of simple underlying factors, because it does not care about a supposed 'ultimate' layer more than about any other layer.

Jessica Reynolds: Adam Sharr's discussion of what he called the 'Circus Architectura' also relates to this idea that your philosophy could suggest another kind of conception of architectural symbols and images other than currently used by architectural computationalists. Adam used Christian Kerez's *House with One Wall* as an example and spoke at moments about the various architectural images, precedents and references Kerez would have drawn upon from his imagination. Adam discussed how the fictions that architects use have a semi-autonomy from one another and from the architect. Can we ask you whether you think your philosophy could lead on to a theory of signification in which the 'sign' has a certain object-quality, being a relatively autonomous unit within a dynamic economy, over which the subject has no mastery. If we think of a sign as an object, we could apply your philosophy and talk about how the subject approaches the sign obliquely and by allusion.

Graham Harman: Theories of signification in philosophy have often tended towards anti-realism. This is a problem. Such theories have privileged the sign over the signified and claimed that there is no transcendental signified, whereas for me, there is a real signified. There is something there that cannot be known directly but has to be approached obliquely or allusively. I am a full-blown realist, and I do not think philosophy can work if you do not include the real and insist that it is plural as well.

Jessica Reynolds: You have written of your interest in the category of aesthetics as philosophically important, and you have often spoken about poetic allusion, metaphor and humour. Would you be interested in an architecture concerned with such things as metaphor and humour, as forms of allure?

Graham Harman: Aristotle in the *Poetics* says that tragedy is about people better than we are and comedy is about people worse than we are, which is a very concise formulation. It is worth asking: 'In what sense are people in comedy *worse* than we are?' Some comic characters are wealthier than we are, more beautiful, more intelligent

or more successful, and yet they can still be comical. So how are they still worse than we are despite these many superiorities? It seems that they are worse only insofar as they take things seriously that we ourselves do not take seriously. In some sense the comic agent is someone who is sincerely absorbed in things that we ourselves know to be trivial, petty or stupid. I am not sure what the relationship between architecture and humour would be, or even the relationship between architecture and allure, but I hope it will be one of the pleasures of my oldage to see (or even inhabit) buildings that reflect these notions.

Joseph Bedford: You have already said something quite inspiring to architects. You have spoken about how architecture contributes something to philosophy because it is a form of knowledge that one could never fully *know*, nor fully *not know*. This suggests architecture, as a way of thinking, is suited to your philosophy, and philosophy in general, because it is already a kind of practical knowledge.

Graham Harman: I have even written an article entitled 'Aesthetics as First Philosophy', a claim that is intended quite seriously. Aesthetics is about the tension between objects and qualities, as opposed to analytic and scientistic philosophy, where *knowledge* stands at the centre. But it is not possible to place knowledge at the centre, for all the reasons Socrates already gave. According to Meno's paradox it is pointless to look for anything, because if you already have it, there is clearly no need to look for it, and if you do not already have it, then you will not recognize it when you find it. Socrates' classic answer to such sophistry is that Meno's paradox presents a false alternative. We are actually situated in between those two extremes. We neither have nor do not have things. We are neither gods nor animals. We do not have wisdom, yet we also do not *not* have wisdom. What we have is the *love* of wisdom, which of course is what *philosophia* means.

◀ **Lorens Holm:** *Space possesses a realness to which we are always drawn, but which will always escape us. We are drawn to space out of love the way we are drawn to wisdom (thanks Graham), love of what is real, real love. With the loss of love, this trope becomes repetition. Love becomes repetition; and repetition is the hallmark of the death drive, the drive towards death.*

Graham Harman: This has been lost in all those philosophies that take scientific knowledge or mathematical formalization to stand at the centre of our profession. For the past 400 years philosophy has slavishly tried to emulate either deductive geometry or the natural sciences. But why should philosophy not take the arts and architecture as its model instead?

One of the good things about the arts and architecture is that they are under significant pressure not to reduce anything. An artist is not going to say that this painting here is nothing more than the canvas and pigment that were used to compose it. An artist is not going to say that this painting is 40 per cent pigment, 52 per cent stretched canvas and 8 per cent ambient light. You might do that as a deliberately Dadaist exercise, but it cannot be the normal case. An artist is also not going to say that the artwork is nothing more than its interpretation by each and every viewer; that would just be facile relativism. There is a reality to the artwork. Some interpretations

are better than others. You cannot replace a gallery full of artworks with a set of typed prose descriptions of them, unless, again, you are doing that for some deliberately contrived Dadaist reason. There is something about the works themselves that is irreplaceable. The same holds true for buildings or for anything that is designed. You are not going to reduce an architectural work to its materials. You are also not going to reduce it to its current relations with the environment (which could change) or to any particular client demands, which are going to be irrelevant when the client dies and someone else inherits the building. There is a reality you are creating that lies in between those two extremes. In that sense architecture is already very close to what philosophy does.

Joseph Bedford: Let us turn for a moment to the topic of 'autonomy', which has been a central topic in architectural discourse in recent history, with figures like Aldo Rossi, who advocated for a philosophical position in which there was some kind of withdrawal of the actual building from its current context. Even though Rossi was interested in historical archetypes and deep memory, he was a neo-rationalist that, at another level, opposed the contextualists of his time.

Jessica Reynolds: Yes, and there has since been a reaction to the idea of autonomy, explored through various ways of decomposing the identity of the building as a discrete object. Diller and Scofidio's 'Blur Building' literally tries to do this. There have also been several projects that try to dissolve the form of the building into its ground, or its surrounding landscape, such as Eisenman's 'City of Culture'. Given this recent history of autonomy and reactions to it, how would you differentiate your provocative suggestion that architects should think about an architecture of 'non-communication, surprise, and retreat'?

Graham Harman: I recently read the transcript of a discussion between Patrick Schumacher and Peter Eisenman. Schumacher told Eisenman something like: 'one of the things I don't like about your work is that you try to do it all with syntax. You shouldn't try to do it all with syntax, since there is also semantics'. Meaning, of course, that it cannot just be a matter of interesting shapes. There has to be some social relatedness to architecture. But I would disagree with *both* sides of this debate, for reasons I have already published in the context of literary theory. On one side (in architecture, literature and elsewhere) you have people who want to take away the autonomy of the work, who want to insist that it's grounded in a social context and a material history. But of course you cannot just say that Shakespeare was a product of the social energies of the Elizabethan era. There were a lot of writers in England at the time and only one of them was Shakespeare. You can also move Shakespeare to another country or culture and he is still a great success. So it is not merely a product of context. In a sense, any great work frees itself from its context. It becomes a kind of escape pod from its environment that can travel elsewhere. That is what distinguishes great literature from what they call 'period pieces', which are simply reflections of their time and place.

This might seem to push me towards formalism and towards someone like Greenberg, who holds that an artwork is completely independent of its context and

that it is purely formal. But there are two problems with this. One is that there is a tendency to conflate the formal with the outward look of a thing. That is not right. There is a purely formal depth to the thing that is deeper than the way it looks. The other problem is that formalists, in focusing entirely on the interior of a work, tend to view that interior in purely holistic terms. The holism remains even if you say that the work is cut off from its social and political surroundings. There is now an *internal* holism where the autonomy of all the individual elements is lost, rather than the external sort of holism favoured by contextualists and relationalists. You find the internal sort of holism in the literary theory of American New Critics such as Cleanth Brooks, who says that each element of the poem is intimately interwoven with every other element of the poem. But this is simply false. Sometimes poets write different versions of a poem. Even philologists often cannot establish the exact true text of the poem. Despite the famously perfectionistic toil of many poets, you do not really change the poem every time you change the position of a single comma. In literature I defend a method of variation, changing the exact features of literary works: expanding them, truncating them, adding or subtracting characters, just to see how far you can push a work before it becomes a different work. That is what I would recommend to get away from holism.

Joseph Bedford: A lot of your work is invested in defining objects or rather opening up the scope of what objects can be. But after you have done this work, might there be the potential to begin to discuss how some objects are stronger than other objects, more durable, have certain structural qualities in their objecthood etc.? Might you even begin to offer criteria for judging kinds of objects?

Graham Harman: Ultimately, this must be done. This is the inherent challenge faced by all ontology, because ontology always starts out very abstractly, trying to talk about features pertaining to everything. But then at a certain point it does not do you any good, because you end up saying the same thing about everything. This is the problem that Latour is trying to address in his new book, *An Enquiry into Modes of Existence*. Latour's early work turns everything into actors in a network, and it does not matter what you are talking about: cartoon characters, political actors or scientific entities. But then he admits at the beginning of his new book that in actor-network theory, he ended up saying the same thing about everything. In the new book he tries to talk about fourteen different modes of reality. There are challenges associated with this. One is that you have to come up with adequate criteria for splitting the world into these fourteen regions and not others. And then you have to address how the different regions communicate, if at all.

Jessica Reynolds: We would like to turn at the end now to a more personal note and ask you what buildings you think might relate to your own philosophy, or what buildings interest you?

Graham Harman: One building I saw recently that made a favourable impression was the Oslo Opera house – and I say this on the basis of a naïve gut reaction, not knowing what the critical reception of this building has been like. There are a couple of things about it that I especially liked.

First, it is apparently meant to look like an iceberg. I realize that there is something of an ideology in recent years of trying to create buildings that look like they are not autonomous and like they flow naturally from the environment, and also realize that this ideology is ultimately destined to be the enemy of any object-oriented approach to architecture. Nonetheless, there was a beautiful obtrusiveness to the Oslo structure, with its large surfaces of white and glass.

Second, I liked that one can go up the ramp on the side of the opera house and end up on the back. That space at the back is somewhat hidden and secret but not hard to get to, and local people seem to hang out there and simply pass the time. So the building had a number of nice surprises in store, and I stayed there for quite a long time, just enjoying the place.

Jessica Reynolds: As you are speaking about what we might call stylistic concerns in regard to a building, it would be interesting, as a final question, to ask you about what you think about the style of your own writing, or the question of style, in regard to writing?

Graham Harman: One of the problems with analytic philosophy, which dominates Anglophone universities around the world, is that it tends to overemphasize *clear* writing, as though lack of clarity were the only place where bad writing goes wrong. That is not the case. I think we need *vivid* writing more than we need clear writing. We need writing that is clear when it needs to be and unclear when it needs to be, writing that is suggestive when it needs to be rather than direct.

◀ **Jonathan Hale:** *If you do not already know it, can I recommend the book* In Praise of Shadows *by Jun'ichiro Tanizaki.*

Graham Harman: You need a bit of literary flair in philosophical writing in order to do justice to reality, and not just to entertain the easily distracted reader. Saying that everything in philosophy should be clear is like saying that there should be no *chiaroscuro* in painting: 'Damn Leonardo, what's with this shadow nonsense! Just put Mona Lisa in full direct sunlight, for Pete's sake!' That would be obvious nonsense. Shadow has its uses. This is why analytic philosophy has produced no great writers despite having produced armies of clear ones. To write well, you really need to be able to point to things that are not entirely accessible through providing an accurate list of their properties. You also need to be able to suggest and hint. The important thing about style is how you make things come to life. For example, the thing that is really great about novels is the characters that one finds in them. It is not the things the novelist explicitly tells us about the characters, but the fact that in the right hands, these characters feel real and come to life. In the best-case scenario, you feel like they could walk out of the novel and into a different novel or into the real world. In that sense, an object is like a character in a novel: something that is really there, beyond anything we might say about it.

Joseph Bedford: It would be interesting then to take what you have just said about style in your own writing and apply it to architecture. As you were speaking about writing I

was just imagining what you were saying as if you were talking about buildings too, and I think it would make the beginnings of a good approach to architecture as well. There has to be some chiaroscuro in architecture; you have to know how to use shadows as well as clarity, how to create elements with their own depth like characters in a novel and how to hint at things without making the whole thing transparent. Architecture, similar to writing, would be an art of clarity and shadow. Well, thanks very much for this interview.

Jessica Reynolds: Thank you so much.

Graham Harman: Thank you. I learnt a great deal from this discussion and hope it continues, and hope as well that you continue to have interesting Architecture Exchange events for years to come.

3

Adam Sharr

3.1 Adam Sharr, The *Circus*, the Canon and a House with One Wall

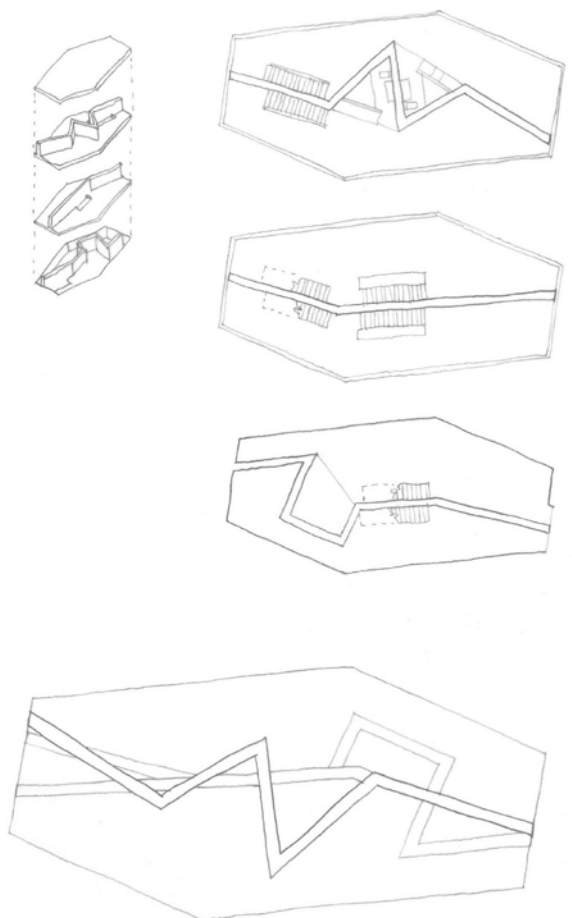

Figure 1 Drawings of Christian Kerez's House with One Wall. Drawn by Adam Sharr.

Introduction

Graham Harman's book *Circus Philosophicus* – billed in the cover blurb as 'Platonic myth meets American Noir' – provides the most vivid depictions of his object-oriented ontology. It is also Harman's most architectural book. Most obviously because it focuses on six made artefacts – a Ferris wheel, a bridge, tiny calliopes, an offshore drilling rig, a haunted boat and a flag with a sleeping zebra – to illustrate the transactions of the radically object-centred world that he has proposed. But the book also seems architectural because its approach resonates with how many architects think. It offers a series of productive fables that allow us to imagine our surroundings differently. This is exactly the kind of storytelling – the production of imaginative worlds – to which architects devote their work lives.[1] As architects, we find ourselves in a construction industry which favours the predictable quantitative metrics offered by other consultants: the cost certainty seemingly promised by quantity surveyors, for example, and the consistent lux levels calculated by electrical engineers.[2] We, on the other hand, can only persuade through our stories. We can't promise that our designs will make a house 72 per cent better or make an office 27 per cent more productive, but we *can* tell a convincing story about how a building's qualities, its organization, its outlook and its interiors can yield atmospheres for the client which will feel more dignified, more lively or more efficient. It is through the powerful evocation of imaginative worlds that we're able to encourage clients to invest in our designs.[3] And these fictions – which can seem more real than competing fictions conjured through Excel spreadsheets and engineering calculations – remain architects' stock-in-trade.

The House with One Wall, the object at the centre of this chapter, was designed by Venezuelan-born Swiss architect Christian Kerez for a site in Zürich in 2007.[4] I know the house well, although I've never seen it with my own eyes. The time I've spent there was in the pages of the architecture magazine *El Croquis*, where I've pored over its plans, sections and photographs, admiring the creativity and intellectual integrity of the architecture.[5] My claim here is that the fabric and the disposition of the House with One Wall can be examined in conjunction with Harman's philosophy. While it's possible that the House with One Wall may be visible – imaginatively – over the fence of the *Circus Philosophicus*, it sits outside that fairground's perimeter. I will argue here that the house exists instead primarily as part of another global theme park which I will call the *Circus Architectura*: a fairground that collects together from all seven continents the disparate artefacts of the architectural canon – some built, some unbuilt, some demolished – as they are known to architects from books, journals, zines and blogs. I will argue that the House with One Wall, read in conjunction with Harman's philosophy, exemplifies the operations of the *Circus Architectura*: the group of imaginary objects which shape the field of architecture as most architects understand it: a canonical universe which exists in architects' minds and whose presence is reasserted whenever those architects design.

I will begin with the *Circus Philosophicus*, with a brief review of Harman's fairground of objects, which is overshadowed by the revolutions of a giant Ferris wheel. I will then address the House with One Wall, examining its parallels with Harman's philosophical ideas. And I will conclude with a view of the *Circus Architectura*, of which the House

with One Wall is a part. Inspired by Harman's work, I propose another view of the architectural canon as a dynamic, shifting force-field of objects which is decisive in the imagination of new architectures. What follows thus takes an autoethnographic approach to the House with One Wall in relation to Harman's object-oriented ontology, engaging in self-reflection through writing to connect philosophical, architectural and personal experiences to wider experiences and understandings,[6] and engaging in the close reading of architectural fabric.[7]

A Ticket to the *Circus Philosophicus*

Harman's philosophical circus presents a picture of the world. His philosophy proposes a 'total cosmic infrastructure',[8] a cosmos comprised of objects which are always immediately present and whose immediacy goes far beyond their usefulness to us. Harman has extended the account of tools from Martin Heidegger's *magnum opus*, *Being and Time* – where Heidegger argued that tools demonstrate to us the fundamental and constantly surprising presence of our own being – to claim that objects are not just ready for us to use, or present to our use, but that tool-being fundamentally characterizes the things of the world and our life in it.[9] All is present reality, Harman argues – constituted by 'objects', in the broadest definition of that word – and there is no background truth. There is no need, here, for descriptive metaphors: objects, as tools, are always themselves, first and foremost. It does not help much to think of things being 'like' other things, or 'representative' of other things, in Harman's universe. 'Each of the objects', he has argued, is radically itself. It 'rumbles in its depths, unleashing powerful forces in its ceaseless duels and friendships with the others'.[10]

Harman's philosophical world finds mythical reality in the 'gigantic Ferris wheel of many miles in diameter' that he asks us to picture in *Circus Philosophicus*:

> The wheel would be lodged in a massive trench in the earth, with the hub at ground level. At all times the wheel would be half above ground and half beneath the surface. Over the course of twelve or fourteen hours, the wheel would make a complete circuit high in the air and deep beneath the soil. It would carry thousands of separate cars, each of them loaded with various objects. Some would contain printed documents, or zinc and molybdenum Buddhas. Others would be loaded with colourful flags, electric generators, reptiles and birds, miniature explosive charges, bottles of wine, tap dancers, brass bands playing military music and other entities circling day and night.[11]

A series of underground chambers are also part of the wheel's infrastructure, located either side of its subterranean path. These rooms extend the menagerie of objects in the wheel's orbit:

> For instance, one of the rooms would be occupied by the members of a secret society … They have perhaps assembled for a celebration, but with strict orders to wait calmly … until the special flag of their group passes by … There are poets writing verse in some of the rooms, their moods affected deeply by all of the

> objects, but especially by the various musical groups that circle past … Some of the rooms contain rabid dogs that bark at all passing objects, but especially at the cats and foxes that sometimes circle by, pushing the dogs toward a state of frenzy … Let's suppose as well that one of these underground chambers contains the main electric generator for the town above. From time to time a huge electromagnetic coil circles past this room, disrupting the town's energy supply for several minutes.[12]

The wheel, in conjunction with the chambers surrounding it, becomes an agent of radical juxtaposition, counterposing objects in a shifting and almost endless series of permutations. Boy meets girl, meets rabid dog, meets masonic ritual, meets generator, meets cockateels, meets corpses, meets knitting circle, meets anything and everything else in a *melange* so huge and unfathomable that any sequence of events remains effectively impossible to anticipate. But this is not just a benign conspiracy of coincidences. Harman again:

> With the exception of the eternal wheel itself, each of the entities in this myth faces a certain degree of danger. After all, some of the cars contain explosive devices; no one knows when or how powerfully they might detonate. If these explode while transiting underground, the chambers closest to them will be annihilated without hope of survivors … Yet the danger also works in reverse, with some of the underground rooms posing a threat to the objects riding the wheel. For instance, a number of the subterranean rooms might be equipped with dormant furnaces … . At sporadic intervals and random temperatures, jets of flame suddenly erupt from the room toward the car that is passing by, spraying fire on whatever entity it contains.[13]

The giant Ferris wheel, Harman implies, is a picture of the world which we inhabit, being ourselves human objects.[14] It does not just conjure up a cycle of strange juxtapositions; it frequently contrives situations where objects activate or neutralize one another, where objects acting in concert conspire to reshape themselves, or each other, according to the visible or invisible force-fields that they enact together. The panoply of objects loaded onto the wheel has, together, something like a basic sentience. The wheel is a microcosm – or, maybe more accurately, a macrocosm – of the ever-shifting and endlessly multiple choreography of objects whose world we are always and inevitably part of.

To offer an architectural parallel, designers will be familiar with the phenomenon of bimetallic (or galvanic) action, where certain metals should not be placed together because, when they join, they electrolyse each other and speed up each other's rate of decay. Locating zinc next to stainless steel, for example, causes both metals to destroy themselves much faster than they would corrode alone. These juxtapositions, while they are conventionally to be avoided, also offer an opportunity if an architect – according to some perverse logic – wants to design a building that decays itself. In Harman's philosophical world, the galvanic series, the table of corroding metals, is infinitely expanded – beyond metals to incorporate objects of all materials including plastic, concrete and flesh, encompassing everything at any scale, charting endless benign or malevolent interactions.

Harman's wheel of fortune is, to some extent, aligned with philosophers like Alfred North Whitehead and Bruno Latour, who 'focus on the pervasive interrelations of things and discount the existence of entities outside their effects'.[15] It also, he argues, illustrates the limits of their thinking: that no object – whatever its destructive or benign power – can be reduced to solely the sum of its effects. Actuality, Harman argued, is always more than just potential. An object cannot be exhausted by the various events in which it is implicated. To this extent, any object must always remain a mystery.[16] 'What needs to be discovered', wrote Harman, 'is an actuality different from all events, but one that belongs to plutonium, armies, flocks of geese, and Hindu epics no less than atoms'.

This picture of an object-oriented ontology inevitably raises the question of what constitutes an object. In *Circus Philosophicus*, Harman wrote about a calliope, a spectacular steam-powered instrument playing 'sweet-and-sour melodies … slightly out of key', which he found himself sat next to on a Chennai beach.[17] This 'invincible machine', he argued, is encountered not as a sum of individual qualities comprising an underlying thing but, rather, is found as a whole 'so that the eerie and underlying style of the object imbues all of the isolated songs and notes that emanate from it'.[18] An object's wholeness comes about neither by comprising just the sum of its smaller parts nor by being comprised of a unity of pieces. An object, he argued, is always, in the instant, a thing unto itself:

> Just as the calliope was independent of the specific notes it played at each moment, and separate as well from its shifting effects on me and the … other listeners on the beach, so too it achieved an autonomous life over and above its component pieces. Never could the calliope be dismissed as a mere aggregate, since most of its pieces could be removed, replaced, shuffled, or altered without the calliope ceasing to be what it was … The calliope was no less unified than the simplest hydrogen atom, yet this fact did not entail an absence of substance and aggregate.[19]

To relate this to another architectural example, the object – as Harman imagines it – might be akin to an ancient Japanese Buddhist temple. The temple has remained ostensibly the same object for generations, its pebble landscapes having been combed meticulously in the same pattern every day for hundreds of years, its timbers having been carefully replaced when their patina of age eventually became decay. Yet, like the fabled broom that has had eight new heads and four new handles, no part of the temple remains from the time of its first construction. Despite these multiple constructions and reconstructions, the temple is always still the temple. This ontology is not about construction in language but instead about a radical self-construction of objects. The wholeness of the temple as an object, and its power in a world full of objects, comes from always being at once complete and incomplete, forever being immediate while also comprising pasts and futures, always being both itself, made up of parts and a constituent part.

According to Harman, objects are not only graspable things like, say, a hammer or a jug.[20] Objects can be real even if they aren't seen to exist. In the instant, a mythical creature like a mermaid or a unicorn can be at least as tangible as a rabid dog or a

generator. Indeed, an event can also be an object. An evening party for example, like that held by the secret society who had been waiting underground for the Ferris wheel to pass, is every bit as powerful an entity, and can exert itself just as tangibly, as an exploding stick of gelignite or a giant magnetic coil. Objectness, in the wheel-world, is wildly diverse. That said, its ontology is not completely flat with every object equal to every other object. Some objects are sometimes assertive and emergent, while others are latent. As Harman puts it, they shift 'between states of sleep and wakefulness'.[21]

In Harman's universe, humans are objects too. Likewise, so are their encounters. And so too are the cultures that gather around objects. But these human encounters and cultures, like human objects themselves, have no inherent right to special status in the endless, shifting matrix of object relations. Resonating with current discussions about sustainability, the wheel-world eschews anthropocentrism,[22] refusing to put humans at its centre. While architects, who deal in the design of things, might be comfortable with a world where objecthood is paramount, this is where Harman's cosmos seems most challenging to many academics.[23] Where, in this picture, is human perception, cognition and psychology? Where are the long histories of deep cultures? Where are the habits and practices presumed to emerge from them? Indeed, where are agency and political commitment? Is it that, in Harman's universe, humans are merely passive objects caught up in the force-fields among objects, of which they are a part?

At the end of *Circus Philosophicus*, Harman conjured a mental picture of a zebra asleep by a fire – a reverie inspired by a flag with a sleeping zebra device seen from the window of Bruno Latour's flat in Paris. Everything 'perceives insofar as it *relates*', Harman wrote:

> When the zebra perceives the abandoned campfire …, we have seen that this object is merely phenomenal or sensual. It would be easy to regard this experience, and all others, as occurring on the inside of the mind: that of the zebra. But recall that the zebra's mind is just one ingredient in this situation, and the campfire another … The encounter between zebra and fire is not two things but also one: the experience as a whole. And when something is one, it instantly acquires the status of 'object' … The world is perhaps filled with countless entities that exist without any current impact, and which might never have any. While the fashionable doctrine today is that things are real only because they have effects, in fact the reverse is true: they can have effects only because they are real.[24]

So, it is in the self-constitution of an object – as a rabid dog, or a bomb, or a party, or a Buddhist temple – that it becomes for Harman a 'one', an entity, an object. And this constitution lends it power in the eternal revolutions of the wheel-world. Habits, practices, perceptions – human or otherwise – become real because of their effects, he would argue. This reality, which transpires from something's power to deflect the force-fields of inter-object relations, gives it a unity and therefore equips it with object status.

But an object is always comprised of other objects and is involved in comprising other objects. Its unity is thus multiple. In another book, *The Quadruple Object*, Harman develops this further by arguing – following Heidegger – that any object's relations

with its surroundings are always fourfold.[25] Rather than Heidegger's quadrophonics of earth, sky, divinities and mortals, Harman prefers tensions of time and space, and essence and *eidos*. All objects negotiate these pairings, he claimed, in their multiple oneness. And it is through their multiple oneness, always sleeping in any object, that an object acquires its power. Concluding *Circus Philosophicus*, he wrote:

> [B]y being withdrawn from the world as sleeping objects, we are *unfree* rather than free; being just what we are, we are incapable of anything else. Yet in a sense we are always *inside* the world through the fact that we are made of pieces – and only *therefore* are we free, with our components doing the work of liberty on our behalf. For there is an excess in our pieces beyond what is needed to create us, and this excess allows new and unexpected things to happen … And so it is with all objects. We are awakened neither by our own powers nor by the world outside, but by the swarming landscape *within*: the pieces we never exhaust or master despite exceeding them. The dormant zebra, like all other objects, awaits a hailstorm from below.[26]

Objects are comprised of multiple latent potentials which may or may not ever be activated. It is this excess, Harman claims, which constitutes an object in its agency, that very agency constituting another kind of object by virtue of its real effects.

A Key to the House with One Wall

My next step here is through Harman's object-induced hailstorm, from the *Circus Philosophicus* to the House with One Wall, from the metaphysics of the wheel to the almost unbelievable physics of a singular architectural structure, whose object quality seems especially intense.

For architects who admire such things, the architectural organization of the House with One Wall – its diagram – has a remarkable intellectual clarity. The building appears simple from the outside, but it remains a complex object of contemplation. To start with, the house is in fact two houses. They aren't placed side by side in a straightforward, semi-detached fashion, nor are they placed one above the other as maisonettes. Instead, the two dwellings interlock vertically, overlapping between floors but always separated either side of the one – eponymous – wall. This steel-reinforced concrete wall offsets differently at each level, making jagged pockets of space. Its configuration establishes the interlocking volumes of the two houses and, while doing so, provides a striking demonstration of structural acrobatics worthy of an agile circus performer. Notably, the house has no perimeter columns or additional structural walls. And the perimeter glazing is a non-structural curtain wall. The concrete floor slabs are therefore wholly cantilevered from the one jagged central wall. The house's structural stability therefore comes only from the floor slabs working in conjunction with the offsetting cranks in the (one) wall to balance out the forces at work. The house operates right at the edge of structural possibility, its barely credible physics making its continued survival remarkable. Its refined structural integrity gives it a powerful integrity as an object. It equips the architecture with an inward logic all of its own, a system of balances which is self-sustaining and largely self-referential. The house has

a formidable integrity, a powerful resolution of multiple forces from which it derives a heightened object quality.

In this respect, I claim that the House with One Wall is a Harmanian object *par excellence*. The one wall after which the building is named is not so much a device or a brand but, rather, the object whose excessive oneness makes possible the house as a whole. If the house has a heightened objectness, then the singular object of the wall makes that objectness both possible and particularly evident. The one wall is both an enduring structure and a system of balances poised in the moment. It is at once a thing-unto-itself, a thing made from separate constituents (the cement, sand and aggregate of the concrete, plus steel reinforcement), and a constituent part of a bigger thing. Without its constituents, it would not be capable of doing what it does. And without the wall's singular integrity, resolving multiple structural loads, the house as a whole could not stand. It is excessive, not least in its reduction of conventional four-square load-bearing wall construction towards a more daring – and considerably more expensive – structural logic. But its excess relies, simultaneously, on a unity which derives from its own autonomous integrity. Its structural force-fields align the house with the wheel-world of Harman's metaphysics.

The distinctive structure of the House with One Wall is such that it almost seems possible to hear and feel the forces at work. It is easy to imagine, in a strong wind, the building shifting its weight on its footings almost imperceptibly, slightly compressing the concrete in one floor slab and subtly tensioning the steel reinforcement bars in parts of the wall. It is also easy to imagine almost seeing the deflections at work when a heavy object (a molybdenum Buddha, for example) is placed towards the outer edge of one of the floors, seeing the other floors and the wall twisting to compensate. This echoes the architect Adam Caruso's description of how he conceives of architectural details and how he imagines different materials – which expand and contract differently, react to rain and snow differently, weather differently – while pondering their potential assembly. He said, in an interview with myself and one of my co-editors for a book:

> A working drawing to me is incredibly three dimensional. Through plan and section I can imagine each assembly and the way the different materials are leaning on each other or groaning against each other … When you think about materials that way, all materials become equally interesting. Steel and aluminium are so different, and sometimes we use them together. People say you shouldn't, but it's not a problem. You do it because one is bluer, one is warmer and one is softer.[27]

The material consciousness that Caruso evokes here – as an architect who, in the spirit of Harman, seems willing to wager on the galvanic series, and let the material effects of steel and aluminium loose on one another – is also at work in the House with One Wall. The raw materiality of the house is evident. Importantly, this raw materiality is intellectual as well as visual. Its groaning and shifting physicality is palpable, inherent to its *parti* diagram and vital to its constitution. And this raw materiality reinforces the house's heightened objecthood.[28]

It is, perhaps, no coincidence that the one wall, and the house it supports, is made primarily of concrete. The glass curtain – although it lends the building its

external appearance and keeps the weather out – is subsidiary, both structurally and conceptually. Concrete is a strange material, simultaneously solid and elusive, as Adrian Forty has noted:

> From many of the usual category distinctions through which we make sense of our lives – liquid/solid, smooth/rough, natural/artificial, ancient/modern, base/spirit – concrete manages to escape, slipping back and forth between categories … To say that concrete has a tendency to 'double', to be two opposite things at once, is not a particularly original observation. Many other commentators on concrete have noticed the same thing, though they have often been at a loss with what to do with the insight.[29]

A liquid which becomes solid, concrete is usually given its shape by the formwork into which it is poured, regularly displaying the impress of its shuttering material. Yet it also has its own material properties which determine how it flows, sets and how it acts when dry. Seemingly self-reliant, it is only really liberated in association with other materials: aggregate and, especially, steel which – as hidden reinforcement – greatly extends its structural capacities. Concrete's feel changes hugely, and often unpredictably, when it is diamond-sawn, bush-hammered, pigmented or shuttered in timber, fabric or stainless steel. So concrete is not just given form by architects and builders; it is largely self-determining – sometimes on its own, sometimes in association with other materials – in its surface characteristics and its depths. These strange self-activating material alchemies, this multiplicity, contribute to the heightened object quality of the House with One Wall.

But the material dimensions of concrete are only one side of its character and are only one constituent of its decisive role in the house. Forty again:

> In so far as there are any accepted principles for concrete, they have generally been assumed to belong to its technical properties, and indeed the bulk of what has been written about concrete has come from engineers and chemists … More interesting … is the description by Sir Thomas More in his *Utopia*, first published in 1516, of the houses of the Utopians … Not only does More's description mark the beginning of a long-standing association between concrete and utopian movements of all kinds, but it makes clear that concrete has a metaphysics as well as a physics, an existence in the mind parallel to its existence in the world.[30]

So, concrete has long-held associations with utopias of different kinds – from the ideal geometries of the Pantheon to the ideal cities of the modernists.[31] A latent utopianism is part of its mix, it might be argued; a suggestion that offers a reminder, here, not to make ambitious claims that the House with One Wall straightforwardly represents any kind of Harmanian architecture. But it also reminds us that – like Harman's mythical Ferris wheel, bridge, oil rig and tiny calliopes – architectural objects, particularly where they have a special intellectual intensity, can be at once physical objects and objects of metaphysical insight. The House with One Wall is an object of this sort.[32] It has an objectness familiar to architects through the presentation of architectural objects in

the professional press, but it also has a kind of objectness that chimes with Harman's writing. Its quiddity seems exceptionally concrete, owing, only partially, to its having been made in concrete.

A View of the *Circus Architectura*

The House with One Wall exists in my mind like a unicorn or a mermaid might exist. I have not seen it with my own eyes, although it remains as real to me as anything more present at hand.[33] The creativity and intellectual integrity of the architecture serve to anchor the house in my mind. Its singular structural acrobatics, its *parti* diagram and the powerful constitutive unity of the wall that configures it stand in my architectural imagination alongside numerous other buildings from across the world, across architectural culture and throughout architectural history. As an architect, these are the imaginative and intellectual structures that I design with, alongside various artworks, fictions and remembered images from films. I am familiar with most of these buildings, stories and pictures through monographs, journals, websites and clips. I know them through intellectual intimacy rather than physical adjacency. The House with One Wall is a case in point, known to me through the plans, sections and photographs published in *El Croquis*.

It seems to me that most architects design like this. They construct in their minds whole pleasure parks of imaginative edifices – including galleries, libraries, theatres and cinemas that they stuff with treasures – often pacing their grounds in search of inspiration. These enclosures become real spaces of the mind, labyrinths of wonders assembled for speculative wandering. Like Harman's objects, these fairgrounds exist in the moment. New extensions are built over time while other parts gradually become lost. Some buildings become more prominent and others recede. And, like Harman's objects, the buildings activate or neutralize one another, acting in concert to reshape each other according to the force-fields they enact together. This is no historian's view of architectures situated in their social and material cultures but instead deals in object lessons for design – those objects rumbling in their depths as actualities different from all events.

For example, I sometimes find myself talking with students about Le Corbusier's Carpenter Center at Harvard,[34] sketching its plan and section for them. Its *parti* is famous for the curving ramp that climbs up to a hole cut right through the building, which sails across that hole, and then curves down again the other side. In the fairground of my architectural imagination, the Carpenter Center stands in a neighbourhood near other buildings with holes that the weather snows and hails through, including the Pantheon in Rome and Dublin's Pearse Street Station (which has a façade that trains regularly pop out from). My own Carpenter Center is, however, better than Harvard's. At that one – which disappointed me mildly when I finally visited – the ramp begins and ends in places which appear rather incidental in the city (no one apart from architectural tourists seem to want to go that way across the block), and the main entrance is on the ground floor, away from the ramp. In my Carpenter Center, the ramp is an important route in the city, regularly used as a helpful passage, and the main entrance to the building is off the ramp where it pierces through the block,

located where the architecture seems to signify that it should be. As a designer, my own Carpenter Center is clearly the better one – a more satisfactory fulfilment of the promise of the diagram – and it's the one that I usually tell students about.

Also particularly real in my imaginative pleasure grounds, because recently I finished a co-authored book about it, is Leslie Martin's unbuilt design to replace London's Whitehall: a grand plan, published in 1965, which sought to substitute the nineteenth-century palaces of state in London's historic government district with a ziggurat-section megastructure built in concrete.[35] By no means modest in conception, scope or scale, it would have spanned roads, re-framing the Houses of Parliament and Westminster Abbey. It was imagined by its designers as a symbol of a scientific, purposeful and meritocratic 1960s future, whose other trophies included the moonshots, Concorde and stylish mid-century American cars with absurd tailfins. Martin's Whitehall megastructure is an object of fascination because it seems to stand for a Welfare State Britain, whose architecture is being erased just as its liberal values are being reworked.[36] It is also notable as an architecture produced directly out of a functional diagram, derived from daylight studies and land-use efficiency calculations, where that diagram is ruthlessly pasted in to the site with only passing regard for its topography. In my pleasure grounds, the broad public arcade that Martin proposed for Whitehall, through the megastructure from the Thames to St. James' Park, connects – both physically and intellectually – with the ramp through the Carpenter Center, conceived at a similar time according to similar values. Fortunately, while Martin's Whitehall would have demolished the previous one, both are able to coexist together in the fairground, along with Christopher Wren's seventeenth-century plan for Whitehall, which was equally ambitious and equally unbuilt.

In another corner of the grounds is an altogether different landscape; a park within a park. Named Armilla, it is a curious and striking presence glinting in the sun. I came to it first through Italo Calvino's novel *Invisible Cities*.[37] Long abandoned by its residents, Armilla's buildings have crumbled away to leave only the plumbing – the washbasins, WC pans and bidets, and the pipes that connect them – hanging in mid-air. Armilla is striking not just because of the powerful impression it leaves in the minds of the people who visit it. It is also a powerful depiction of contemporary architecture at a time when 40–50 per cent of construction budgets are regularly spent on building services, when buildings are wired for lighting, power, data, security and audio, and packed with plant to cool, heat and recycle air.[38] The ruins of Armilla show how architecture is increasingly merely a container of pipes, ducts and cables, the servicing of life with its casing stripped away; and how historic buildings are now re-purposed as carriers of cables, accessorised with plastic trunking, suspended ceilings and cable trays. Indeed, in a strange re-folding of the fairground map, the service ruins of the Carpenter Center and Martin's Whitehall also exist as ruins in Armilla. Simultaneously, the twisting tubes of Armilla's truncated limbs exist as a real and present part of those buildings – and all the other buildings in the park.

These three edifices – the Carpenter Center, Martin's Whitehall plan and Armilla, which could be categorized superficially as built, unbuilt and fantasy – stand prominently in a complex mental landscape which I pace regularly, and which feeds my designing imagination. The grounds also incorporate the House with One Wall. Each

building has a heightened object quality. Echoing Harman's wheel-world, they have a special intellectual intensity at particular moments in time. They are simultaneously singular and multiple, past and future, present and real, both themselves and part of something larger. They have surface qualities and depths. They are concrete things, creaking and groaning together in a complex structural system, whose forces are finely balanced.

The same buildings coexist simultaneously in other architects' imaginative pleasure grounds, although they are configured differently there. Just as my House with One Wall oscillates between oneness and multiplicity, balancing complex forces in a subtly shifting structural unity, so another architect's House with One Wall might be primarily a housing typology, or an exemplary curtain wall. Just as my Carpenter Center is a diagram of a building with a hole in it, pierced by a ramp – to be improved by shifting the entrance and reconfiguring the territory around it – so another architect's Carpenter Center might be an assembly of *brises-soleil*, or a harmonious colour palette. None of these Carpenter Centers, or Houses with One Wall, are the same. And none of them are any more or less concrete than the versions of them published in the magazines or the ones that stand in a Harvard street or a Zürich suburb.

Indeed, these buildings which exist in architects' imaginations may prove more powerful than the ones in Massachusetts and Switzerland. Their reality derives from their effects. They are detonating generators on the Ferris wheel of design. Their parts are waiting to explode into as-yet unimagined architectures, although their consequences are too uncertain to predict. As real imaginaries,[39] tangible fictions, they are ready to exert their power, generating unexpected force-fields between each other and with other objects in the world.

Thinking the canonical objects of architecture in the light of Harman's wheel-world – picturing them as constituent parts of the charged object of design imagination – helps to reimagine the architectural canon anew. The *Circus Philosophicus* makes a powerful case for what I would like to call the *Circus Architectura*: the group of imaginary but concrete objects which shape architecture as most architects understand it; the architectural universe that exists in every architect's mind and whose presence is reasserted whenever they design. Following the lessons of cultural studies, we have become accustomed to condemning the canon because of what, who and where it excludes. But such criticisms imagine the canon as a static edifice rather than as the sum of shifting force-fields. It forgets that those force-fields can change in new and unpredictable ways when dormant background objects re-charge and burst forward, disrupting the equilibrium.

It is common to criticize the architectural press for publishing buildings as though they were objects-unto-themselves, depicted in isolation – empty apart from a handful of specimen furniture objects – with untidy surroundings and unruly occupants cropped out in order to maintain some fiction of pure architecture.[40] Published drawings are also usually cropped tightly to the object and seldom easy to read in context. It is often claimed that architects fail to engage with real people and real contexts, making overly self-referential architectures because the press encourages them to think of buildings in terms of the images that photographers shoot.[41] But this is also how architects' imaginative pleasure grounds are constituted. Maybe it's not so much that the press

produces a culture of self-referential objects than those objects instead produce their own canonical reality through the effects they exert on architects' imaginations. The objects of the canon reproduce and replicate in the *Circus Architectura*, shifting and mutating through multiple re-appropriations and reconstructions. Numerous Houses with One Wall, in conjunction with countless other architectural objects, spark off each other to produce types and variants, at other scales, in other contexts and for other clients.

It seems entirely appropriate to constitute this concrete universe of the architectural canon as a circus. It has its high-wire acts, halls of mirrors, freak shows and disappearing women.[42] Like any circus, it is simultaneously spectacular and intimidating, delightful and repulsive, highly regulated and lawless, of the real world while conjuring up its own alternative reality. New acts join old ones and old ones retire. Like any fairground, we enjoy being amazed by the *Circus Architectura*. And, while most people would like visiting, few would want to actually live there. Graham Harman's philosophical cosmos and the House with One Wall help us to see these objects of the architectural circus, in their place, as a heightened reality. The circus remains surprising, anarchic and vital, a necessary part of the designing imagination. As Harman's Ferris wheel demonstrates, we should be careful what we build there, but we should never dampen its spirit.

3.2 Graham Harman's Response to Adam Sharr

I am also pleased that Sharr discussed *Circus Philosophicus*. (It is by far my favourite of all my books but is also the least successful, and, amazingly, I still get people who think the book is autobiographical. I have a two-mile-wide Ferris wheel in the first chapter and am stranded on an offshore oilrig in the Gulf of Mexico with China Miéville the science fiction writer. It is quite obviously fictional. Almost nothing in there is real, just a few people's names.) Adam proposes what he calls a *circus architectura*. He gets my project quite right, which is to extend tool-being in Heidegger's analysis to cover the whole of reality. He does something that I disagree with though when he says I think all objects are present. This might just be a linguistic difference, but I would say all objects are *not* present, but rather that all objects are absent, meaning non-relational. That is the key for me. Sharr talks about bimetallic galvanic action where two materials speed up the decay of each other. Yes, these metals can act on each other, but they also have some reality apart from that interaction. He also brings up the example of the Japanese temple, which is torn down and rebuilt in the same shape every twenty years while still being considered the same temple. For us, in the West, this would be very problematic, even quite bogus that we tore the temple down and rebuilt it with different material and still wish to call it the same thing. It occurred to me that we have this very famous problem in Western philosophy, with the ship of Theseus. If you remove one board from the ship of Theseus and replace it with another and keep doing that with every board, is it the same ship? And then what if you take all the old boards and build another new ship with them – is that the real ship of Theseus? In America we also have the joke about George Washington's axe. The joke is that you go into a museum and see George Washington's axe and you ask if it is the real one. And the

museum staff says yes, but with two exceptions – one is that the metal started rusting so we put a new head on the axe, and the other is that the wood was rotting so we put a new handle on it.

Sharr also notes that academics do not like the fact that I de-prioritize humans. That is true; they do not. But it is not that I am privileging *non*-humans either. Some critics are trying to say that I am crowding humans out of philosophy, but that is not the case at all. I am just saying that humans should not be treated as 50 per cent of reality as they have been in modern philosophy. In most modern philosophy, in every situation you have to have a human perceiving it to make it real. There is a correlate between human and world. As I said before, we call this 'correlationism' in Speculative Realist circles.

Now as for Christian Kerez's House with One Wall, I have to admit that I come to architecture as a complete outsider, and so I thought this house was a fiction the first time I read Sharr's essay. I had no idea it really existed. Sharr does something interesting in choosing this building from a magazine and without having seen it. He defends the notion of publishing buildings in isolation, against people who criticize the fact that architectural drawings have no people in them, in an isolated space by themselves without their relational context. What this reminded me of was Piero della Francesca's painting, *The Ideal City*, which is without even one person in it. I like this, of course, because there is a sense in which placing something in isolation is a way of getting at a counter-factual reality of the thing. People ask me: What is the empirical method of object-oriented ontology? What I would like to do is to compare it with actor-network theory, something to which I am close without quite being an adherent. Actor-network theory, that of Latour and others, is very good at talking about things that have already happened. I do not think it is quite as good at talking about things that *might* have happened. So for example in Latour's masterful interpretation of Louis Pasteur, who understands that germs cause disease and not spontaneous generation. Latour shows the very complicated political manoeuvers through which Pasteur must pass in order to get his theory accepted. First, he had to rely on the hygienists who needed him, but the doctors were mad because they thought all diseases would be eliminated by vaccinations and they would go bankrupt. So then he had to flip it around and invent serum, which doctors can administer in their offices. So now doctors get to keep their jobs, and Pasteur finally has the doctors on his side as well. Latour is very good at things like that. But he is often criticized for being too unfair to the losers. There are winners and losers in every situation. Certain people mobilize actors and win and become the champions whose theories are accepted, while other people lose, and for this reason he has been accused of asymmetry. But I am not so worried about that. I am more worried about Latour effacing the difference between the *deserving* and *undeserving* losers. What I mean is that there are great theories in different disciplines where pieces of design never caught on but should have. We know what that means. We all have private regrets of this sort: Why is this physicist not more famous? Why are people reading this overrated past author again? You cannot say that time always does justice to everything. There is a certain possibility that things have quality that is not recognized, or the reverse. We are constantly re-evaluating the past. Object-oriented ontology is very much about counter-factuals,

and in a way, architecture is one of the supreme counter-factual fields. Schumacher puts this very well when he writes that actual construction is a rarity in architecture. That is one of my favourite lines in his book. In architecture you are actually doing a lot of things before that stage, if you ever do actually get to that point.

Sharr also talked about canonicity, in architecture as well as in other fields, and I tend to agree with him. The problem of canonicity tends to be framed almost entirely these days in terms of who gets excluded: who is not being treated fairly due to the over inclusion of dead white males. And, certainly, that is part of it. But as Sharr points out, the canon (our sense of what the models of quality in past work in any field are) is a shifting field of horses, never a static list of people. If you go back and look at what they were reading in a great books programme a hundred years ago, you are going to laugh at some of the selections. Some of it is very minor stuff in our eyes. So things are constantly being reweighed and revalued. It does not mean everything is equal. It means that rather than constructing canons according to prejudicial criteria, one should open up the canon. But I think this feeds into my idea that philosophy should be counter-factual as well. You should not only be talking about the *success* of a thing, the way that actor-network theory does. You should be talking about what a thing *could* have done, had the conditions only been right.

3.3 Adam Sharr Interview: An Extrovert and Engaging Discreetness

Jessica Reynolds: Why do you think architects need philosophy?

Adam Sharr: In terms of the immediate experience of being an architect, architects need philosophy to help make design decisions. Some design decisions are straightforward – this is the best material to use for spanning that distance, for example, or this is the best way to ventilate this roof space – where others are much more complex. At the scales of city, building and detail, there are design decisions whose character is not just practical but also ethical and political – and ultimately philosophical. And then, broadening out from immediate design problems, philosophy is about inquiring into the world we find ourselves in, using the objects around us to measure the world. In its cultural resonances, political nuances and phenomenological experiences, every work of architecture is philosophical. It is about finding intellectual order *in* things and giving intellectual order *to* things. Any set of plans and sections, or digital model, describes an architectural order that is always inevitably structural, environmental, social, political, mathematical *and* philosophical. Every building is a fragment of a whole world, describing the philosophical outlook of the people who made it what it is, and the culture in which they worked. I wrote about that in my edited book *Reading Architecture and Culture*.

◀ **Graham Harman:** *Sharr's book on Heidegger's hut is beautiful. I avoided it for years since the title made it sound like Heidegger Kitsch. Not so. It is a lovely volume with which to spend an evening.*

Adam Sharr: So, doing architecture can be imagined as a way of doing philosophy. George Steiner speculates in *Real Presences* about an imaginary world where secondary criticism is banned, where musicians can only compose to criticize music, where dancers have to dance to criticize choreography, where literary critics have to write novels to practice their trade. It is interesting, if quite daunting, to imagine designing architecture in this way, as already being philosophical criticism, not just of other architectures but also of the intellectual worlds that they stand for.

◄ **Graham Harman:** *Brilliant. The old saying that 'writing about music is like dancing about architecture' has always left me cold, since I love the idea of dancing about architecture. But 'making architecture about architecture', as Steiner suggests, smells a bit too much like postmodern self-reflexivity, whereas 'making architecture about ontology' might leave more room for a productive innocence.*

Joseph Bedford: Do you think architecture's relationship to philosophy changes over time and has a history?

Adam Sharr: At least over the last forty or fifty years in the West, architects, critics and theorists have been particularly interested in those ways in which philosophy could help them to think counter-culturally and to challenge prevailing architectural orthodoxies at particular moments in time. At the high water mark of 'systems thinking' in the mid-to-late 1960s, when the worst architectures seemed to be top-down and alienating, and when it was imagined that design could somehow be systematized, phenomenology offered an alternative. The resonances of deep atmosphere and the *longue durée* of culture which phenomenology legitimized seemed an important corrective to the dominant professional *milieu*. At a similar time, semiotics reminded us that architecture has important cultural and historical codings – which can be imagined as symbols and signs – that are deeply engrained and which operate intertextually. Then the 1970s counter-culture, which continued to offer important challenges in the 1980s and 1990s, emphasized subjectivity: reminding us that architecture had forgotten the subject, neglecting inhabitants' power to participate in architecture, neglecting gendered perspectives, ethnic identities and hybridities and skating over the problems of how the educated professional architect can deal meaningfully with everyday situations. Philosophy and theory helped with important critiques towards the formulation of alternative practices.

Jessica Reynolds: What do you think is happening now, as architects seem to be turning away from philosophies of language and subjectivity and towards philosophies of objects and of non-human relations?

Adam Sharr: Perhaps because architecture has become more aware of multiple subjectivities, and more attuned again to atmosphere and its long culture, the pursuit of the object can now seem counter-cultural. I am fascinated by the idea in 'object-oriented ontology' that shifting force-fields of objects have their own power. However, another part of me is not yet convinced that subjectivities and inter-subjectivities, or indeed cultures themselves, can be wholly accounted for solely in terms of object relations.

◄ **Graham Harman:** *As Sharr notes, the idea in OOO is not to get rid of human subjects completely but to recognize that whatever makes human special (and there is much that does) cannot simply be built into ontology as a radical human/non-human rift in the manner of Descartes and other moderns. Moreover, what makes us human has nothing to do with rising above objects in nihilistic fashion, but much to do with immersing ourselves in objects in erotic fashion.*

Adam Sharr: The most challenging part of what Harman and his colleagues have argued is that subjects, political subjectivities and cultures are themselves objects, which can be imagined in terms of inter-object relations just like any other objects. That said, architecture deals in making objects and if 'triple-o' can help us to sharpen our appreciation of those objects and their effects, then it is certainly worthy of architects' attention.

Joseph Bedford: Seeing as you have written extensively on Heidegger in relation to architecture – could you speak to the question of this oscillation within architecture between an orientation towards 'object-hood' and an orientation towards 'world-hood'?

Adam Sharr: You pose a dichotomy between deep contextualization and autonomy, or between architecture imagined around multiple subjectivities and architecture imagined as aesthetic object – and I am not sure distinctions like these are always so clear-cut. Architecture is seldom 'either/or' and instead is nearly always 'both/and', to borrow from Venturi's *Complexity and Contradiction*.

Critics have for some time been challenging the tendency for architects to imagine buildings as aesthetic objects-unto-themselves and the tendency for the architectural media to see buildings in isolation, photographed empty of everything and everyone except a handful of specimen items of designer furniture.

◄ **Graham Harman:** *I am not sure that Sharr is right to call this a pseudo-problem. While it may be possible to strike some sort of balance between the autonomous and the relational, this does not seem to be what has been happening. Where is the autonomous architectural object in Koolhaas, for instance? Or in Hadid/Schumacher? These are some of the most successful architects today.*

Adam Sharr: In such photographs, architectural objects are understood as pure expressions of the hero designer's individual genius more than they are understood as the embodiments of human cultures, as choreographies of delightful atmospheres or as generous enablers of everyday life. At a time when SketchUp and Rhino models of buildings are conceived first as objects in the autonomous realm of drafting space and numerous architects are concerned with parametric manipulation of computer models, there is a tendency to emphasize the primacy of object shape even more strongly. So perhaps it is especially in our moment that such critiques remain necessary.

Jessica Reynolds: Do you think it is possible to *synthesize* a new approach to design that focuses on object-hood with approaches that focus on world-hood?

Adam Sharr: Harman's work allows a potentially significant rethinking of what an object is. For Harman, objects are not simply objects because they have effects.

◄ **Graham Harman:** *This is not quite how I would put it. Objects are assembled from smaller objects, certainly. But they must exist before they have effects, and are not retroactively constituted by their effects. I am not one of those who say that the ebola virus exists only in the network of victims, doctors, and border regulations it brings about.*

Adam Sharr: Objects become *real* because of their effects. An object becomes an object – a 'one', an entity – through its multiple self-constitution as simultaneously being a 'something' while also being constituted by multiple 'somethings' and constituting other 'somethings'. Harman explains how objects consist in ongoing tensions of time and space, and essence and eidos. He argues that infinitely multiple objecthoods remain latent in an object waiting to be activated through relations with other objects. It is through this latent potential, and through imminent transactions, that objects gain their power.

Following this conception, an object need not be something straightforwardly concrete; it can be something transitory, like an event, or something imaginary or mythical, like a unicorn or an architectural proposition. So the object, in Harman's ontology, is not something static and isolated but rather something dynamic, overflowing and restless, which shifts and is re-made through changing but perpetual encounters with people, things, events and ideas. What would CAD objects be like, if they were conceived as objects in a Harmanian sense? What would happen to parametric processes or to representations of canonical objects in the architectural media?

◄ **Graham Harman:** *In his two-volume* Autopoiesis of Architecture *book, Patrik Schumacher candidly admits one of the problems with parametricism. Since it prioritizes gradations over sharp changes, it has a difficult time placing apertures (windows, doors, etc.) without seeming arbitrary. Whatever a OOO architecture might look like, apertures and other sudden shifts would have a much more central place than they do in the flowing shapes of Zaha Hadid Associates.*

Adam Sharr: I do not have the answers to these questions, but there is potentially an 'object-hood' here which is always already 'world-hood', and vice-versa, which can be reached by remaking the idea of the object.

Jessica Reynolds: Harman has written about architecture suggesting that architects think about an architecture of non-communication and discreetness? Do you think taking up this challenge might risk a return to old notions of autonomy or do you think there might be new ways in which architects might rethink autonomy as well?

Adam Sharr: What is fascinating about Harman's work is that his objects are never autonomous because they are always constituted and re-constituted through their effects on other objects, in a web of transactions including (and this is the trickiest part) human objects, imagined objects and even objects which have not even been

imagined yet. Harman's thinking offers to architects the possibility of objects, which are always simultaneously objects-unto-themselves but also simultaneously radically engaged with the objects of society and culture. The idea of architecture conceived as object seems so far usually to have involved forgetting history, place, culture and multiple subjectivities.

◄ **Graham Harman:** *Yes indeed. But too often considerations of history, place, and culture lead theorists on the slippery slope to all-out relationalism. 'Nothing exists in a vacuum; everything is connected to everything else'. Not really. Only certain aspects of one's context and environment are included, and they have resonance only if they are inscribed directly into the object. At this moment in intellectual and aesthetic history, relations are overrated, and are due for a fall.*

Adam Sharr: Harman's thinking can, potentially, be folded into a new idea of the always-engaged object. This is an object characterized by a generous, sensitive and outwardly receptive autonomy, or an extrovert and engaging discreetness. If the twenty-first century is to be characterized by an architecture of objects, then it seems important to imagine our objects in such terms.

Notes

1 Allison Dutoit, Juliet Odgers and Adam Sharr (eds), *Quality out of Control: Standards for Measuring Architecture* (London: Routledge, 2010).
2 Marco Frascari, *Marco Frascari's Dreamhouse: A Theory of Imagination*, edited by Federica Goffi (London: Routledge, 2017); Marco Frascari, *Eleven Exercises in the Art of Architectural Drawing: Slow Food for the Architect's Imagination* (London: Routledge, 2011).
3 Flora Samuel, *Why Architects Matter: Evidencing and Communicating the Value of Architects* (London: Routledge, 2018).
4 Drawings and images of the house are available online at: https://www.archdaily.com/604014/house-with-one-wall-christian-kerez (accessed 15 January 2019).
5 [n.a.], *Christian Kerez 2000–2009: El Croquis 145* (Madrid: El Croquis, 2009).
6 Tony E. Adams, *Autoethnography: Understanding Quantitative Research* (Oxford: Oxford University Press, 2014).
7 I have argued elsewhere that architecture expresses the values involved in its inhabitation, construction, procurement and design, tracing the thinking of the individuals who have participated in it. Importantly, the values embodied in buildings and their depictions can sometimes be unanticipated, at variance with their architects' and promoters' stated intentions. See Adam Sharr (ed.), *Reading Architecture and Culture: Researching Buildings, Spaces and Documents* (London: Routledge, 2011); Adam Sharr, *Modern Architecture* (Oxford: Oxford University Press, 2018); Adam Sharr, 'Buildings as Sites for the Production of Architectural Knowledge: Reflections on Replicas in Istanbul, Dresden and Las Vegas', in Sophia Psarra (ed.), *The Production Sites of Architecture* (London: Routledge, 2019).
8 Graham Harman, *Towards a Speculative Realism: Essays and Lectures* (Winchester, UK: Zero Books, 2010).

9 Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago, IL: Open Court Books, 2002).
10 Harman, *Towards a Speculative Realism*.
11 Graham Harman, *Circus Philosophicus* (Winchester, UK: Zero Books, 2010), p. 1.
12 Ibid., pp. 2–3.
13 Ibid., pp. 3–4.
14 Ibid., p. 4.
15 Ibid., p. 7.
16 Ibid., p. 11.
17 Ibid., p. 34.
18 Ibid., p. 35.
19 Ibid.
20 Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (London: Wiley-Blackwell, 1972) (first German edition 1927); Martin Heidegger, 'The Thing', in *Poetry Language Thought*, trans. Albert Hofstadter (London: Harper and Row, 1973) (first delivered as a lecture, 1951).
21 Harman, *Circus Philosophicus*, p. 74.
22 Clive Hamilton, *The Defiant Earth: The Fate of Humans in the Anthropocene* (London: Polity, 2017).
23 For example, see Andrew Cole, 'The Call of Things: A Critique of Object-Oriented Ontologies', *The Minnesota Review*, vol. 2013, no. 80 (2013), pp. 106–118; Slavoj Žižek, 'Objects, Objects Everywhere: A Critique of Object Oriented Ontology', https://conversations.e-flux.com/t/slavoj-zizek-objects-objects-everywhere-a-critique-of-object-oriented-ontology/3284 (accessed 15 January 2019), an extract from Agon Hamza and Frank Ruda (eds), *Slavoj Žižek and Dialectical Materialism* (Princeton, NJ: AIAA, 2016).
24 Harman, *Circus Philosophicus*, pp. 73–74.
25 Graham Harman, *The Quadruple Object* (Winchester, UK: Zero Books, 2011); Heiedgger, 'The Thing'.
26 Harman, *Circus Philosophicus*, p. 75.
27 Dutoit, Odgers and Sharr (eds), *Quality Out of Control*, p. 14.
28 Parallels can be drawn here with the range of ideas and methods characterized as 'new materialism', which can be linked to, and also seen as distinct from, Harman's object-oriented ontology. See William E. Connolly, 'The "New Materialism" and the Fragility of Things', *Millennium: Journal of International Studies*, vol. 41, no. 3 (2013), pp. 399–412; Diana Coole and Samantha Frost (eds), *New Materialisms: Ontology, Agency, and Politics* (Durham, NC: Duke University Press, 2010).
29 Adrian Forty, *Concrete and Culture: A Material History* (London: Reaktion, 2012), pp. 10–11.
30 Ibid., pp. 7–8.
31 Nathaniel Coleman, *Utopias and Architecture* (London: Routledge, 2005).
32 Jonathan Hale, 'Coping without Noticing? Buildings as Tool-Beings', Architecture Exchange Lecture, Swedenborg House, London, 29 May 2013.
33 Heidegger, *Being and Time*.
34 Eduard F. Sekler and William Curtis, *Le Corbusier at Work: The Genesis of the Carpenter Center of Visual Art* (Cambridge, MA: Harvard University Press, 1978).
35 Adam Sharr and Stephen Thornton, *Demolishing Whitehall: Leslie Martin, Harold Wilson and the Architecture of White Heat* (London: Ashgate, 2013).
36 Owen Hatherley, *The New Ruins of Great Britain* (London: Verso, 2011).

37 Italo Calvino, *Invisible Cities* (New York: Vintage Classics, 1997).
38 For an extended discussion, see Rem Koolhaas, *Elements of Architecture* (Köln: Taschen, 2018).
39 George Steiner, *Real Presences* (Chicago, IL: University of Chicago Press, 1991).
40 For example, Jeremy Till, *Architecture Depends* (Cambridge, MA: MIT Press, 2013).
41 Till, *Architecture Depends*.
42 Denise Scott-Brown, 'Room at the Top? Sexism and the Star System in Architecture', http://www.mascontext.com/issues/27-debate-fall-15/room-at-the-top-sexism-and-the-star-system-in-architecture/ (accessed 15 January 2019). First published 1989.

4

Lorens Holm

4.1 Lorens Holm, Architecture and Its Objects

Imaginary prelude

The paper is about space, but it has to begin with the object. Architects are fixated on the architectural object. Arguably, the *arché*-object of architecture is the Parthenon. Le Corbusier was tormented by the Parthenon until his death. It is reflected in all his work: Domino, Garches, Ronchamp, Chandigarh. The Parthenon haunts modernism. It is not the real object that haunts modernism – that's just a pile of old stones – but the symbolic one. In order for something to enter discourse, it has to be symbolized. Space is present in the cult of objects. Without space, all Le Corbusier's precious type forms, all his *objets types*, his *objets à emouvoir*, would be one sticky lump. Nothing would separate cylinder from cube from sphere and Rome would have no space in it. Architecture is about arranging objects in plan but space is the precondition for arrangement.

Space enters architecture with the subject. In Marc-Antoine Laugier's frontispiece of the primitive hut (1753), the architectural paradigm is summoned by she who is at once the personification of architecture, and its first occupant. The object – a form of Parthenon – is placed before Architecture and the reader. In Andrea Pozzo's first plate (1693), Pozzo shows us an architecture imagined by its centred subject. The occupant of architecture is shown positioned in the centre of his space, and from that centre, imagining its continuation as if it were the projection of a picture.[1]

Introduction: Architecture and Space

Space is the material and the necessity of architecture. It is hard to imagine a practice of architecture without it. We make space so that we can put objects and subjects in it. This chapter was written in response to *The Quadruple Object* (2011), in which the philosopher Graham Harman argues for the primacy of objects. Although an 'object-oriented ontology' might initially look plausible for architecture, architecture more comfortably supports a heterogeneous ontology of object and space in dialogue. Harman's argument is one half of a debate about whether objects or relations are the

Figure 2 Frontispiece of Marc-Antoine Laugier, An Essay on Architecture, translated from the 1753/55 editions and with an introduction by Wolfgang and Anni Herrmann (Los Angeles: Hennessey & Ingalls, 1977). This image, reproduced from Wikipedia https://en.wikipedia.org/wiki/The_Primitive_Hut#/media/File:Essai_sur_l'Architecture_-_Frontispiece.jpg, is in the public domain.

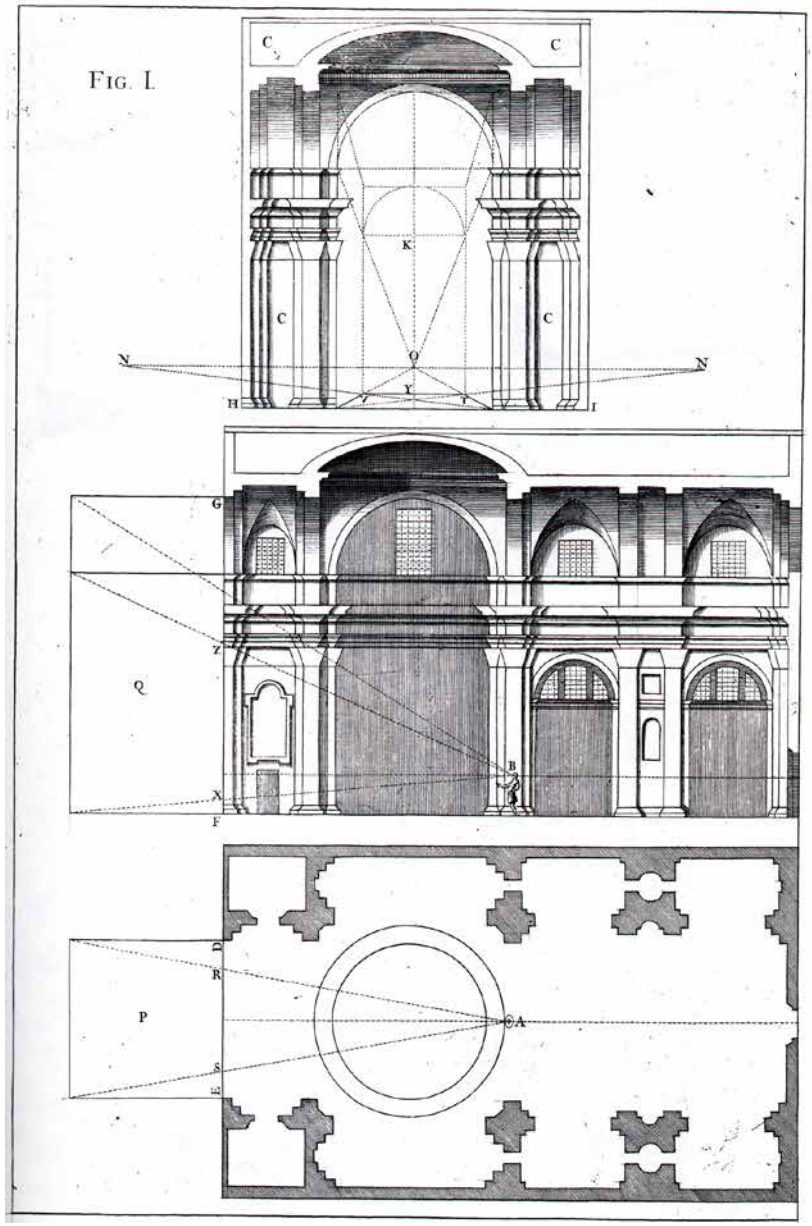

Figure 3 Plate 1 'Fundamentals of Perspective' in Andrea Pozzo, Perspective in Architecture and Painting: an unabridged reprint of the English-and-Latin edition of the 1693 Perspectiva Pictorum et Architectorum (New York: Dover Publications, Inc., 1989). This digital image is reproduced from the Max Planck Institute for the History of Science Library and is available online at http://echo.mpiwg-berlin.mpg.de/MPIWG:9PE7BUKS under a Creative Commons ShareAlike 3.0 license, CC BY-SA.

primary building blocks of the world.[2] As odd as this tussle may seem to the non-philosopher, this debate is not altogether foreign to architecture. It is shadowed in architecture by the opposing positions of Aldo Rossi's theory of types (the type is the archetypical symbolic object) and Bernard Tschumi's event architecture, although most readers do not see them as making mutually annihilating ontological claims.[3]

The question raised in Harman's work is where or how space figures in ontology. Harman argues in *Collapse III* that we can speak about objects being touched by their qualities, that they have a relation or proximity to them; in *The Quadruple Object*, that space is a relation between a real object and its sensual qualities. In Harman's ontology, each object is a fourfold complex, comprising a real and sensual object and real and sensual qualities; and space is a function of this relation.[4] The question about space is, paradoxically, spatial. Is space internal to the object, an emergent property of object structure? Or, is space external to the object, which, for space, is simple? Either space is in the object or the object is in space.

Space and time are fundamental for architecture because it is with space and time that architecture structures the relations between objects and subjects. This necessity for spatial and temporal spacing (*or spatial and temporal temporalising*) sets architecture apart from the art object. Irrespective of whether the art object contains space, it is possible to speak unequivocally of the object. The subject of the art object is rarely part of the art; the subject of architecture is always within architecture. By subject of architecture, I mean its intentional occupant. Elsewhere I have argued for the spatiality of the subject.[5] The object is an intentional object, usually an object of desire for a subject.[6] This chapter will look at the relation of subjects, space and objects from the point of view of architecture and argue that space is the apparatus for representing objects to subjects. It will have bearing on an ontology of/through architecture.

Space and Subject

Imagine the following scenario: I have just entered Brunelleschi's nave of San Lorenzo in Florence, designed not long after he invented perspective (*c.* 1420). I stand before the altar, contemplating my salvation. Between us, a space that positions us, qualifies us, signifies our importance. This paradigmatic architectural scenario that situates a desiring subject before its desired object – let us call it a picture – has the structure of fantasy: firstly, it suggests that this stone could be my salvation, and secondly, that all I have to do is walk the nave to get it. Fantasy comes in the form of a picture of me being satisfied by an object – not simply of the object but of me attaining it and being satisfied by it. All I have to do is walk the nave to be saved. If it is a renaissance nave, this fantasy is calibrated (through six Corinthian bays) like a dreamscape. It is a fantasy because when I get there, the altar turns out to be a stone and my salvation lies elsewhere. I have not even attained the stone, because touching something is not having it. Salvation may be possible, but it is not to be found in a stone, and its attainment is never as simple as traversing a space. The architecture does two things. It distances the object from me so that it conforms to the psychoanalytic convention about objects of desire (you only desire what you do not have, Plato, *The Symposium*), and it presents a seemingly credible scenario for attaining it.[7]

Figure 4 Photograph of the nave of Brunelleschi's San Lorenzo, reproduced by permission of Stefan Bauer from Wikipedia https://en.wikipedia.org/wiki/San_Lorenzo,_Florence under a Creative Commons ShareAlike 2.5 Generic license, CC BY-SA 2.5.

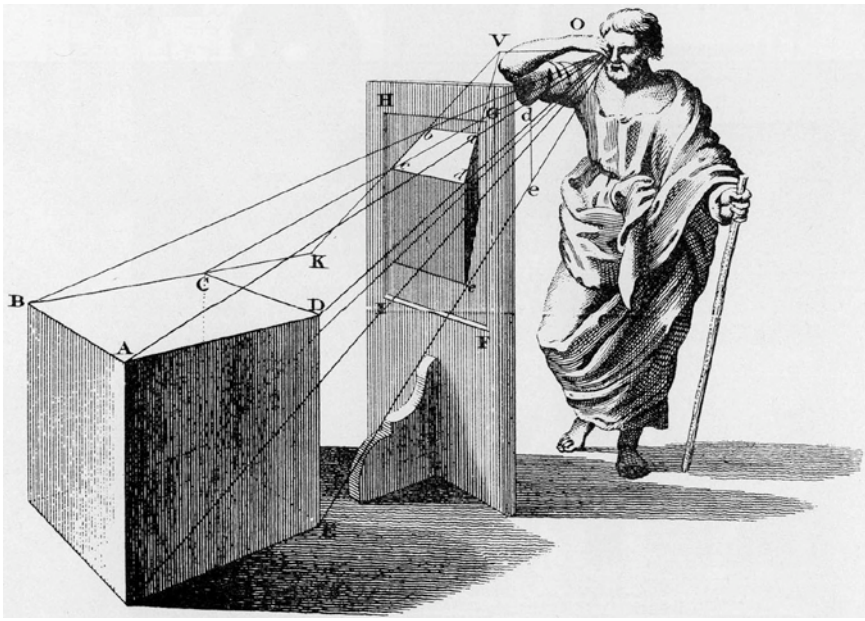

Figure 5 Figure 1 in Brook Taylor, New principles of linear perspective, or the art of designing on a plane the representations of all sorts of objects, in a more general and simple method than has been done before (London: R. Knaplock, 1719). This digital image is reproduced from the Max Planck Institute for the History of Science Library and is available online at http://echo.mpiwg-berlin.mpg.de/MPIWG:C0RQ3H5B under a Creative Commons ShareAlike 3.0 license, CC BY-SA.

The altar is a symbolic object and a real object. There is that hallowed stone that terminates the nave and which is the focus of a liturgy that bathes it with significance and promises me salvation; then there is that stone which generates no heat of its own and which is, disappointingly, just a stone. This real object is not a deeper object; it is the shallow, desiccated husk of a symbolic one. It is the symbolic object, not the real one, which is deeper than our experience of it, which withdraws, which is never fully grasped by what we think and say and do with it. The real object always brings us up short, with the brevity of a brute fact. By itself, it goes nowhere, although it challenges us to make it a symbolic object. This is what we do when we insert it into a significant and signifying context, like architecture. By situating it in a nave, in a geometrized space, centred, framed, lit, sheltered, that stone becomes an altar, and so long as it remains spaced from us, it remains an altar.

Architecture puts objects in relation to subjects in a way that defines the relationship spatially and temporally. This is simply the form of a relation, similar to the subject-object relation in grammar, and, like grammar, is what Lacan would call a symbolic relation. This architectural operation has two steps:

- The object position: architecture uses the figure-ground relation of space to define the object. The altar is figure to the ground that is the nave.
- The subject position: architecture positions the subject by distancing the object from the subject in space and time. The position of the subject has to do with this nascent sense of a picture surface.

Architecture surrounds a thing with space, which gives it a contour and distances it from other objects. Architecture represents an object to a subject as a distanced object, that is, an intentional object or object of desire. In this scenario, architecture assimilates to representation; space and time constitute the apparatus of representation.

Transparency Literal and Phenomenal: The Façade Effect

I want to pursue the question of space and how it positions the subject by invoking the plane surface. We have introduced the idea of space through the psychoanalytic account of desire and through an oblique reference to renaissance perspective. It is also possible to understand it within the space of modernism. For the theorists of modern painting and architecture, of which Greenberg and his architectural counterparts, Colin Rowe and Robert Slutzky, are probably most well known, the plane surface was paramount.

In their groundbreaking paper 'Transparency, Literal and Phenomenal', Rowe and Slutzky argue that there are two types of transparency in modern painting and architecture, the literal and the phenomenal – and by implication, two kinds of space. Imagine: gazing at a painting or a façade. Literal transparency corresponds to a glass façade through which the viewer looks to see a space beyond or to the canvas of an illusionistic painting. Now imagine: gazing at a cubist still life or (literally opaque) free façade. Phenomenal transparency ('phenomenal' refers not to phenomenology but to the conceptual, to a 'form of organization') corresponds to implied depth where there is none; it is an effect of what Derrida would have called a reading event, or Freud, projection.[8]

When we follow their gaze through the façade/painting into depth, we find that literal transparency corresponds to the unequivocal delineation of figure and ground, objects individuated by space. In the case of phenomenal transparency, figures and grounds seem to fluctuate, to trade places, to join at their contours, to interpenetrate 'without optically destroying each other'. This is not a blend, a continuum, any more than the chiselled forms of the cubist still life might blur to grey; it is simply the not-figure confronting the not-ground.

If we reverse engineer their argument, Rowe and Slutzky claim that even the implied depth of the cubist painting and the corresponding space of the free plan depend upon the plane surface. Space is represented on the façade/painting, and it goes on being represented on the interior of the plan, with implied or conceptual (i.e. phenomenal) picture planes. The façade effect continues in the plan. This intrusion of representation into space may seem to lead us away from ontology to epistemology. The significance of the intrusion of representation into the question of what exists for architecture is

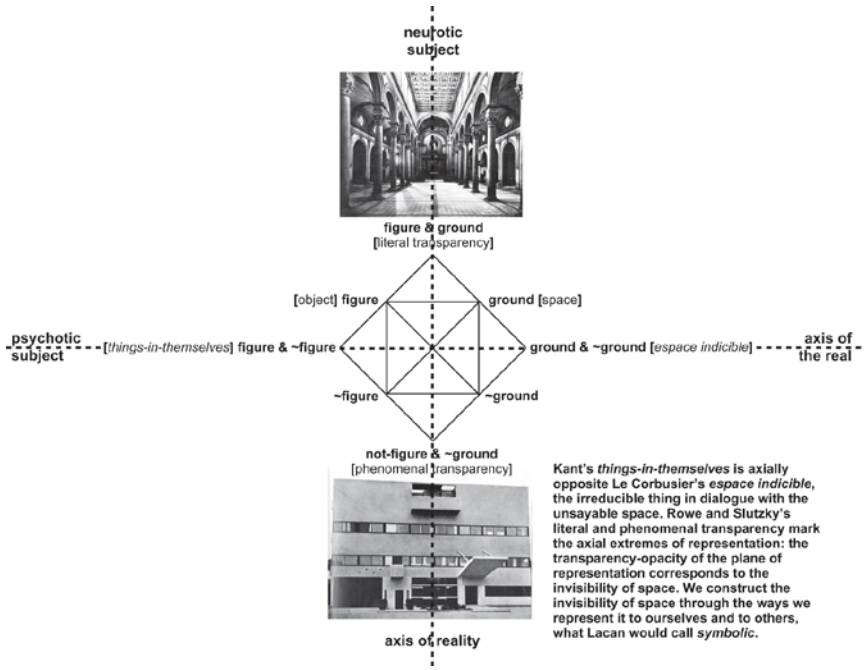

Figure 6 Diagram by Lorens Holm incorporating thumbnail images of the nave of Brunelleschi's San Lorenzo and the façade of Le Corbusier's Villa Stein at Garches, readily available on the internet. An earlier version of this diagram was published in Lorens Holm, 'Transparency Effable and Ineffable', in Henriette Steiner and Kristin Veel (eds), *Invisibility Studies: Surveillance, Transparency, and the Hidden in Contemporary Culture* (Bern: Peter Lang, 2015).

that it introduces the subject as an element of the plan, for representation is always representation *for* a subject. Representation puts an object in relation to a subject. It is not possible to position an object *for* a subject, outside the context of representation.

The Klein Square

We can diagram their argument on the Klein Square (introduced to spatial discourse by Rosalind Krauss and used by thinkers as diverse as Lacan and Harman).[9] We begin by mapping the terms of the argument, 'figure' and 'ground', onto the top corners of the square. The second term, 'ground', is understood by the argument to be the other of the first. From figure and ground, we derive the negations not-figure and not-ground (henceforth ~figure, ~ground), which are placed on the bottom corners. The Klein diagram depends upon distinguishing other from negative. In these terms, we are provisionally arguing for an ontology that begins with a thing and its other, which are irreducible to each other, but necessary for their mutual intelligibility.

There are a number of ways of negating a term. In a binary figure/ground spatial logic, the ~figure is tantamount to a ground (space), hence a seeming equivalence of terms along the diagonal axes; but free from that logic, a ~figure could be anything, space or otherwise, that is simply not a figure to a ground. Similarly for the ~ground, it is simply whatever does not play the role of ground to a figure. Depending upon the context of the argument, these terms could be satisfied by concepts (Rossi's type, Plato's form), screens, fluids, clouds (Leonardo), Diller & Scofidio's Blur Building, spittle (Bataille) or subjects.

If we take the terms in pairs, they define axes at right angles to each other. Figure and ground together define the plan forms of literal transparency of which renaissance space is the paradigm. ~figure and ~ground define the plan forms of phenomenal transparency or modern space, in which spatial figures and figural objects overlap and vie with each other. These two spatial positions, the literally and phenomenally transparent, define the invisible space that delineates objects. We call this axis *representation* because it relates to a form of space – whose main feature is that it is invisible – that solicits the subject and supports the representation of objects to subjects. Invisibility, then, is the property of space that corresponds to the transparency, literal or phenomenal, of the plane of representation.

There is another more difficult axis marked by the positions figure & ~figure, and ground & ~ground, which forces us into the bastard logic of contradiction. These positions are difficult to characterize in anything but negative terms. Figure/~figure would be things – I hesitate to call them objects – that are not individuated by space. Kant's *things-in-themselves* are not so individuated. He understood that space and time were not objects of experience, but the *a priori* conditions (*intuition*) that precede experience and make it possible. We would not understand the world as a distribution of objects and a succession of events if we did not already organize the world in space and time. *Things-in-themselves* mark this *a priori* condition of experience and representation. They are stripped of their symbolic and imaginary accoutrements.[10] Piranesi may have glimpsed this impossible world when he drew the classical tombs on *Via Appia Antica*. They are stripped of the marble cladding by which architecture individuates itself, merging into formless lumps of masonry.[11]

Ground/~ground would be a space that cannot do what space is supposed to do, which is to individuate objects. The only candidate I can recall is Le Corbusier's ineffable space. It has lost its invisibility and begun to thicken, to become opaque. Elsewhere I have argued that this 'boundless depth' that 'drives away contingent presences' is not about a synthesis of the arts – as most Le Corbusier scholars would have it – but about a non-projective space. A boundless depth would be a space unbounded by the vanishing point that terminates every view and thereby supports the appearance of objects to subjects. Walls would no longer converge as they recede from the viewer. If this space does not form views, it also does not emanate from a viewer and therefore does not position subjects in relation to objects. A boundless depth would be a space that cannot be put in relation to a viewing subject, and we would expect that if such a space should exist, it would be extremely disruptive and lie at the extreme end of spatial experience where subject and object collapse.[12]

We call this axis *real* because whatever is on it is not representable by us to ourselves or to others, and if we have made a jump from vision to the representation, it is because for the purposes of this argument, we take it as axiomatic that what cannot be represented cannot be perceived or thought. In this schema, the real is not constituted of objects, real or symbolic – stone or altar – but is a pre-objective reality. Nor is the real deeper or farther away than what we can perceive, describe and communicate to others (Harman's formulation, see below). It is on a different axis. The possibility of this axis does not suggest that the other axis, representation, is falsification, or illusion, or subjective, or non-autonomous, or whatever; indeed the association of transparency with representation suggests the opposite, but simply to acknowledge that we throw the skein of the symbol – the image and the concept – over all our forms, by necessity, in order to bring them into discourse. The real axis has an affinity to the Lacanian real. In Lacan's text, the real lies outside experienced reality and remains unknown except for its effects of anxiety and horror.[13]

This is also the axis of creation, from which something new and unknown emerges from a nowhere about which we cannot speak. The creator (author, artist, architect) is in the terrible position of having to draw forth something that is not yet known and not yet named, shaped and materialized, but whose immeasurable distance pulls at his or her desire and whose imminent proximity clouds him or her with anxiety. Something emerges out of nothing to become, by the arduous work of representation, figure or ground, object or space. We receive our symbols from others; we are skilled in the ways of endless recombination. Rarely do we have to confront the horror and ecstasy of something new – creation in the sense of something coming from nothing. Arguably, the invisibility of space, in which we stand before the plane surface looking into infinite depth the way the frontier legionnaire stands at the parapet, is a defence against the anxiety of that possibility. Because space is invisible we can say: *Look! Nothing there!*

Whither Metaphysics?

The diagram speaks of a subjective world in which spatial and temporal distance are metaphors for a symbolic relation between subjects and objects; it is put in relation to an objective hinterland in which subjects have no place because it is not organized by the categories of space and time. The diagram is derived from a consideration of vision, but it is more correct to say that it draws on visual metaphors to make sense of the structured relation between a desiring subject and its desired object that assimilates to the picture surface. The line of sight is a metaphor for a symbolic distance – the symbol apparatus screens world from subject – lamented by phenomenology. The diagram is a montage of two diagrams or two interpretations of the same diagram – what you get when you combine subjective and objective worlds (arguably irreconcilable). In the first instance: a diagram that crosses a spatiotemporal axis with an axis where the logic of space and time does not apply and which therefore marks the limits to architectural reality. In the second instance: a diagram that crosses a subject-object axis with an axis of creation.

The ambiguity is introduced by the subject for whom the internal relation to a symbolic object (the Parthenon that haunts me, the salvation I desire) comes first;

external relations that express them in architecture, second. We understand spatial and temporal distance because we know what it means to desire salvation, to be moving towards it, to strive for what we do not yet have.[14] We work through salvation in many forms, including novels, liturgy and architecture. The axis of representation defines this relation, according to which we put the subject at one end of the nave and the altar at the other. The ambiguities become apparent when we seek to position the stone. Nothing 'real' could be more slippery. We put the stone on the subject-object axis, if it is the stone we discover when we find that the altar is only a stone and our salvation is elsewhere. But we put it on the corresponding real axis if it seems to escape the symbolic entanglements of the altar and, in a sense, does not yet exist for us. Alternatively, we put the stone on the spatiotemporal axis simply because it is an object of vision and conforms to a figure-ground organization of objects in space. We put it on the real axis if it is simply more of the undifferentiated stuff of the world to which we have no relation. The diagram is not making an ontological statement about what exists but an epistemological one about how we know what exists. However, because the real axis marks a kind of outside to our spatiotemporal/subjective world, it shadows this world with the possibility of its non-existence.

Harman

That space and time keep returning in our metaphors is only a problem for an ontology that excludes them. It would be tempting to place Harman's sensuous object on the axis of representation and the real object on the real axis except that his fourfold diagram is a matrix whose relations are already spatial (it is a Klein square) and his metaphors are all spatial. There is a problem with how a theory shields itself from its own metaphors, controls them, resists contamination. There is a problem with how to prevent the metaphors by which a theory represents its content, from infecting that content. Harman's object-oriented thought, which removes space from a position of primacy in his ontology, is redolent with spatial metaphors. Real objects are 'submerged', 'below', 'receding', 'withdrawn' from experience. They are 'encrusted' with qualities (a theory of cladding?).[15] It is difficult to see how Harman could rewrite the theory of the object without contaminating it with space. Heidegger's tool analysis, which is pivotal in Harman's thought, is inherently spatial: *present-at-hand* assimilates to vision and distance and concept, and *ready-to-hand* to touch and proximity and use.[16] In Harman's ontology, there is a real object behind every sensual or intentional object. The real object is never exhausted by our encounters with it. It is always more than what we think about it (theory) or do with it (practice). It is never completely accessible but must be there because the object world is autonomous from subjects, and because without it, we would never encounter the same object twice.[17] Harman's real goes in the direction of the essence of things, the real presence of things far away from the subject. These spatial metaphors place the object in relation to a subject, farther along the subject-object axis of representation.

The repression of space has a correlative effect upon Harman's treatment of subjects. In his ontology, all objects are in relations with each other (fire burns cotton); subjects are simply objects with slightly more intense relations to other objects. They

differ from stones in degree only. In our spatial schema, subjects are objects too, but they differ from other types of objects because they have the capacity to represent objects to each other, something other types of object cannot do. It follows from this that a subject can be an object to another subject, but never an object to an object. Representation is not simply another effect like fire burning cotton or one ball hitting another, but an altogether different class of effects (for one, it is the subject that is effected – when you draw a stone, you, not the stone, are effected by the drawing). Without relinquishing the object status of subjects, we are able to account for salient aspects of subjectivity: as subjects we situate ourselves before our objects, space is structured for the subject in a way that makes it possible for this to happen, and we use architecture to do it. In this schema, subjects are special objects not because they have emotions and ideas and such like but because they have a special relation to space that stones do not have.[18]

Collapse

Before the conclusion, a collapse

If all that is real about space (Harman: anything can be an object; every object has a real position in his fourfold) is that it is the necessary condition for individuating objects, then there is nothing necessary about space because there is nothing necessary about objects. The world of objects is contingent in an ordinary sort of way: this altar might have been that altar. But behind this ordinary contingency, space introduces a more radical and loopy contingency to the world. It goes something like this: it is possible that the world could exist without space; but if it were to be an objectless continuum, we would not exist to know it. It is the *we* that is at stake. A world that cannot position subjects in relation to objects would not support the *we* as we know it.[19]

We glimpse this radical contingency in catastrophes like the collapse of the World Trade Towers, where object, space and subject are returned to a state of one (the real axis is also the axis of destruction – appearance and disappearance). People and spaces, office furniture, suspended ceilings, walls windows and doorways were reduced to a single inhalable soup, like Genesis in reverse. As if all the articulations of difference upon which architecture is erected, all the thresholds between the subject and its objects, the space that contains them, as if all the details that carefully articulate materials and surfaces from each other were undone. Buildings fall down all the time, but it was the scale that turned this collapse into the expression of an ontological possibility. These moments always seems to come at us too fast for comfort.

As if to compensate for this eruption of the Lacanian real into our world of difference, the representation machine went into overdrive. The shock with which the collapse was received, and the media overdrive that attended it (*it was just like a movie*) confirmed the role of representation in reasserting subject-object relations at a moment when they were under threat. Even the real comes with a message; it is just not possible to articulate it with certainty: not only could our world have been different, which it could (indeed something new is on ground zero), but our world is only a possible world.

Instead of a Conclusion, a Summary

We insisted on the paramount role of space in architecture. This is a definition of architecture as much as it is an argument. Starting from the position of the subject, which was what Pozzo visualized (1693), we argued that Harman's object-oriented ontology is too reductive to account for architecture, that it needs space and that space

Figures 7 and 8 Google Earth image showing a plane over central London. Google Earth and Blue Sky, accessed by Lorens Holm June 2019.

drags with it the subject. Our diagram is a way of symbolizing space and subjectivity, giving them a logic, and thereby bringing them into discourse and making them part of our world. By starting from a position in/of space and time, it puts creation or emergence into an other logic from the space of subjectivity with its objects of desire. In effect, we countered Harman's ontological argument with an epistemological one. To his ontological question (*What exists? Objects*) we posed an epistemological question (*What is the precondition for representing objects to subjects? Space*). This epistemological argument seems to have dragged with it the ontological possibility that Harman's object world, any object world, is radically contingent. If this argument has led to a heterogeneous world of objects and spaces, and muddied up both with subjects, and mixed branches of philosophy, it is perhaps a testament to both the richness and the fragility of architectural thought and practice, and to the pliability of its logics. Architecture reflects the multiplicity of our world.

Imaginary Postlude

We never really glimpse this real contingency. What we see is always only ever creation or destruction. We may sense the proximity of collapse, in the smarmy corporate sheen of façades like the Trade Towers, but the real is always rushing towards the surface of our tidy world. In this Google Earth view of the Swedenborg Society, I am trying to be here now.

4.2 Graham Harman's Response to Lorens Holm

Now I will move on to Holm's paper. Holm gives a nice summary of my fourfold theory: time, space, essence and eidos. He then gives the example of approaching an altar and makes the claim that my fourfold theory cannot account for the altar or for any other symbolic object for that matter. It is an interesting claim.

Holm's account of my view is that I would see the religious experience of the altar as sensual, and the real experience would be the physical thing, this stone or whatever it is. That is not quite what I would say, though. But because Holm thinks I am saying that, his rejoinder is that the sensual object is actually deeper, because the spiritual experience of approaching the altar is deeper than mere physical stone. I would agree with that. But I would not say that the symbolic experience of the altar is a mere sensual object. What I would say is that a new real object is produced by my encounter with the altar, and that real object exceeds my access to it. Just because I need to be there for this piece of stone to become an altar does not mean that the altar is totally defined by my access to it. The fact that humans are needed to produce society does not mean that humans adequately know society. But society is still real, and one token of its reality is the fact that sociology has not yet finished – and never will. The fact that a human is an ingredient in something does not mean that that thing exists *only for humans*. I can be part of society *because* society has a reality that exceeds my grasp. And I can be part of an experience of worship through the altar because my relationship with the alter exceeds my grasp. This is important.

Some art theorists recently have been too literal in their use of Speculative Realism. They have been trying to say that what we need is an art without humans. They end up with things like noise music, or scary installations that show us how meaningless human life is, but that is not really what speculative realism is about. It is not about getting rid of the human part so that only the nature part is left. Instead, it is about getting rid of the *correlation* between them, a correlation that insists an artwork is never anything more than what it is *for us*. But that does not rule out that we humans must always be involved with artworks as constituent parts of them. Humans need to be there as part of the artwork, but it does not mean that art is reduced to anyone's opinion or perception of it. I can still be wrong about an artwork in my interpretation of it. I can still return to it and develop or improve my conception of the artwork or a piece of architecture. The fact that humans make architecture does not mean that architecture is reducible to how people perceive it. Humans are an ingredient in architecture but do not have an exhaustive comprehension of it.

Holm also says that the altar is not the same thing for the same person at different times. There I would disagree, because I am following what Husserl says, which is that there is an enduring core to the experience even if the variations shift. I do not think that the altar is a different altar if you see it in shadow and then you see it in sunlight. I think it is the same altar seen according to different accidental permutations. There might be certain times when the altar changes so much that you have to speak of it as a different thing entirely. There might be some experiences where something bad happens to you in a city such that it is no longer the same city for you, a certain line is crossed so that you cannot bear to go to London anymore because something horrible happened while you were there. I can see that happening in such a way that it would not really be the same city. Short of some major threshold being crossed like that, London is the same city that I first visited in 1990, even though I am discovering different parts of it all the time.

Holm also offers a very subtle reflection on the question of whether or not objects have an unconscious. I still want to think about that some more. It would sound crazy to say that fire or rock have an unconscious, so I guess I should say that it does not, but I want to think about it a bit more.

Holm does try to map my terms 'real' and 'sensual' onto Lacanian terminology – Lacan is a major figure for Holm. He identifies my 'sensual' with Lacan's imaginary and symbolic and then draws a different distinction between Lacan's real and my real objects. His argument is that when I call the real multiple, this is already an act of symbolization, whereas the real is that which resists symbolization entirely, and so presumably cannot be called either one or many (just as Kant's thing-in-itself cannot). I do think we can encounter the real without symbolizing it. This has to do with my argument against German Idealism, with which Lacan is often lumped together, especially by Žižek. The German Idealist argument is that you cannot really talk about a thing-in-itself, apart from the fact that it resists our symbolization of it. I think you can talk about things non-discursively. You can hint and allude to them. I use the term 'allure' for this. It can point at something without being able to grasp it discursively, which I think is exactly what we do in things like poetry.

We have all these experiences when we allude to a reality without making it symbolically present, and in fact I think that Holm's altar is just such a case. When we approach the altar, we know there is something there that we cannot quite explain. It is not fully symbolized, it is not fully discursive, and yet we are in contact with something there that exceeds our grasp, though we sense it is there. It is not just some all-encompassing traumatic, unsymbolizable real. No, there is a specific experience of the altar that is different from my experience of seeing a starry sky – or seeing a monster, for that matter.

There are too many philosophers today who think that we cannot talk about the plurality of the real. All of them have some closer or further relation to Lacan, with Žižek being the best example. But there is also Badiou and his difference between the inconsistent and consistent multiplicities. He does not think we can say much about the non-discursive real, except insofar as it shocks and surprises us, insofar as something has been excluded from the count, such as when some uncounted group has been excluded from the political system, and there is a revolution. In the revolution, we realize we encounter the political properly, but you cannot really say anything about it until there is an event that exposes what was previously uncounted.

4.3 Lorens Holm Interview: Real Objects and Space

Joseph Bedford: What do you think about the relationship between philosophy and architecture in general?

Lorens Holm: Architects draw buildings, build buildings, use buildings and then write about them. We write about them to reorient them within their symbolic and material contexts, and to plot the path of their efficacy, as part of a continual process that critically rearranges our thinking on architecture. This is not correction, but work, psychical and physical work. Architects draw on philosophy and psychoanalysis in order to put buildings in relation to the human subject that inhabits them, because they are the two discourses that treat the human subject as a thinking and speaking being.

I am cautious of architectural design's responses to philosophy, particularly when those responses are formal. Deleuze and Guattari use the figure of the fold to describe a maximally deterritorialized space, a space articulated without thresholds or at least a space where the thresholds are always under negotiation and are encountered with the unexpected and unmediated necessity of the schizo. It is a diagram of the relationship of a subject to the world with its unexpected flows and contiguities, not the new *maison domino*. I am suspicious of the way that the diagram of the fold is interpreted so directly in architecture as folded forms, not because I do not enjoy the formal inventions of folded space but because I do not think that these projects speak about the kind of continuities that Deleuze and Guattari were talking about. I think, for instance, that the way Koolhaas programmed his La Villette competition project as a continuous strip cut to fit the site is much closer to the truth of Deleuze and Guattari than the work published in Lynn's *Folding in Architecture*. A similar thing happened with Derrida. Deconstruction as a philosophical practice is about pursuing the

unacknowledged discontinuities in texts. What should function as a detail turns out to do the opposite: instead of joining texts up, it fractures them. The deconstructive reading of texts leads to what Derrida called *aporia*, a condition of undecidability. Although Eisenman recognized the textual dimension in his work, most architectural responses to deconstruction involved an aesthetic of fracturing, which does not seem to me to have a lot to do with the conceptual abyss of *aporia*.

◄ **Graham Harman:** *While these may be misreadings of Deleuze and Derrida, they do not bother me much. Philosophers do not know how to design or build, and so any contribution we might make will have to be heavily translated to become useful. However, it does seem to me that a great deal of contemporary architecture is based on correct readings of Deleuze, and I have the same objections to this that I do to Deleuze's philosophy more generally (though I do not dislike it).*

Lorens Holm: The question is, is the relationship between architecture and philosophy about developing new architectural forms or is it about developing new ways to understand those forms and, in particular, their relation to the human subject, the speaking, thinking spatial subject? I doubt it is the former.

◄ **Graham Harman:** *I doubt it too. But there might still be an indirect contribution to form. If you have a lot of architects right now (and you do) speaking the language of uninterrupted flow, continuity with the environment, endless questions of context and a tendency to downplay thresholds and apertures, then object-oriented philosophy (which negates each of these principles) will necessarily prod you to think of new forms.*

Joseph Bedford: What do you think are the benefits of architects staying abreast of philosophical ideas at least, theoretical ideas within the culture? I ask this because you have found it valuable to read Lacan.

Lorens Holm: I am still trying to understand how my thinking on Lacan – or psychoanalytic theory generally – can be instrumentalized in architecture. Lacan's tripartite imaginary, symbolic and real registers of experience is a powerful tool for understanding our relationship to space, although I do not think we are going to see architects doing real spaces for a while.

◄ **Graham Harman:** *I assume this was just a witticism. But I would love to hear Holm speculate on what an architecture of Lacanian Real space might look like.*

Lorens Holm: Lacan insisted that we are fundamentally 'speaking beings'. Following Lacan, I want to argue that we are fundamentally 'spatial beings'. I want to argue that architecture is a symbolic practice that positions a subject and that subject is spatial. If the subject is a speaking being, then how is the subject also a spatial one? This is not simply the default mode of having a body. One of the ways to approach this question would be to look at the degree to which architecture is a discourse that insists that the speaking subject of analysis and the spatial subject of architecture are aligned with each

other in a problematic relation. It is important to be clear that this relation is a symbolic fact, not simply an anatomical one. There are consequences for the coincidence and/or non-coincidence of the speaking subject with the spatial subject.

Joseph Bedford: It would be good to clarify the term 'space'. In a casual parlance we think of the experiential, but you are obviously using it more in terms of conditions of possibilities, in a more ontological sense. Could you define it?

Lorens Holm: There is an experiential or perceptual aspect to space, but there is also a conceptual aspect to space – or a symbolic structure, such as Sigfried Giedion's three 'space conceptions': the Greek (positive), the Roman (void) and the Modern (inside-out). Giedion is close to this idea of space as a symbolic structure that makes certain things understandable, or accessible to thought and perception, and rules out others. He is interested in the way we conceptualize space by making architecture. In contrast to the view, presented by Peter Carl and Patrick Lynch, that regards space and its discourses as a reductive gesture that leads to a flattening of experience, or the flattening of 'world'. I would like to offer a conceptualization of space that views it as opening onto an unfathomable richness. Le Corbusier called it *indicibile*. It defines our being. My work is dedicated to deepening the mystery of space, which is the opposite of making it transparent to reason. Space is the surface out of which subjectivity emerges and to which it returns; in the way that non-sense is the surface from whence sense emerges and to which it returns. Modernism has left us with a rich heritage of space that has nothing to do with efficiency, function or profitability. The project of psychoanalysis and philosophy, at least for architecture, is to continue to develop that richness by working through the consequences of the many threads that bind space and subjectivity to each other. To my mind, space is inseparable from subjectivity. This cannot be said directly, it can only be alluded to, said in moments of protest that interrupt the discourse of others.

Joseph Bedford: In your contribution to the exchange, you said something else about space. You began to define it in terms of difference, as opposed to oneness. You almost made space and difference synonymous, suggesting that being spatial results from the fact that the world is made of lots of objects separated from each other.

Lorens Holm: That is space understood as a condition of possibility. The kernel of my critique of Harman is that you cannot have a world of objects, without space in which to individuate them.

> ◄ **Graham Harman:** *This sounds a lot like the Clarke/Newton defense of absolute space and time (as pure empty containers) against Leibniz's relational concept. Though I generally work against relations in my philosophy, I think Leibniz scores heavily in this debate – and of course it was Leibniz's position that eventually reached full flower in Einstein's. Since everything that exists must be individual and determinate, everything must be an object.*

Lorens Holm: Space is here the principle of difference that must precede the plural world of objects to make it possible. We are talking about the capacity to articulate difference, and how space plays this role. It is similar to what Derrida called *différance*, and he linked it to spacing. *Différance* is not just about space but space is a part of it.

◄ **Graham Harman:** *The sad thing about Derrida is that he rules out the most interesting différance in advance: the inability of a given object to coincide completely with its real withdrawn core. For Derrida, of course, there is no such core, which is why différance for him is just a surface-play – a less rationalist version of Husserl that never comes to terms with the realist nucleus in Heidegger: withdrawal.*

Lorens Holm: I think that Harman needs space in his system in order to articulate his objects.

◄ **Graham Harman:** *Space is already in my system, as the gap between real objects and sensual qualities. The tension between these is the key to the aesthetic realm.*

Lorens Holm: Even Harman's diagrams are spatial, with circles and a line between them. Space here becomes the principle of difference that makes the plural world possible.

Joseph Bedford: Could it be said that Harman's discussion of space as a form of relation absorbs the idea of space? In *The Quadruple Object* Harman wrote, in respect of a visit to Osaka, that one is always in relation to Osaka whether one is in London or actually in Osaka itself. He wrote that even if you go to Osaka, you are still not really ever fully able to touch Osaka. You are still in a relation to it. So he does have an account that sounds similar to what you are saying about space as difference, but he just describes it in terms of distance and proximity with respect to an object whose centre, or whose essence, always withdraws.

Lorens Holm: Two things. I had the sense in our conversations that Harman and I were simply using different words to grapple with similar questions. If his argument needs a strong notion of difference, then it seems like there is an overlap. But when he argues that 'there is nothing but objects', it seems very reductive. It's not that you need a container to put your objects in, but you need some way to account for the relations between them such that you have more than one. That is where space enters in.

◄ **Graham Harman:** *Bedford's explanation in the next question is the right one: for me, the relation between two objects occurs on the interior of another object. Will it help make objects sound less reductive if I emphasize that objects have nothing to do with physicality, durability, eternity or otherworldliness? An object is simply that which cannot be reduced downward to its pieces or upward to its effects. In this sense, objects are the least reductive things imaginable.*

Lorens Holm: His anecdote about Osaka confirms in my mind the ineluctable spatiality of the world. The world cannot be a lump of tessellated objects, all edges contiguous and not moving. I disagree with his idea that the relation *to* an object is just an internal relation *of* an object. When Harman talks about the real qualities of the object, it seems that he wants to say the object has a relation to its qualities and that there is a distance between the object and its qualities. This sounds to me like an internal relation within the object, as opposed to a relation between two objects. One

of the questions I have about his philosophy is: Does Harman distinguish between internal and external relations with the object?

◄ **Graham Harman:** *Internal and external relations both have a technical sense in philosophy, and in this technical sense my philosophy is all about external relations, meaning that objects are not essentially related to each other. But Holm seems to mean something different here: do I allow for relations between objects along with relations between objects and their own qualities. The answer is yes.*

Lorens Holm: And how can the relation between two objects be entirely understood as an internal relation within the object?

Joseph Bedford: Harman has said somewhere that the relations between two objects are internal to another object.

◄ **Graham Harman:** *Right. That's it.*

Joseph Bedford: They are, as it were, on the inside of an object. A husband and a wife are on the inside of the object that is 'their marriage', so the relation itself becomes a meta-object, of which any two relata are inside. So yes it is all objects.

Lorens Holm: The relation between a husband and wife may be internal to their marriage but it is not internal to them. When marriage can be an object containing a relation between husband and wife, then Harman is willing to contemplate that things can be objects simply by virtue of occupying the object position in a grammatical structure.

◄ **Graham Harman:** *It is not about a grammatical structure. It is about the fact that the marriage is a real object over and above to the two people who are in it. It affects them just as they affect it and might well leave it.*

Lorens Holm: One of the lessons of psychoanalytic theory is that for a subject, anything can be an object. But more to the point, I do not understand why Harman's ontology cannot have both kinds of things: objects and space. Who said the world cannot be heterogeneous? For Harman, something is at stake with having a homogenous ontology, but I do not know what that is.

◄ **Graham Harman:** *There are actually four kinds of things in my ontology: Real objects, real qualities, sensual objects, and sensual qualities, which can interact in up to ten possible ways. I do not see the need to add 'space' as an independent term. Anything that exists is both individual and determinate, and if that holds for space, then space itself is an object, with no need to invent a separate category for it.*

Lorens Holm: I do not think that Heidegger was that reductive.

◄ **Graham Harman:** *I am not sure that Heidegger is any less reductive. We find him mentioning all kinds of technologies (the atomic bomb, gas chambers in the concentration camps, mechanized farming) that get lumped together as forms of an*

'ontic' forgetting of Being underway since ancient Greece. It is a very deep philosophy, but not a very pluralistic one, to say the least.

Joseph Bedford: You also spoke in your contribution about a special link between the subject and space. Can you say why the subject and space are specially linked, in contrast to the object having a special relation to space. Why is space a matter of subjectivity? That seems to be another point where you and Harman differ.

Lorens Holm: This question goes back to the idea of space conceptions, and to Lacan's three registers of experience: the symbolic, imaginary and real. These are not precise categories, more like a tripartite armature for thinking through relations. Thus there are a number of ways of articulating what real space might be. In the present context it could be this idea of space as the pre-condition for the plural world of objects. This space is real because it constitutes a limit to the plural world.

◄ **Graham Harman:** *Do we ever find this sense of the Real in Lacan without a human Subject being involved?*

Lorens Holm: Imaginary space is space as perceived, because perception is internal to the perceiver – a private matter – until he or she symbolizes it to represent it to others. Giedion's three space conceptions are forms of symbolic space. They are different ways that subjects constitute the world and represent the world and their relations to it. Paradoxically, although subjects produce concepts, the symbolic system produces subjects. There is no sense to the idea of a subject without a symbolic system, including symbols and syntax, to position it. It seems to me that subjects are representation machines. They use space conceptions to represent things to themselves and to other subjects. I am different from a rock because I am a representation machine. I live in a world of symbols and a rock does not. A rock may be next to another rock, but it does not represent itself as such, to itself or to others.

◄ **Graham Harman:** *This is probably true. The question is whether this leads to an ontological difference between humans and everything else, or to a psychological/psychoanalytic difference between these two kingdoms that is too often mistaken for a basic philosophical rift?*

Lorens Holm: The question then becomes: to what extent is space necessary for representation to work? If I am going to represent a rock either to myself or to you, I must have a critical distance from it. I step back so I can view it, so to speak. Symbolic space attaches to the subject by definition, not to the rock. That does not mean that rocks do not have the spatiality of any object that is in space and has spatial relations which differentiate it from other rocks or other people. It just means they cannot represent it. Another question then would be: how does representation fit within Harman's ontology?

◄ **Graham Harman:** *It is hard to say right now, but at least I have problematized it. Too many philosophers (Žižek, Badiou, Meillassoux) assume that representation must be a sort of magic ontological event.*

Joseph Bedford: You illustrated the issue of representation in your contribution by speaking about how architecture exhibits a tension between volume (or spatiality) and its flattening (or distance). You cited Colin Rowe's idea of phenomenal transparency in support of this. But if representation is about this tension, I wonder if this is not very close to Harman's ideas about how objects relate. Harman tries to speak of how objects have a kind of 'consciousness' of each other, or, as it were how they 'perceive' each other, insofar as they always only ever reduce each other to a few aspects and never fully grasp each other. So there is always a distance and I wonder if this would not be the issue of representation you are looking for. It is as if Harman wants to take the issue of representation away from the issue of consciousness though, to explain how representation is a project of the material world as well and not the subject exclusively.

Lorens Holm: If two rocks tumble down a slope and bash into each other, and there is a spark between them, with one rock 'perceiving' the other in one aspect, but not in all its aspects, before they roll their separate ways, is that a model for consciousness?

◄ **Graham Harman:** *No, and I have never claimed that it is. What I have claimed is that we first need to look deeper at what consciousness has in common with rocks bashing together. What they have in common is: relation, which differs absolutely from reality. The wrong thing to do is say: 'Hey, humans are so different from rocks that this difference needs to be the absolute foundation of philosophy.' No it does not, any more than the difference between hydrogen and helium deserves to be the foundation of philosophy.*

Lorens Holm: They may perceive each other, but they will never know it because they are not able to represent what they perceive. Is two rocks sparking off one another the model for what is happening here now between us? The question of the unconscious is more problematic. I have trouble understanding how a rock could have an unconscious since a rock is not subject to language or other symbolic systems of representation.

◄ **Graham Harman:** *The rock most likely does not have an unconscious. I toyed with the possibility in my first book, but cannot really bring myself to believe it.*

Lorens Holm: Are two rocks that spark off each other really like a language? I am not making an ontological claim here; I am just trying to define the unconscious. The unconscious is a language effect like a slip of the tongue. You need to have symbols and you need to be able to mistake one for the other. If you do not have language, you do not have an unconscious. The unconscious is not a shadowy object with an independent existence, a ghost in the house.

◄ **Graham Harman***: That is what Lacan says, anyway. But I am not sure that this idealist twist on psychoanalysis was the right way to go.*

Lorens Holm: The unconscious is an emergent quality of associative life, flooded by language. Would Harman countenance the idea that you can have emergent qualities of objects when they get into big groups?

◄ **Graham Harman:** *Yes I would.*

Joseph Bedford: In your contribution to the exchange you drew a diagram with two crossing axes and said that one axis is that of representation, and the other axis, which you claimed Harman does not account for, is that of the Real (in the Lacanian sense).

◄ **Graham Harman:** *A good question.*

Joseph Bedford: Can you say what the difference is between Harman's real and Lacan's Real? It seems that the difference is precisely to do with this question of the unconscious.

Lorens Holm: I find Harman's account of the object extraordinarily poetic. The idea that the object is always retreating behind its qualities is very moving. No encounter with the object ever fully exposes it in all its existence. He is the only person I know who says that.

◄ **Graham Harman:** *Thanks for the compliments. I suppose someone could say that Kant and Heidegger were already on to this, and Peter Gratton's book implies that I am taking it from alterity in Levinas. The chief difference from all these, I would say, is that for me it is not just about objects hiding from their encounters with us – they hide from each other as well.*

Lorens Holm: I can understand how you might then say that there must be a real object behind it, which is never reached. Harman says there is always something beyond any particular encounter I have with the object. Lacan says the real is what I miss in every encounter. Where they differ is in the position from which they speak. Lacan takes the subjective voice, Harman the objective. For Lacan, articulating the real is a way of marking the threshold beyond which we simply cannot go in perception or thought. We articulate the threshold from the inside. When Harman argues that the world is constituted only of objects, this world is not limited by his position. His claim is not limited by the system within which he articulates it. There is nothing that his voice and vision cannot reach.

◄ **Graham Harman:** *I would say the opposite: my voice and vision cannot reach anything at all!*

Lorens Holm: That is where I think Harman's ontology is problematic. Even cosmologists accept that there is something beyond this universe.

◄ **Graham Harman:** *I do not believe there is anything like consensus among cosmologists about this.*

Lorens Holm: I find it extraordinary that Harman is not willing to contemplate an outside to his ontology.

◄ **Graham Harman:** *Do not forget that my ontology is built of countless outsides: the outside of every object, which can never be reached directly, but only allusively or*

vicariously. How can such a philosophy be treated as less open to the outside than an idealist position like Lacan's?

Joseph Bedford: Is that 'outside' something that, from the perspective of the subject, is so incomprehensible that it is effectively a oneness prior to all differentiation? And is that oneness traumatic to human consciousness? In your contribution, you described the collapse of the World Trade Towers as a collapse back into one?

Lorens Holm: Yes, I was trying to imagine a loss of symbolic difference, the world becoming one stuff. I also wrote about it in *Perspecta 42: the real*.

Joseph Bedford: It seems like Harman's aim is to account for the real in its multiplicity, and his issue with Lacan is that the real is rendered as a traumatic return to the one.

◄ **Graham Harman:** *Yes. I think this is the key difference with Lacan.*

Lorens Holm: It depends whether you think that the world is a multiplicity or whether you think the world is only multiple because we have imposed distinctions upon it. Is there a difference between the one, the multiple, the continuum? Is it just two options – the one or the multiple? Or is there a third option, which is Deleuzian, that would be to say that everything is connected to everything else in a seamless continuum and what we bring to the world is the continuous process of territorializing it.

◄ **Graham Harman:** *The problem with the seamless continuum is that you cannot ever get true individuals from it. Despite all protests to the contrary, you will be led to the shapeless, indefinite mass that the pre-Socratics called apeiron.*

Lorens Holm: We cookie-cutter the world with our space conceptions to make it into a this or a that. To my knowledge, Lacan never claims that the real is one.

◄ **Graham Harman:** *Neither did Kant, since unity and plurality are categories of the human understanding and cannot be applied to the thing-in-itself. But this supposed agnosticism about one or many actually functions as a commitment to the one, since plurality is automatically treated as a surface-effect.*

Lorens Holm: The Lacanian real is a world where there are no distinctions, no articulated differences between subject and object, object and space. It poses epistemological problems. It might be a continuum, a soup, where differences are unstable.

Joseph Bedford: Is that why you used the World Trade Tower collapse as an example? Is it because from the point of view of subjects whose normative realities are always highly regulated and differentiated in a certain way, suddenly, all those differentiations were scrambled in one traumatic moment, and in that loss, everyone witnessed a glimpse of that which we cannot think, the outside?

Lorens Holm: Yes. There is nothing inherently traumatic about the World Trade Towers collapsing. So I ask myself, where is the trauma if not in the object? How can

you be so inhuman as to think that 3000 people dying is not traumatic? If the collapse of the Trade Towers was traumatic, it was because it gave us a vision of the possibility of something that totally wrecks our categories. Here is something which is supposed to articulate clear architectural categories of up and down, inside and outside, object and space, house and inhabitant, and the like – Deleuze and Guattari would say 'nicely striated' – and it turns into a lumpy grey cloud. It is traumatic because it shows us a vision of the end of the world.

◄ **Graham Harman:** *I would not read 9/11 that way. It was indeed traumatic, and led to compulsive re-watching. (I may have watched it fifty times in the first twenty-four hours, but never again since.) But the threat felt much more specific to me: not just to the United States, but to civilian life, to urban centers, to the countries of the Middle East. But never did it feel like all points were simultaneously under threat.*

Joseph Bedford: If we talk about objects relating to other objects and encountering a real within each other, then there are obviously no categories to be wrecked. If everything is an object encountering another object in a representational relationship without human categories, there would not be a trauma.

Lorens Holm: The object is already a category of thing, even if it is the only category in Harman's ontology. But rocks are not traumatized. Trauma is a failure of representation. Trauma is about the hard kernel of experience that remains unassimilated by our symbolic systems, the systems by which we represent experience. Hence, with the Trade Tower collapse, the representation machine went into overdrive. We played it over and over, never got enough, never got to the bottom of its meaning or significance.

Joseph Bedford: In Harman's response to your contribution to the exchange he made a bold statement about his difference with Lacan (and with Žižek) that one can encounter the real without symbolization. Harman said that we *can* relate to the real without it being traumatic. We simply allude to it, we hint at it. The relation to the world is not that problematic, he claimed.

Lorens Holm: It depends what you mean by encounter. In Lacan, you encounter the real like a bump on the head; it keeps repeating because it remains unassimilated. There are symbolic, imaginary and real aspects to every experience of the object. There is a real aspect to this conversation. It is probably why you keep asking me the same question, and I keep not answering it. It is not like there are some things which are real and too hot to handle, and then all the other things which aren't, which get chucked in the symbolic and imaginary bins. There is something in the object which is always withheld, in any encounter. And yes, we can allude to it. We glimpsed it in the Trade Tower collapse. But there is also something beyond objects. The idea of the object already brings with it symbolic baggage. This may not be too different from Harman's understanding of the real.

◄ **Graham Harman:** *Again, this is only true if one accepts Lacan's account. I have tried to give philosophical arguments for why we cannot dispense with the concept of the object, and for why there must be objects at sub-symbolic level.*

Lorens Holm: I never exhaust the qualities of this cup. Likewise, we never exhausted the possibilities of the Trade Tower collapse. We stopped watching because fatigue set in, not because we 'got it'.

Maybe instead of trying to understand how Harman and Lacan are different, we should try to understand how they are on the same team, and look at how they can interact and support each other, or how they could agree to disagree on certain things. For instance, one of Harman's lesson to Lacan might be to open up the possibilities for understanding the real. The real might not necessarily be the end of days, the end of the world of objects and the distinctions upon which they depend for their intelligibility. It may be that the real can also reside in objects. Harman might draw from Lacan a more nuanced ontology that takes better account of that special object, the subject.

Harman takes us out of this gluey world of subjectivity. I like objects too. People are a pain in the arse usually, so it is refreshing to think that when you design stuff, your first allegiance is to the objects you are designing rather than the people who are going to use them. It is refreshing for an architecture and planning discourse that is way too dominated by users and their needs, and its corollaries like place and place-making. I am thinking of Tschumi's image of someone falling out of a building, titled, 'to really appreciate architecture, you may even need to commit a murder'. That image is a good antidote to the discourse of users, which is really clogging up the thought tubes. It might lead to a better world. Because if you could understand your allegiance to objects, the ones you are designing for and the ones you are making, and find the integrity of your work in the contemplation of the object as opposed to always having to go outside the object, looking over your shoulder to the user, we would probably have a more beautiful world, and more importantly, one that works better for users. There is far too much moralizing in architecture.

◄ **Graham Harman:** *The moralizing everywhere! Even politics threatens to become a branch of morality – not just architecture and art, where there is plenty of it.*

Lorens Holm: Harman seems to offer the possibility of thinking a world outside the gluey attachments of humanity, the moralizing, the fixation on progress. If Harman can hit us on the head, if he can be a wake-up call, that is a good thing. We need that. There is value in Harman's close attention to the object.

◄ **Graham Harman:** *And there is much value in Holm's subtlety and insight. I always had the sense that Holm and I were speaking the same language, even though the points of disagreement are abundant.*

Notes

1 Marc-Antoine Laugier, *An Essay on Architecture* (Los Angeles, CA: Hennessay & Ingalls, 1977); Andrea Pozzo, *Perspective in Architecture and Painting (Perspectiva Architectorum et Pictorum)* (New York: Dover, 1989).

2 Graham Harman, *The Quadruple Object* (Washington, DC and Winchester, UK: Zero Books, 2011). Harman sketches the case for the autonomy of objects in chapter 1 'Undermining and Overmining', pp. 7–19.

3 See Aldo Rossi, *Architecture of the City* (Cambridge, MA: MIT Press, 1982); and Bernard Tschumi, *The Manhattan Transcripts* (London: Academy Editions, 1994).

4 Cf. Harman's untitled presentation followed by discussion at the 'Speculative Realism: A One-Day Workshop', Goldsmiths College, April 2007, in Robin Mackay (ed.), *Collapse: Philosophical Research and Development Vol III* (Falmouth: Urbanomic, November 2007), pp. 367–388. Other presentations by Ray Brassier, Iain Hamilton Grant and Quentin Meillassoux. Cf. also *The Quadruple Object*, p. 114. Space is a 'tension' between the real object and its sensual qualities; time is a tension between the sensual object and sensual qualities.

5 See my text *Brunelleschi Lacan Le Corbusier: Architecture Space and the Construction of Subjectivity* (Abingdon, Oxon: Routledge, 2010).

6 For a discussion of the intentional object and its sensuous qualities, see Brentano's and subsequently Husserl's versions, cf. *The Quadruple Object*, pp. 21 and 24 respectively.

7 This is how the advertising image functions. Give me that Coke while I play beach volleyball, and I will be the man of my dreams to the woman of my dreams. Even my sweat will be as pure as the condensation dripping off the can. I won't say more here about this relation between advertising and space creation, except to point out that it is along these lines that we can understand how architecture intervenes in our desire. What makes me predisposed against a materialist architecture is simply that I do not think that the environmental problems facing our species will be solved by making better technology, but by intervening in our rampant desire, in changing what we want and how we want it. The way I see it, the interest in technology and the discourses of instrumentalization that attend it (including impact) are simply distractions from something much realer and more threatening: our capacity to desire ourselves into extinction.

8 Colin Rowe and Robert Slutzky, 'Transparency: Literal and Phenomenal', *Perspecta*, vol. 8 (1963), pp. 45–54.

9 Rosalind E. Krauss, 'Sculpture in the Expanded Field', *October*, vol. 8 (Spring 1979). Cf. also Krauss, *The Optical Unconscious* (Cambridge, MA: MIT Press, 1993). Lacan uses it for his Schema L and Schema R diagrams, for which, see 'On a Question Preliminary to Any Possible Treatment of Psychosis' (1958) in Lacan, *Ecrits* (New York: W. W. Norton, 2006), pp. 458 and 462.

10 Immanuel Kant, *Critique of Pure Reason* (London: Macmillan, 1929) trans. by Norman Kemp Smith. Cf. 'Transcendental Doctrine of Elements, First Part: Transcendental Aesthetic, Section 1: Space' (pp. 67–74), and 'Section 2: Time' (pp. 74–91), in which he determines that space and time are forms of intuition, and not objects of intuition, and defines the *thing-in-itself* as an *a priori* object of which space and time are not properties. 'Space is not an empirical concept which has been derived from outer experiences' (p. 68). 'Space is a necessary *a priori* representation' (p. 68). 'Space does not represent any property of things in themselves, nor does it represent them in their relation to one another' (p. 71). 'Space is nothing but the form of all appearances of outer sense' (p. 71). 'Time is not an empirical concept that has been derived from any experience' (p. 74). 'Time is a necessary representation that underlies all intuitions' (pp. 74–75) and so on.

11 A number of contemporary projects may also allude to this impossible objectless world: in Rachel Whiteread's *House* (London: Tower Hamlets, 1993), interior space is stripped of its cladding and becomes an object; in the photographs of Koolhaas' CCTV Headquarters Building under construction, interior space appears solid with steel structure. As luck would have it, the Polish Pavilion at the Venice Biennale 2014 is called 'Impossible Objects'. Cf. http://www.labiennale.art.pl/Accessed 15 July 2019.

12 See my 'Psychosis or the Ineffable Space of Modernism', *Journal of Architecture*, vol. 18, no. 3 (2013), pp. 402–424. As hallucinogenic as it may seem, Le Corbusier's ineffable space is closer to reality, for walls do not really converge and objects do not really get smaller as they get farther away from us. And it really is full of energy and motion.

13 The distinction between the axis of representation and the real axis corresponds to Lacan's distinction between what Lacan regards as experienced reality comprised of the imaginary and symbolic orders and the real which constitutes an absolute outside to experience. The imaginary order corresponds to sense perception and hence images; the symbolic to symbolization, to thought and concept. Think of the world of experience as a continuous surface (imaginary) articulated by thresholds (symbolic). The qualities of this surface may vary, but it streams continuously, the way day streams into night (for which see Jacques Lacan, *The Seminar of Jacques Lacan: The Psychoses* (New York: W. W. Norton, 1997), pp. 148–149). The threshold between day and night is imposed upon experience to make sense of it. The real cannot be witnessed, or if witnessed, not shared with either yourself or others, because in order to share it, it must be represented and this is precisely what the real resists. It may be possible to glimpse, in the way that, if you whip around really quickly, you can catch a glimpse of death's head.

14 In psychoanalytic theory, one of the baby's originary experiences is separation from the mother's love, for which see Sigmund Freud, 'Three Essays on the Theory of Sexuality' (1905).

15 Harman writes: 'the withdrawn reality of any object' (42), 'the being of things lies veiled behind all theory and practice' (44), 'their reality is … deeper than all reciprocity [i.e. reciprocal relations of objects]' (47), 'the real object that withdraws from all experience, and the sensuous object that exists only in experience' (49), the 'categorical intuition [of real qualities] requires an oblique … access to reality' (53), the 'subterranean reality' of objects (54). All page references from *The Quadruple Object*.

16 Ibid., pp. 35–40.

17 Cf. *The Quadruple Object* chapter 3 'Real Objects', pp. 35–50.

18 We could record this in an equation: Subject = object + spatial media. Harman does not seem to distinguish symbolic effects like representation from material effects like burning.

19 This contingency may be what Plato was trying to capture by his image of creation as a threshing floor, something that goes back and forth, the threshing of creation, it could be this, it could be that, nothing is fixed except the lack of fixture. Cf. the discussion of Chora in Plato, *Timaeus and Critias* (London: Penguin Classics, 2008).

5

Jonathan Hale

5.1 Jonathan Hale, Buildings as Objects and Buildings as 'Tool-Beings'

As a counter-argument to the notion of buildings-as-objects put forward by Graham Harman, in this chapter I try to defend the contrary view that buildings are in fact more usefully conceptualized as 'tool-beings'. The latter term was developed by Harman from the work of one of his early philosophical heroes, Martin Heidegger, but quickly dispensed with as part of his larger critique of the limitations of mainstream philosophy. My interest in this debate stems from a nagging doubt about the usefulness of Harman's so-called object-oriented ontology, or 'OOO' ('Triple O'), and likewise about its potential contribution to architectural theory.

Curiously, the enthusiastic uptake of Harman's ideas by a number of architectural designers, writers and educators – not to mention Harman's own initial engagement with architecture – might perhaps be due to a simple misunderstanding about the meaning of this ambiguous new terminology. In architecture the term 'object-oriented' typically refers to a type of computer-aided design software, one that allows the construction of representations of buildings by assembling three-dimensional modules. There is therefore no obvious overlap with the meaning of 'object-oriented philosophy', but this hasn't prevented some useful intellectual exchanges between architects and philosophers. Having said that, for those of us who have been around long enough to remember, this is a clear echo of what took place in architecture schools in the decade from the late 1980s to the late 1990s – a similar conflation of meanings between two similar sounding terms: philosophical 'Deconstruction' and 'Deconstructivism' in architecture. Few people – at least within architecture – seemed willing to ask the obvious question: What did a nostalgic revival of Soviet 'Constructivist' aesthetics from the 1920s have to do with Jacques Derrida's subtle and complex probing of the ambiguities inherent in philosophical language and logic?

Notwithstanding these misgivings, it seems that there is still something useful to be gained from further exploration of this interdisciplinary dialogue. If a new philosophy of objects can tell us something about what kind of objects buildings are, then perhaps by considering our relationships with architecture, we can also reveal something useful about the strengths and limits of 'OOO'.

Indicative of Harman's interest is the paper 'Objects and Architecture',[1] where he quotes from an essay by David Ruy entitled 'Returning to (Strange) Objects':

> 'The grand finale of architecture's movement from object to field may very well be the collapse of the architectural object into a field of relations that then dissolves into a general ecological field of relations that constitutes the world.' To counter this trend, 'there must always be something about the object that is in excess of its qualities and relations. There will always be some "dark nucleus of objects" … … The architectural object, like any object, would have that "dark nucleus" that cannot be exhausted by a list of its qualities'.[2]

Ruy seems to be claiming that if architecture becomes too 'relational', it begins to lose its own identity, becoming instead a kind of crossover point where landscape and urban planning meet interior design, or – even as he suggests here – simply a branch of environmental science or ecology. In other words, it gradually loses what for many people has been its traditional status as a maker of distinct and enduring objects, often dedicated to the greater glory of gods, dictators, battles and bankers, since at least as far back as Vitruvius.

For Harman, as an object-oriented philosopher, this trend is not something to be welcomed. After all, there can be few better examples than traditional buildings: identifiable chunks of physical stuff that have a habit of sticking around, sometimes long after their useful life has ended, while doggedly resisting periodic storms of rough weather and swings of public opinion. Harman's essay takes issue with what he sees as a recent tendency to attack the sheer permanence and fixity of these stubborn physical masses. Buildings are now increasingly seen as disposable commercial assets in our 'throwaway' society but are also apparently under siege from new approaches to design, based on, among other things, generative algorithms, parametric modelling and dynamic self-organizing systems; theoretical notions of flux, flow and continuous variation; and even socially driven strategies such as user-centred open-ended infrastructures.

In the essay 'Objects and Architecture' Harman also engaged directly with the work of architect Patrick Schumacher, specifically his two books on *The Autopoiesis of Architecture*,[3] which were largely inspired by the writings of the German sociologist Niklas Luhmann. Luhmann's central premise is that society is structured around systems of communication, an idea which tends to dissolve a three-dimensional building into an immaterial play of signifying surfaces. This would include the architectural drawings, the building itself and even the images and texts inspired by and commenting on it. Hence the real value of any of these signifying surfaces lies in what they communicate rather than what they are 'in themselves'.

Harman's response to this threat is twofold:

> First, rather than treating architecture as the art of framing and articulating social communications, we might view it in precisely the opposite way. Communication occurs only on the basis of non-communication; without distance and mutual opacity, the exchange of information would be unnecessary. Since there is even something a bit sinister about defining all entities by their place in the social grid, the task of the architect might be precisely to open up spaces of non-communication, surprise, and retreat.[4]

And, an argument against the now-familiar Deleuzian notion of 'smooth space', as well as the kind of free-form parametrically modelled architecture that Patrick Schumacher is well known for:

> Second, rather than calling for continuous differentiation, we might hope instead for a jagged or discontinuous sort. However locally justified it might be to eliminate straight lines, right angles, corners, and clear-cut zones, the structures built according to these principles do not blend into their surroundings like a spreading pool of liquid, but are generally striking or even obtrusive. The architectural object is no more continuous with its relations than is a rock with the window it shatters.[5]

Apart from giving a flavour of Harman's lively and vivid style of writing, the second of these two statements also goes some way towards answering the challenge of the first. Rather than 'disappearing' behind the network of social relations in which they are embedded – or simply being absorbed into their physical surroundings thanks to the fuzziness of their edges – the kind of free-flowing and curvilinear buildings that Harman is thinking of here are often so formally distinct from the buildings that surround them that they do often end up standing out like self-contained free-standing sculptures.

Between the Tool and the Broken Tool

More interestingly, Harman's first statement above implies that buildings only begin to be consciously noticed by their users during moments of 'incomprehension' or communication breakdown. This idea is also drawn from Heidegger's analysis of technology in his major work *Being and Time*, a key element of Harman's PhD thesis, which was later published in book form as *Tool-Being: Heidegger and the Metaphysics of Objects*.[6] He also offered a summary of this analysis in the essay 'Objects and Architecture':

> In his famous tool-analysis in *Being and Time*, Heidegger notes that for the most part, the things of the world are not present to consciousness. When using a drill, a fork, a telephone, or a road, we do not focus on these items, but on some ulterior purpose for which they are employed. The things themselves tend to *withdraw* from view, except in those rare cases when they malfunction. There is thus a constant reversal between the tool and the broken tool, with the former remaining veiled or concealed and the latter becoming present in consciousness.[7]

Harman then proceeds to focus on the idea that all objects 'withdraw' from our perception, even those that we are most closely engaged with like our own clothing, everyday equipment and personal spaces. But this seems to me to be a curious place to begin trying to build a philosophy of objects as they exist beyond all human experience. This is partly because the kind of withdrawal-in-use that Heidegger was describing is a very particular kind of withdrawal and is therefore not applicable to the broader class of things to which we have no direct connection. And also partly because

it may perhaps not even be possible to say anything at all about objects as they are 'in themselves', other than the simple statement that they are inherently withdrawn.

This second point I will return to briefly in the concluding section below, but for now, I want to focus on what I think is a key problem in this reading of Heidegger's account: it suggests an overly binary view of perception which I think misses a key aspect of the process of using tools. Heidegger's now-famous example described how a piece of equipment like a hammer can initially be approached in two ways: either we can pick it up and use it or we can contemplate it from a distance. When we pick up the hammer and use it, it becomes what Heidegger called 'ready-to-hand', the hammer is ready to be put to work, assuming that we know how to use it.[8] In the second case, what Heidegger described as 'present-at-hand', we simply stare at the hammer as an object – as we might with a work of art – trying to make sense of it by some kind of intellectual analysis. In this case Heidegger claimed that we will never uncover the true being of the hammer as a tool; we are simply confronted with a curious amalgam of wood and metal, perhaps deliberately shaped for some as yet unknown purpose.

Now the interesting thing about using the hammer, in the ready-to-hand relation, is that when we are skilfully deploying it as a tool, it begins to 'disappear from view'. It withdraws from our conscious perception as we concentrate instead on the task 'in hand' – our attention moves from the hammer towards the nail being driven into the wood. When everything is working well, we have no need to think about the hammer; instead, we can just enjoy the process of carrying out and completing the task. This process can continue until something interrupts our progress – if something goes wrong with the process of hammering and the nails stop disappearing into the wood. In this case, according to Harman's reading we immediately enter a state of breakdown – the hammer re-appears in our conscious perception when it refuses to do its job.[9] The problem with this kind of all-or-nothing account is that it assumes an instant transition from one state to the other, a kind of sudden gestalt switch between figure and background like we get with those optical illusions of faces and goblets. If that were really the case, then it seems to rule out any kind of transitional experience, such as we typically go through when learning to use an unfamiliar piece of equipment or when developing a new skill.

The other problem with Harman's 'on-off' explanation of the transition between the presence and withdrawal of the tool is the difficulty of accounting for other kinds of interruptions to the ongoing feeling of 'flow'. Heidegger also described a condition where the tool becomes 'un-ready-to-hand' – another category of the experience of objects that disappears in Harman's account. Heidegger set out three ways in which tools can be un-ready-to-hand, and I will address these briefly in reverse order, for the sake of my broader argument. The third example he called 'Obstinacy', which is where something gets in the way of us doing the job.[10] For example, it may turn out that we must first clear the workbench before we can begin the new activity, or perhaps we have to fix the tool that we need because we broke it the last time we used it.

The second case he called 'Obtrusiveness', where the tool required for the task is absent. For example, we set out to cut a piece of metal and the hacksaw has gone missing – it is simply not there where we thought we left it, hanging on its special hook. And finally the first category he called 'Conspicuousness', where the tool begins

to break down in use. This is where that gradual shift of perception – from withdrawal back into presence – begins to happen in the midst of performing the task:

> When we concern ourselves with something, the entities which are most closely ready-to-hand may be met as something unusable, not properly adapted for the use we have decided upon … We discover its unusability, however, not by looking at it and establishing its properties, but rather by the circumspection of the dealings in which we use it.[11]

The kind of circumspection that Heidegger refers to here – that special kind of perception that is both *of* an object and of a task *through* the object – is one that I suggest we can usefully look to the work of another philosopher to help explain: the French phenomenologist Maurice Merleau-Ponty (1908–61). Merleau-Ponty employed the term 'bodily (or "motor") intentionality' to describe just this kind of background perceptual awareness – a kind of withdrawal of the object from conscious attention while maintaining bodily control.[12] A clear case is that familiar experience of running on 'auto-pilot' that we often get while driving a car, where, for example, we have no need to make a conscious decision about putting our foot on the clutch; it just happens automatically as part of the process of changing gear. This kind of bodily grasp of an ongoing activity therefore provides a persistent background awareness, allowing us to monitor our performance of the task and to make sure that the tool is still 'on track'. Hence, without being fully aware of it, we can make continual ongoing adjustments, for example, to keep the saw blade from wandering off line, or to make sure that the hammerhead keeps hitting the nail.

Both Merleau-Ponty and the American philosopher Hubert Dreyfus describe this kind of background perception as part of our repertoire of bodily skills and abilities, ways of maintaining our peripheral awareness of the so-called withdrawn tool. Both philosophers also describe the tool becoming (literally) incorporated into an extended body-schema, a kind of prosthetic bodily extension through which to experience the world – as when a blind person uses a cane to navigate as an extension of their biological hand. So, I would argue, in case of tools and equipment, there is no 'total withdrawal' in the sense that Harman appears to be claiming, and perhaps instead there is a movement in two directions, both away from and towards us, simultaneously.

Dialectic of Withdrawal and Advance

A key point addressed by Harman in one of the passages quoted above is whether a building should be seen primarily as a means of communication rather than a thing in itself. He suggests instead that the very opacity of objects like buildings (and other people) is actually something to celebrate, as well as being one of the reasons why we originally created language. The idea being that our basic motivation to communicate emerges from our primal condition of incomprehension. However, having invented a means of describing the world based on social conventions and linguistic categories, it remains the case that language is far from a perfectly seamless conduit of clear and transparent meanings. Harman himself seems reluctant to engage in any detailed

analysis of language, determined as he is to focus on the problem of objects as they are 'in themselves'. As we have noted already, this leads him into a somewhat paradoxical project: an attempt to talk about precisely those aspects of objects that escape linguistic (or any other) description.

In contrast, I want to suggest that returning to language can shed some useful light on this problem, and to do this, I will refer again to the work of Merleau-Ponty, for whom language is also a paradigmatic case. One reason for this is that language can also be seen as a set of objects 'at large' in the world, with linguistic objects interacting with things, just as we interact with language. In other words, we should think of language as a category of physical stuff, whether it exists in the medium of sound or it is in the written form of graphic symbols.

For Merleau-Ponty language also has two modes of operation, although he would accept that there is no clear and absolute distinction between them.[13] The first one he called 'spoken speech' referring to conventional everyday language, where the intention of the speaker is to pass on factual information with the minimum of ambiguity. In this case we tend to stick to familiar 'tried and tested' formulations, although even the supposedly neutral languages of science and mathematics can still be open to uncertainty and misinterpretation. The second case he labelled 'speaking speech' to describe expressive or poetic language, which often works by deliberately playing with or distorting the conventional rules of speech. Poetic expressions and literary metaphors often confound conventional readings, and by interrupting the easy flow of interpretation, they can invite new meanings to emerge. This process involves a kind of disruption of the familiar links between *signifiers* and *signifieds*, where old expressions can be turned to new uses and new expressions can be assimilated into the old system. What Merleau-Ponty was describing is one of the familiar difficulties of understanding poetic or literary language – a kind of breakdown of comprehension which I would argue is analogous to the breakdown of the tool. I would also take issue with Merleau-Ponty's apparently binary distinction between spoken and speaking speech (as I did with Harman's opposition between 'tool and broken tool'), partly because I think that both are actually present in ordinary language and partly because this also highlights the intrinsic creativity in any act of speaking. To my mind, the linguistic model implies a kind of simultaneous double movement, a loss or withdrawal in Harman's terms, but also a significant gain.

To explain this, I would like to suggest that all language operates on a kind of 'deficit and surplus' model, meaning that in any act of communication, we always end up saying both less and more than we intended to say. In the first instance we say less in the sense that words can never fully capture the subtlety and richness of a unique moment of experience. Whatever fleeting impression we might have just had about an object encountered in experience, it will never be fully exhausted by our often clumsy and stumbling attempts to describe it. 'Words fail me' as we often say, or as the Olympic gold medal winner tends to say, when confronted with yet another request from a journalist to 'describe your emotions for me as you crossed the finishing line'.

In the second instance, we also end up saying much more than we intended, in the sense that all words inevitably carry with them a certain amount of linguistic 'baggage'. This is partly due to the process of collective agreement on the labelling of objects as belonging to types, where social conventions such as the naming of colours entail a

somewhat arbitrary division of a continuous spectrum. The other reason is that the use of language involves a form of *bricolage*, where the meaning of words gradually shifts over time according to the various contexts in which they are used. Language therefore embodies a kind of social or collective memory, with each word drawing behind it a comet's tail of associated meanings. It is this that gives language its capacity to surprise the hearer, even for the speaker as well as for the listener. As Merleau-Ponty suggests, in his essay on 'The Phenomenology of Language', 'my spoken words surprise me myself and teach me my thought'.[14]

Given this kind of mismatch or displacement between linguistic intention and realization, every act of communication must exist on the edge of meaning – on the boundary of sense and non-sense and always at risk of breaking down. So, we might therefore ask at this point, what is it that keeps our language 'on track' in any given situation? And what is it that allows us to continually monitor the effectiveness of our ongoing communication and to fine-tune it according to the demands of our audience? Well, I would argue that it is basically the same kind of monitoring that happens when we are in the process of using tools, what the philosopher Hubert Dreyfus called the process of 'skillful coping'.[15] It is this very special kind of 'withdrawal' of perception that I think Harman glosses over far too quickly, but where I believe there is still some unexplored potential. So rather than simply lamenting the fact that something is inevitably lost in our interaction with objects, we might instead prefer to celebrate the way in which additional meanings are also gained.

Conclusion – The Limits of Withdrawal

To sum up, there seem to be three ways in which objects could be said to withdraw from our conscious awareness: Firstly, by always transcending or exceeding any attempt we make to grasp them. In both cases considered above – perception and representation – we never reach what Harman likes to call the 'shadowy subterranean depths' of an object-in-itself. Secondly, by withdrawing into the background of our awareness when we are concerned with something else – that is becoming just another component of the 'lifeworld' of objects that forms the ever-present backdrop to our current activity. And thirdly, as the tool through which we are experiencing the world 'right now' in the fulfilment of a specific task. In this case the tool-object becomes an extension of the biological body as it recedes from conscious attention when we are focused instead on the task. This is the 'ready-to-hand' of Heidegger's tool analysis that remains constantly at risk of breakdown.

This third case is the one that seems most neglected in Harman's analysis, a serious omission because I think it confounds his binary reading of the 'tool and broken tool'. If we return to the example of the double movement of linguistic withdrawal and advance, I think we can usefully apply the 'deficit and surplus' model to the use of tools and buildings. Confronted with a composite of wood and metal and putting it to work 'as-a-hammer', we grasp it in a particular and partial way in both a physical and an intellectual sense. Of course, by taking it merely as a hammer – and 'caricaturing' it, in Harman's terms – we also inevitably miss out on many of its other possibilities as an object. But, once we have it ready-to-hand as a hammer, we also invoke and entail a new set of possibilities, uses

and meanings that are generally afforded only to 'hammer-like' objects. As the old saying goes: when you have a hammer in your hand, everything looks like a nail.

In spatial terms we might say that buildings also tend to resist unexpected uses, and if we try and take them 'as' something they were not designed to be, they begin to stand out in our perception like Heidegger's un-ready tool. If we manage to overcome this momentary obstinacy, obtrusiveness or conspicuousness, successfully re-appropriated spaces have the potential to take on new meanings. Further, if we take Heidegger's example of obstinacy where things seem to get in the way of the task, we could imagine a process of gradual modification enabling a space to accommodate new functions. To return to the language analogy, Merleau-Ponty also suggested a mechanism by which new language emerges, by pushing at the boundaries of accepted usage and opening up new expressions and new meanings:

> It is just this process of 'coherent deformation' of available significations which arranges them in a new sense and takes not only the hearers but the speaking subject as well through a decisive step.[16]

Perhaps this is the closest we can ever get to understanding objects as they are in themselves – by using them and re-using them, we continue to explore their inexhaustible depths. As for the search for a philosophy of objects as they exist outside of our experience, it may in the end turn out to be nothing more than a futile project. Even if we say we are talking about things-in-themselves in isolation from any human relations, the fact remains that it is us as human beings who are doing the talking, so we cannot in the end escape at least one of those human connections. We may be able to imagine that we could say something about an object outside of all its relations, but in reality we have simply placed the object back into a relationship with language. The very notion of thinking *about* something requires that we do it in a material medium, whether this is in the language of philosophy or poetry or in any of the 'languages' of art.

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5.2 Graham Harman's Response to Jonathan Hale

Hale makes the interesting criticism that my distinction between tool and broken tool is too binary. What he is trying to point out is that there is actually a gradation between background unconscious activity with things and implicit perception. He cites Dreyfus in support of his reading, but I happen not to like the Dreyfusian interpretation of Heidegger because I do not agree that Heidegger's tool-analysis is about the distinction between practical and theoretical activity. The reason I make the tool-analysis 'binary' is because I think there is no alternative. Either you are talking about the things themselves or you are talking about some relation to them. And yes, there is surely a gradation from unconscious contact with the thing up to a conscious theoretical deliberation about it. You could do a very subtle description of all those variations, but they would all still be on the same side of the fence: they would all be *relations* to

the things. Whether consciously theoretical or unconsciously practical, they are all relations that fail to exhaust the object, because for me the object itself withdraws from all relation. I do not think that Dreyfus is on the right track when he distinguishes between 'coping' and theoretical compartment.

Hale is also worried that I avoid the topic of language. I actually agree with Hale about the importance of poetic language. I am interested in poetic language *because* I do not think there is direct access to realities of any kind – I do not think mathematical or scientific discourse can give us direct access to the real. I think the real has to be known obliquely. We know this. It is not some new method. We all know that hinting is often a more powerful method of communicating than direct discourse. Sometimes you can ruin communication by being too explicit. Instead, you drop hints or insinuate because it is a more powerful means of communication. You can ruin jokes by explaining them, and the importance of jokes should not be underestimated. They have a very powerful, even physical effect on us. Laughter is one of the most important things in the world.

One of my least favourite examples is when Daniel Dennett attacks wine tasting in his essay 'Quining Qualia'. Dennett is always reducing things to scientific discourse. He talks about a wine taster who describes a specific wine as 'a flamboyant, velvety pinot, but lacking in stamina'. Dennett's attitude towards this is roughly 'Haha, isn't this the most ridiculous thing you have ever heard? How pretentious! What you should do is pour the wine into a machine, and it spits out a chemical formula: that is real wine tasting'. I do not think so. It is not only that we poor emotional human beings do not like the pure scientific formula coming out of the machine. It is more that Dennett's procedure does not even do justice to what the wine is. The wine cannot be undermined by its chemical formula, because the wine has a reality over and above this formula. Even if the wine needs those chemicals to be as it is, there is a reality to the discourse that wine tasters use.

So I do think poetic language is extremely important. In fact, I have been accused of overusing it. I think that this is the best communication that we have – oblique descriptions, metaphorical descriptions. There is a lot of cognitive power in these things; they are not just ornaments for clear, propositional scientific discourse.

Hale also questions my use of the term 'real qualities', because he asks: Would not these inevitably be relational? How can I *see* that a thing really has qualities apart from its relations? Well, if you just say that there is a liquid in a room and no one is in the room, then each of us comes in to the room and tastes it, we are probably all going to agree that it is cola, or wine, or water, which means that it is not just some indeterminate lump until someone comes and tastes it. There are primary qualities to the thing. It is just that we are not interacting with them yet. There is something about the interior of a watermelon that will make it red when human eyes see it, no matter what.

I think there are real qualities in Husserl because when we look at an object, an apple say, the surface qualities of the apple change a lot from second to second. But the apple also needs certain qualities that endure in order to make it an apple, and those are the real ones. Phenomenology is supposed to do the work of asking, when I look at this apple from every possible angle and distance and use it in every possible way, what are the qualities that remain over time and are absolutely essential?

Hale also worries that the sort of architecture that makes enduring objects has served the interests of bankers, dictators, the commemoration of violent battles and so forth. I would respond to this by saying that I am not sure it is ever a good thing to tether a politics to a specific ontology. In other words, it is completely false to say in advance that you are endorsing violence and patriarchy and slavery because you defend enduring things over fluid relations.

The best philosophies in history have been fairly indeterminate as to their political use: you get left and right Hegelians, left and right Nietzscheans, left and right Heideggarians and now even left Schmittians. Schmitt was imprisoned as a Nazi; he was more of a Nazi than Heidegger, yet he's now getting a lot of use from the left politically. Interesting thinkers tend to be that way. You tend to be able to pick them up and use them for very different purposes. But when an ontology is tethered too closely to a politics, I start to have the suspicion that the theoretical value is too wrapped up with the purported political use value. I have to confess this is still one of my worries about Badiou. Most of Badiou's followers have some sympathy with his Maoism. Until I start seeing right Badiouians, I am going to have some questions about how deep his theory really goes.

Hale also brings up an interesting paradox about parametricism, because in a couple of essays, I have criticized Patrick Schumacher's communicational view of architecture. The paradox is that the buildings that Schumacher helps to create are actually quite striking and obtrusive objects in just the way that goes well with my philosophy. So I am not criticizing the buildings of Zaha Hadid Architects (many of which I find quite exciting). I am criticizing Schumacher's theory that architecture is all about framing communications that he uses to justify them. I have said that I think such a theory based on communications is politically sinister because if we are nothing more than our communications, why would anything ever change? If the Egyptians were nothing more than their place in the Mubarak regime, why would there be a revolution? There has to be something held in reserve that is not reducible to the current context. Any kind of liberatory politics requires this.

Schumacher also refers to Luhmann as the heroic forerunner of his architectural theory. But Luhmann is not just about communication. Luhmann is equally about *non*-communication, about the opacity of systems to each other. Systems never understand each other. Luhmann is more my ally than he is Schumacher's.

5.3 Jonathan Hale Interview: In-between the Broken and the Unbroken

Jessica Reynolds: What would you say is the relationship between architecture and philosophy?

Jonathan Hale: I normally tell my students not to be only interested in ideas that they can immediately apply in studio. I do not think philosophy should be only 'design theory' for architects. Philosophy should be a way of helping us to talk, write, argue and make judgements about architecture. In my classes we study a series of philosophies as frameworks for interpretation and criticism, ways of talking, thinking and writing

about architecture. Students have to write an essay, in which they 'read' a building in a philosophically informed way. We also ask students to design a building that is philosophically informed in some way and ask them to write about that project.

Joseph Bedford: What philosophers do you discuss?

Jonathan Hale: We start off with the contrast of art and science, or art and engineering, looking at functional, utilitarian or instrumental approaches to buildings, looking at the Enlightenment and the rise of modern science, looking at Descartes, but also further back to the arguments between Plato and Aristotle about art and science. We look at Hegel on the history of architecture, and the limits of its capacity to symbolize, and the end of its role in the progress of knowledge. Then we turn to Phenomenology, Structuralism, Semiotics, Marxism and Critical Theory.

Jessica Reynolds: Are there specific buildings that you feel are particularly useful pedagogical tools to describe the relationship between philosophy and architecture?

Jonathan Hale: I look at Libeskind's Jewish Museum mainly from a phenomenological perspective. We talk about it both in terms of embodiment and meaning. Marxism and Critical Theory are often the most difficult ones because they tend to bypass a lot of what the building itself is and says, and take us straight to what is behind the building. The building tends to fall into the cracks between questions like: who is behind the project? who funded it? who uses it? etc.

Joseph Bedford: What do you think about the general trend in the humanities at the moment towards philosophies of the non-human, of 'material culture', of 'things', and 'objects', of which Harman's work is a part?

Jonathan Hale: It is really important that architects take more account of things like material agency.

> ◄ **Graham Harman:** *I am deeply suspicious of talk of material agency. Materialism tends to be idealism with a realist alibi. It claims to lead us away from the Cartesian Subject but simply gives that Subject a nonhuman partner while leaving it as the star of the show. The world has bigger fish to fry than to throw material obstacles in our paths.*

Jonathan Hale: Historically we have not been very good at dealing with the agency of other human actors. Maybe we have been slightly better at dealing with processes of weathering, ageing and conservation, which involve the impact of both human and non-human agencies. Jeremy Till and Jonathan Hill have been doing that in really interesting ways. The only danger in this is if we move too far away from the agency of the human because we have become fixated on material agency.

> ◄ **Graham Harman:** *Object-oriented philosophy does not mean privileging non-humans over humans. It means treating them both in the same way ontologically, not politically. Humans will always remain central in the sense that we are humans and very interested in our own fate. It does not follow that the world is nothing more than what meets the human eye.*

Jonathan Hale: There are some interesting examples, in the area of digital design, of people almost managing to take the human completely out of the design process, to automate it and, as it were, to offload the decision-making. Setting up a generative programme to spit out a solution can be a cop-out. If it does not come out right you can just blame the machine. I am exaggerating but there is something in that.

There is a history to this kind of automatic design work: for example, the process art in the 1960s using various machine techniques or the Surrealists tapping into the subconscious. It is a good way of throwing up possibilities but how do we decide which possibility is good? Who will decide? Will there be another machine that will decide? In the traditional design process where you explore through sketching and modelling, there is this constant cycling between generation, critique and assessment. We decide which parts work and which do not. My concern, or question, regarding the shift to the non-human would be to ask how important human input is in the design process.

Joseph Bedford: Object-oriented programming appears to be an effort to try and copy the kind of emergent behaviour seen in things like ant hills by giving autonomy to all the different parts of the programme, letting them interact in a more complex environment and hoping that some kind of higher 'intelligence' will emerge from the interaction of the parts.

Jonathan Hale: I think there is a place for this kind of computation within a range of actors, the human being one of them. Especially if you work with a system or an ecology that is more complex than a designer can possibly grasp. I would like to think of such tools as a prosthetic extension of the designer's ability to deal with a range of variables and generate alternatives.

Jessica Reynolds: Turning to the question of whether there is an object-oriented approach to Architecture, what is your response to Harman's ideas about objects?

Jonathan Hale: I particularly enjoy the fact that in Harman's philosophy, his objects are not limited to a physical entity but include things like events, gatherings of people, contracts, arrangements, social conventions, habits, patterns of dress, fictions etc. This helps architects to counteract the tendency they have to fixate on the form of the building as a static object.

◀ **Graham Harman:** *Bravo! This is a key point that many have overlooked.*

Jonathan Hale: Object-oriented philosophy sounds like it is just another excuse to fixate on the object again. Someone might react by saying: 'We don't need to read it; we just need to know there is a school of philosophy about objects.' But if you broaden the definition of objects to include things that are not fixed and you include things like transient happenings as momentary objects, I think that an object-oriented approach becomes really interesting. I would question, however, whether the experience of things can really be classed as an object, given that each time we experience something it is a unique thing. The object would be slightly different, however minimally, for every encounter. I think that the more transient the object becomes in the way we define it, the more interesting it becomes.

◀ **Graham Harman:** *We can always define it in different ways, and in fact we do. This does not make it a different object every time we encounter it. The most impressive thing about Edmund Husserl, in my reading, is the way he grasped the underlying similarity of objects amidst the vastest changes in its location, position, and surface-qualities.*

Joseph Bedford: I recall that in your contribution to the exchange, you raised the question: 'How do we begin to categorize objects?' The fact that *everything* is an object leads one to ask whether there are different kinds of objects.

Jonathan Hale: I would link this question to the linguistic description of things as a form of classification. It relates to what Harman, following Heidegger, calls the 'as' structure of experience. When I experience something, I have to experience it *as* something. In order for it to show up, it needs to fit with some kind of expectation that I have of things in certain situations. If I am in an architect's office I expect to see computers. Thirty years ago I would have expected to see drawing boards. I need categories for something to appear. It is because I have already experienced things like an architect's office before that I can experience *this* architect's office now. Even though this office could have very recently been a meat-packing yard, or something that looks very un-office-like, I immediately experience it as an architect's office because I have arrived knowing it is an architect's office.

This was one of the points I was making in my contribution in terms of linguistic objects. When I describe something in language, I am finding a word that I think more or less matches a particular category of object. This is a computer. This is a table. This is a hammer. But such names are only one way of describing those things. The computer could be for playing quizzes on. The table could be for sleeping on. The hammer could be for propping the door open. I take something *as* something because I have a purpose in mind. I am going to use it *as* something in particular, but in doing so, I obviously miss out all the other properties that it has. Categorization is unavoidable, but it is also problematic. As soon as we pigeonhole something, we have cut it off from something else it could do, at least for a moment. In linguistic terms I would say that as soon as I have described this thing in this way, I have cut it off for the moment from other ways of describing it.

◀ **Graham Harman:** *This is right. And language is one of the primary ways that we carve things up. My primary aim here is simply to argue that things are also carved up in their own ways ahead of time. We cannot have a conception of a formless dough that can be arbitrarily sliced up by language.*

Joseph Bedford: By language you also seem to mean a kind of collective field of people who use the language and share those normative categorizations'. In this sense the *as* structure is something that evolves over time and has a community and a history.

Jonathan Hale: That is the key point with language. As soon as I want to describe something to someone, I have to draw on that pool of socially agreed conventions. If I do not, I will not be understood very well.

Jessica Reynolds: Would you say that these categorizations have a hierarchy or a structure to them?

Jonathan Hale: Yes, I think so. There are levels of clarity. When I discussed Merleau-Ponty's distinction of 'speaking' and 'spoken' speech in my contribution, I was trying to talk about that fine line where you put yourself at risk of being misunderstood or saying something meaningless, but you do so deliberately because you are trying to stretch what it's possible to say. Let's say something really unusual happened and you are trying to tell someone. You say 'you won't believe just what happened,' and people say 'that didn't sound very exciting.' This is because you are using these ready-made categories. So you might start playing with those categories in order to try to reach a more nuanced level of meaning.

In my contribution I mentioned something that I called the deficit and surplus model of language. The concept of deficit describes the way in which even the best words I can find to describe something never fully capture it, and language always falls short. That is the loss that language produces, but the gain–the bonus we get for using these ready-made, socially agreed conventions for describing things–is that when we use one word, it brings along with it the baggage of accumulated layers of historical meaning. That is what I would call surplus. Something always comes along that I do not fully intend because the listener will always be reminded of other stuff.

The same thing goes for the tool. I take a piece of wood and a piece of metal, and I use them as a hammer and hopefully it will do the job to knock in some nails. It is not a great hammer but it just about works. Maybe it does not quite fit the job, and it does not hammer very well, but there is a surplus that comes with this deficit. Once I have taken this thing as a hammer, I can then do some other things with it which I had not quite bargained for. When we take something *as* something, it releases some other possibilities.

◀ **Graham Harman:** *Yes, releases and also suppresses. It is easy for objects to become 'typecast'.*

Jessica Reynolds: Would it be possible to categorize some objects as having a higher deficit and lower surplus, and others with a lower deficit and higher surplus? And is this the difference between 'spoken' and 'speaking' speech?

Jonathan Hale: Yes, potentially. Merleau-Ponty describes 'speaking' speech as a more poetic or expressive use of language. It is the attempt to reduce the deficit by coherently deforming existing significations to get closer to something unique. This also reduces the surplus because speaking speech ends up being a new coinage that does not have historical baggage.

◀ **Graham Harman:** *Metaphor is also important. It is one of the best ways we have of conveying meaning that leaves a surplus beyond any literal statement we might make. Metaphor alludes to a reality deeper than any possible paraphrase of it in words.*

Jonathan Hale: On the other hand you could say that this kind of poetic language does have associations but they are made irrelevant, estranged or cut off. There is some

familiarity, but it is cut off by being used in a context where it does not make sense. The key thing is that, in speaking speech, words are opened up for re-appropriation of their meanings. I cannot just apply conventional meanings. The new context no longer allows a linear reading of information like a bus timetable. It involves a different pattern of reading. You have to go back over the words and link things in a non-linear way to start to build a new understanding. Joyce and Heidegger both do this. They forget the last one hundred years of meaning or what people think words mean today, and go back a thousand years or more to see what they used to mean, to expropriate their surplus. Merleau-Ponty would see the deformation of present meanings can be a part of the rediscovery of broader historical meanings.

Joseph Bedford: It seems like there is an affinity between the way that you are discussing the struggle to try to get at something you want to say and the way Harman discusses the relation between sensual and real qualities and sensual and real objects.

Jessica Reynolds: Yes, though language depends on the context within which it is spoken to give it its nuances. Language is always part of a situation and tradition. Harman mostly describes the internal composition of objects. There does not seem to be an outside of an object per se, so much as another object which one is on the inside of. I would like to know whether you think it is possible to talk about the inside and outside of an object from a linguistic perspective as well?

◀ **Graham Harman:** *Merleau-Ponty at his best is a master of language and has written some of the best sentences in the past century of Continental philosophy. Nonetheless, I do not find his ontology to be as novel or futuristic as many assume. He tells us that the world looks at us just as we look at it, but this is the sort of 'materialism' that counters the central role of the Subject by binding it to an object. What about object-object relations? Why must a human always be part of the equation? This is the Kantian legacy that we have not yet overcome.*

Jonathan Hale: You could probably say a similar thing in Merleau-Ponty's terms as well, though. Merleau-ponty describes objects as having an inner horizon and an outer horizon. The outer horizon is the background context (or world) against which things stand out and from which they draw meaning. The inner horizon of the object is something grasped but never fully perceived. It is that inexhaustible set of aspects of an object that can never be fully experienced no matter how many times I encounter it, but which I nonetheless still have a grasp, of somehow.

Joseph Bedford: Harman's point in reading Heidegger's as-structure is that you can apply it to object-object relations as much as to human-object relations. When this mug makes contact with the table, it only senses one aspect of the table and the two objects mutually withdraw from one another. It does not require a discussion in terms of language. It just takes place between objects. But it is still the as-structure. The mug takes the table as something to support itself at a certain height above the floor. And in doing so, it does *not* take the table as a heavy mass crashing into it and knocking its handle off.

Jessica Reynolds: And when the mug encounters the table, they form a new object together.

Jonathan Hale: But then I would have to ask: for whom or for what? In relation to the floor or the room? The table also takes the floor *as* something at the same moment as it takes the mug as something. It is busy holding itself upright from the ground as much as holding up the mug. So you can carry on in this way. There is a whole series of such objects and sub-objects that are in relation with each other.

◄ **Graham Harman:** *This is true. There are a great many objects amongst us, though something is not necessarily a real object just because someone says it is. In order to be a real object, it must be irreducible both downward to its components and upward to its effects.*

Jonathan Hale: I am puzzled by Harman's fourfold structure. I struggle with the fourth element of it, in particular. I understand the first distinction between sensory objects and sensory qualities: we can describe something that we experience as having certain sensory qualities, yet someone else can experience different sensory qualities without the sensory object changing. Then he says that it is possible to go beyond what the object means to humans and speak about what endures about the object *in itself* independent of our experiences of it. That is what he describes as the real object. But when you have moved to speak about this thing called the real object, you have removed the sensory object and its sensory qualities. What I do not follow in Harman's philosophy is how it divides up the real object into real qualities.

◄ **Graham Harman:** *The real qualities are in my philosophy because of what Leibniz said about monads: though simple unities, they must each have a multitude of qualities. Otherwise, the lower layer of the cosmos would be nothing but a bunch of interchangeable 'bare particulars' (as analytic philosophers call them) that gained particularity only through their surface qualities. For hammers and shoes to exist outside the mind, they each must have their own particular qualities. Real qualities can be split from each other, in the sense that different causal agents have different impacts on them, because they are interacting with different qualities.*

Jonathan Hale: I cannot see how you can describe this real object given that it has separate real qualities. Whatever real qualities it has, it seems to me that the real object has to have all of them, if they are real and not just sensed. I cannot see how logically you could split them up again and not end up in the sensory realm.

Joseph Bedford: Harman has tried to illustrate this using the example of fire burning cotton. The real quality of the cotton could be 'flammability', and the real quality of fire could be, say, '4000 Kelvin'. So when the fire and the cotton meet, these real qualities sense each other, along the lines of the as-structure. The fire takes the cotton as flammable (rather than as white and fluffy) and the cotton takes the fire as very hot (rather than as orangey-blue and flickering) and they burst into flame.

Jonathan Hale: I would not call flammability and 4000 Kelvin real qualities, because they are difficult to define except in relation to something else. This is the problem you get with any scientific description that claims to be neutral yet is always measured relative to something else. When we say the hot object takes the cotton as flammable and the cotton takes the fire as a source of combustion, we are in a relational as-structure, because one is sensitive to the other. Any attempt to make that kind of analysis brings us back in to the realm of sensory qualities – sensory for objects as much as for humans.

◄ **Graham Harman:** *There is admittedly a problem with giving any examples of real qualities, because that tends to turn the qualities into sensual qualities. But it is less cumbersome to do that than to say things like 'that occult property in the fire that translates in the presence of instruments into what is known as 4000 degrees Kelvin'.*

Joseph Bedford: Harman suggests the whiteness of the cotton to be a real quality as well.

Jonathan Hale: When the cotton is burning, it forms a new object with the fire and it is not white anymore.

◄ **Graham Harman:** *The point is that when they go about forming a new object together, the white (or its pre-sensual precursor) is not taken into account. It is then fairly quickly destroyed, of course, but at the moment when the new object formed it still existed, but was simply irrelevant.*

Joseph Bedford: That is true but there could be some qualities of the cotton such as smell that do not interact with the 4000 kelvin, they only interact with the molecular linings of various human and animal nostrils. They are still real qualities, based on certain forms of the cotton's molecular structure, but they are just dormant. Do they not count as real qualities?

Jonathan Hale: Yes in a sense but I am saying that they are part of the real object that is cotton and whatever qualities the real object has, it needs *all* of them, and they all exist together as the thing called 'cotton'. I do not think we can separate these various qualities out because as soon as we separate them, we have to talk about the relation that activates them from their dormant state, and we are back to the realm of sensory qualities, sensory for someone or something that is sensing them.

◄ **Graham Harman:** *If I understand Hale correctly, he is claiming that real qualities are necessarily a single thing called 'cotton', and that separation between them can occur only in the sensual realm. But if that were the case, then there would be no real difference between the cotton's whiteness and its softness until we reach the sensual. But the fire truly interacts with only some of the cotton's qualities, not all of them. This separability of the qualities is not a mere illusion of the surface.*

Jonathan Hale: I am sure Harman can explain it better than I can follow it in *The Quadruple Object*, but I just could not follow that last step in the logic. To me it seemed a forced or rhetorical argument that comes from Harman's desire to repurpose the fourfold structure of Heidegger's philosophy, but maybe there is more in it than I have understood.

◀ **Graham Harman:** *It is certainly not forced as a reading of Heidegger, whatever one might think of its ultimate usefulness. The fourfold first appears in semi-cryptic form in his 1919 Lecture Course. It is clear that he reads Husserl in terms of a difference in intentional objects: the fire is both 'something specific' (fire) and 'something at all' (an entity). Then he doubles this up with a deeper version of the same dualism. It is the fourfold already, though not yet bearing that name. I do not think the dualism is quite right, but it is on the scent of the right one.*

Joseph Bedford: Let's bring in the question of tools and broken tools because this also relates to the as-structure. You critiqued Harman's reading of the tools and broken tool as too binary. Can you say a little bit more about your critique and how your turn to the issue of language moves us towards an intermediary realm between the binary of tool and broken tool?

Jonathan Hale: Harman's reading of the tool analysis in Heidegger seems to suggest that there is an immediate jump from one state to another. When the tool is working, it is withdrawn from me; I do not need to pay attention to it as long as it keeps working. When it breaks, it suddenly jumps back into my perception, no longer being a tool because it no longer does its job. There is a big gap in Harman's analysis, though. Most of our time is actually spent in between those two extremes.

◀ **Graham Harman:** *This is true if we take the distinction literally to mean a difference between unconscious and conscious relations to the hammer. Yes, it is hard to separate those two cleanly from one another. But that is why I say that Heidegger's tool-analysis cannot be read in such a way. Whether we lucidly gaze at the hammer or simply use it practically, in both cases we are relating to it. And when it comes to relationality, there is no halfway house: we can consider the thing either as related to us or as withdrawn into its own autonomous reality.*

Jonathan Hale: When I use a tool, I pay some kind of attention to it in order to make sure it keeps working. If I am completely distracted by something else, chances are I will mess up what I am doing. If I am cutting a piece of wood, for example, and I stop attending to it in some way, the line will start to wander. I will then suddenly remember what I am doing and concentrate again.

So the withdrawal of the tool into the background during use is not a total withdrawal.

◀ **Graham Harman:** *Again, it is admittedly not a total withdrawal if we think of the tool as part of a praxis. We have all sorts of peripheral semi-awareness of things going on around us. Indeed. But if we think of withdrawal as the genuine being of the thing,*

outside all its relations, then the withdrawal is total by definition: non-relationality and withdrawal are one and the same.

Jonathan Hale: It is withdrawal from conscious-directed intellectual awareness, yes, but there is this unconscious monitoring process. It is like when you ride a bike or drive a car. You use a set of habitual responses that can be attentive to the vehicle and yet deal with a range of other things happening in the environment. You can change gear with your foot going to the clutch without your full attention, and yet with enough attention that your foot does not miss the clutch or slip off it.

I think that Harman glosses over this in-between phase because he is interested primarily in this extreme point where objects are withdrawn from us.

◀ **Graham Harman:** *The real reason I gloss over the in-between state is that I am interested in the difference between relationality and non-relationality. I am not so interested in producing a taxonomy of the various degrees of conscious and unconscious awareness.*

Jonathan Hale: Maybe Heidegger also underplays this in-between state as well. Part of the reason for this is that Heidegger does not really deal with the body as a whole, or embodied experience. I turn to Merleau-Ponty instead here, who, I think, deals with bodily awareness and intentionality in a better way.

◀ **Graham Harman:** *Merleau-Ponty certainly does a lot more with the body than do I or most other philosophers. But that is because the distinction between body and intellect is not so decisive for me. Both are ways of relating to the world, but I am interested in the hidden non-relational thing.*

Jonathan Hale: It is there in Heidegger a little bit, but Harman glosses over it.

Glossing over the in-between-ness of bodily intentionality is not fatal for Harman's philosophy of objects, but it is a really important condition for architects to be aware of and to think about in order to understand what happens when we use buildings. A lot of what we do inside buildings operates on that level of relatively unconscious awareness. The things that we are more directly in contact with are like tools for engaging in a task, but the fabric of the building tends to fade further and further from our directed attention. That is something that architects have not been very good at dealing with, because we tend to want to imagine people walking around and staring at the building, enjoying the door handles. But people are happy that things should just sit there in the background, as long as they work. As long as you can shut the door behind you and keep the draft out, you do not need to stare at the door handle. That sense of the pragmatic engagement of the body with things does not really form part of Harman's philosophy.

◀ **Graham Harman:** *This is true. It is very important for architects to pay attention to this distinction, whereas I am focused on a completely different distinction – though it might not prove to be useless for architects either! Time will tell.*

Jessica Reynolds: Do you think this relates as well to the idea of objects for Harman being discrete and disconnected rather than part of an interconnected web of relations? The relations between his objects seem to be only the result of random juxtapositions, such as in his myth of the Ferris wheel in *Circus Philosophicus*.

Jonathan Hale: The Ferris wheel is a conceit. The whole circus metaphor is fantastic, but a circus is a very contrived environment with some very deliberate decisions about which odd things you are going to push into the tent and have collide with one another.

◄ **Graham Harman:** *The objects in the Ferris wheel are meant primarily to be entertaining, and that is why they take the form of random juxtapositions, as Reynolds puts it above. And yes, the interactions of the objects are kept artificially small in number, since most everyday situations are far more complicated. But I thought that simplification would help make the question of relations clearer.*

Jonathan Hale: I think that glosses over something as well. There is a sense of a pragmatic situational structure of the apparent meeting of things, but they are not human-structured situations in the way we would think of a work space specifically laid out for someone to use. When asteroids collide with each other, that happens in a very particular zone in space; there is a good set of reasons why asteroids collide with each other, it is not completely random and there is an incredibly precise set of things going on.

Joseph Bedford: But if you take out the human world in which we see from the vantage point of reason and understanding, and imagine from the perspective of the asteroids themselves, you could say that they would, as it were, 'understand themselves' to be colliding in a carnivalesque way – like clowns in a circus. Perhaps this is what Harman is trying to say?

Jonathan Hale: But the encounter is not chaotic. There are other forces at work, gravity, molecular genetics, DNA, surface tension on water, which order and structure a situation. There are patterns of order that are non-human and are not contrived for human purposes, but that act in the relation of objects.

◄ **Graham Harman:** *This is true, but in this respect the myth of the Ferris wheel is no different from a typical scientific experiment, which rarely has any resemblance to the complicated tangles of objects and forces that one finds in our world. Oversimplification is often a necessary tool of analysis, in so many different fields.*

Joseph Bedford: So is it that Harman's provocation to think objects outside of human involvement with them just is not that useful?

Jonathan Hale: While I do not think you could say that the object has a sense of its possibilities in the way that humans do, it does still have a range of possibilities in relation to the situation that it exists in. An asteroid can be orbiting around for millions of years. You could not say that it knows that one day, it will hit another asteroid. But because we have seen it happen before, we know that the life cycle of an asteroid has

a set of probabilities of things that it is more or less likely to do, given where it is in the night sky. I am not sure whether you could describe that as a kind of pragmatic field in terms similar to Heidegger's discussion of the human situation, but it is a set of possibilities. We cannot interrogate the object to find out it thinks about its possibilities, but we can draw conclusions about what its possibilities are.

Joseph Bedford: Yes. It is a kind of practical field, just one that lacks the element of human consciousness concerned with its own being that orients the field. You could say that his account of objects is just Heidegger's ontology without his theology.

Jonathan Hale: That is true. The field of the asteroid *is* still oriented, but just not around a consciousness of death. It is oriented, for example, by gravity.

Joseph Bedford: Let us turn to a topic that considers the implications for Harman's philosophy in architecture more widely. It sounds like Harman is leading architecture back towards autonomy when he calls for 'non-communication' or 'discontinuity' as against 'flows' and 'relations'. What do you think of the baggage around the concept of autonomy and objecthood in architecture, and do you see any way that Harman's philosophy could help us rethink autonomy differently?

Jonathan Hale: 'Autonomy' is a tricky term. If you take autonomy in degrees, you can use different terms to describe it. I would probably use a word like 'resistance' and speak of degrees of resistance to conventional patterns of use. You could look to someone like Peter Eisenman, who deliberately obstructed things in an almost comical way, such as when he cut a slot down the middle of his client's double bed. The idea is really interesting. It deliberately interrupts the conventional consumption of space in order to provoke new possibilities. But it is tricky to do this kind of thing as an architect because if you build for someone who is paying you, they will usually want the building to fulfil a clear set of requirements. If you do not do that, chances are that you will not get another job or that your project will not get built.

It is like the distinction between 'speaking' and 'spoken' speech again. How far can you push the space that you design for the client's requirements in order to open possibilities for new ways that the space can be appropriated? That would be where I think you could apply the term 'poetic' in architecture. What follows on from a poetic architecture that resists in order to provoke is that spaces can start to take on new associations and new meanings. Merleau-Ponty writes about language needing to be renewed all the time, like a contract that is expiring and needs to be renewed. We need to reinvent or deform language over and over again, invent some new terms so that language releases some new level of meaning. We need to constantly push at the boundary such as happens in art, painting, sculpture and poetry, but there is always a dimension of boundary pushing even in everyday language.

Joseph Bedford: So could non-communication and discontinuousness also be a means of pushing the boundaries; challenging the absorption of things in their current state of relations and offering something different?

Jonathan Hale: Yes but you can only ever push at the boundary. You cannot fully cross the boundary because if you do, then you will just fall off the cliff. Nobody will know

what you are talking about. You will be speaking a language that nobody understands or you will have built a building that people say is completely useless.

◄ **Graham Harman:** *As Bruno Latour concludes in his Aramis, it is not a good idea to innovate everywhere at once. And as Aristotle puts it, a paragraph made entirely of metaphors would simply be a riddle. Some banalities must be mixed in to give bulk to the metaphor.*

Jonathan Hale: Your client will say: 'There is no way I can use this for what I need; therefore, I'll knock it down and build another one which will do the job better.' That is the worst of both worlds, and you end up retreating and doing something so banal and conventional that it does not offer any new possibilities at all. It is all about hitting that line where you say: 'I have satisfied everything you have asked for but I have also done it in a way that will stop you using it in exactly the way that you thought you wanted to use it and offer you some new ways of using it that you had never even thought of before.' That is part of what makes the in-between so interesting for me and that is why I noticed its absence from Harman's account.

◄ **Graham Harman:** *The in-between for me lies elsewhere: not between praxis and theory, but between objects and relations.*

Notes

1 Graham Harman, 'Objects and Architecture' (unpublished manuscript, 2012).
2 Harman, 'Objects and Architecture', pp. 10–11.
3 Patrick Schumacher, *The Autopoiesis of Architecture* (Chichester: Wiley, 2011).
4 Harman, 'Objects and Architecture', p. 11.
5 Ibid., p. 11.
6 Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects* (Chicago, IL: Open Court, 2002).
7 Harman, 'Objects and Architecture', p. 5.
8 Martin Heidegger, *Being and Time* (New York: HarperCollins, 1962), pp. 98–99.
9 Graham Harman, *Towards Speculative Realism: Essays and Lectures* (Winchester, UK: Zero Books, 2010), pp. 8–10.
10 Heidegger, *Being and Time,* pp. 103–104.
11 Ibid., p. 102.
12 Maurice Merleau-Ponty, *Phenomenology of Perception* (Abingdon, Oxon: Routledge, 2012), pp. 139–140.
13 Merleau-Ponty, *Phenomenology of Perception*, pp. 202–203.
14 Maurice Merleau-Ponty, 'Phenomenology of Language', in *Signs* (Evanston, IL: Northwestern University Press, 1964), p. 88.
15 Hubert Dreyfus, *Skillful Coping: Essays on the Phenomenology of Everyday Perception and Action* (Oxford: Oxford University Press, 2014).
16 Merleau-Ponty, 'Phenomenology of Language', p. 91.

6

Peg Rawes

6.1 Peg Rawes, Non-Human Architectural Ecologies[1]

This chapter considers object-oriented ontology (OOO) from the perspective that contemporary architectural design is deeply imbricated in notions of 'difference' for human and non-human existence, and for ecological diversity. It suggests that these are concerns which now directly impact on the role of architects, their contribution to society and the built environment, towards improving planetary – human and environmental – survival.[2]

I begin with some comments about Harman's thinking and then propose an architectural and philosophical response which focuses on the value of differentiated modes of non-human architecture. While OOO might be a recent development in post-structuralist philosophy, architecture clearly *already* has object-oriented thinking/practices within it; for example, it has histories of building styles which present different buildings, and their respective physical manifestations, in terms of their varied material, structural or aesthetic functions. Since the late nineteenth century, modern stylistic 'histories' have assessed the significance of discrete objects (i.e. buildings and related urban built forms, such as bridges) to determine their canonical value and significance. Such interpretations 'work' insofar as they generate a distinct discipline, field or object of study. In more nuanced forms of historical or theoretical interpretation, specialist characteristics, such as spatiotemporal, phenomenological or functional conceptualizations, come to the fore to demonstrate the originality of a building's function and materiality. However, when innovation is identified in these narratives of design, the status of the building as a discrete object is also often prioritized. Building science and technology are also major narratives, for example, research into sustainable, renewable and environmental technologies which are proscribed by scientific and economic criteria, and in which the local, human or subjective realm of experience is less strongly emphasized.

While each of these histories and theories may construct varied architectural understandings, they nevertheless retain the focus on object-oriented disciplinary knowledge. As such, these definitions of architectural objects are unsatisfactory because they reinforce unhelpful modernist myths of exclusion and autonomy. However, as this volume also shows, many in the discipline work against these reductive disciplinary distinctions towards creating richer, more complex, cultural, social, political, economic and material understandings of architecture.

Harman is also uninterested in classical or modernist forms of objecthood, describing his work as a non-relational philosophy which prioritizes the agency of the object in contrast to human-centred thought. However, when he focuses on artistic definitions of autonomy to make his case, such as Clement Greenberg's formalist art criticism, this historical precedent of object-oriented autonomy is problematic in Greenberg's reduction of post-war American abstractionism to a notion of form: an art criticism which fails to take into account the historical, political and social complexity of the production of this tradition of painting (and by extension, architecture and the built environment). Questions about human and object's agency are also clearly significant characteristics in the humanities (including the architectural humanities), such as important phenomenological, Marxist, feminist and postcolonial historiographies in the English-speaking and European humanities, which have also deconstructed theories of knowledge based upon the centrality of the disembodied human mind. As Harman has also observed, Bruno Latour's post-structuralism has contributed to some of these theoretical understandings in valuable ways. However, when brought into the architectural humanities, Latour's work on agency is also often co-opted into its systems of production but omitting its political formation. Thus, although Latour's writings on nature have addressed the importance of governmental, institutional and disciplinary relations, his ideas lose their critical and political power by being taken as 'flat' or depoliticized theories of architectural production.

This book's introduction suggests that Harman wishes to formulate new universals that can capture reality across space, time and nature. Harman suggests his philosophy examines the constitution of reality, independently from the changeable vicissitudes of modern society: alongside Quentin Meillaissoux's philosophy, Harman suggests that OOO removes the gaps which have developed between the arts, humanities and the sciences (especially the physical sciences) and philosophical 'truths' (*aletheia*). He proposes we conceptualize a non-relational world, but which also rejects the Copernican (Kantian) reliance upon the human subject. Harman turns to Heidegger as the philosopher through which to do this, cautioning against cultural 'total' theories, or scientific determinism, which attempt to exhaust, control or deny alternative or possible objects or worlds.

I go along with Harman's project up to this point, insofar as rethinking orthodox epistemologies and ontologies is a serious task for contemporary philosophy. I agree that there are highly problematic orthodoxies of identity attached to enlightenment scientific and humanist discourses of interconnection and complexity. However, I differ from Harman's project in a number of ways. While Harman's ontology might aim to reconstruct concepts of reality through an inquiry into agency (whether it be in a silent, potential, withdrawn or active form), his refusal to engage in the necessary reconstruction of another standard norm, the human subject, seems a serious oversight in his claims for transformation of the discipline. If we also agree that architectural knowledge and practices need to develop more nuanced qualities and modes of production, then we clearly also need to rethink the concepts of agency and power that constitute architecture and society more broadly and to undertake acute interrogations of whom this agency is for, whom it benefits or excludes and what consequences this has for society (materially, psychically, technologically and environmentally). In Harman's

project, norms of subjectivity remain untouched, unthought and unquestioned. If we follow Harman's readings, whilst the objects that he engages with are multiple and varied, the subject remains undifferentiated and universal, repeating the familiar silencing assumption of modern Western philosophy – including Heidegger's *Dasein* – that the subject is still the white heterosexual male voice of truth. The complex realities that constitute the specific and differentiated onto-historical – that is to say, environmental, corporeal, cultural, sexual and racial – worlds of women and men remain invisible in Harman's project. In addition, given the intersection between Harman's thinking and the 'object of study' here, namely architecture, this repression of difference is already a deeply problematic standard feature of its history and methods. Hence, returning to my opening remarks about object-oriented practices already existing in architecture: as it stands, much environmental architectural discourse, especially, technological, biological and computational forms, perpetuates this elision.

In addition, I cannot agree that OOO is the first philosophical project to name these insights. This act of self-identification suggests a lack of acknowledgement of other philosophers, especially those many contemporary post-structuralist philosophers who have sought to tackle historical issues of power and social inequality. Second, I disagree that relationality is, in itself, an idealistic form of philosophical thought and, following on from this, I do not see feminist materialist philosophy to be a weak or misguided political form of philosophy. Also, to suggest that such practices are unable to undertake reasoning whereas OOO has this self-awareness, reveals a hubris in Harman's project. Third, given the continued negative social and environmental state of affairs, and the entrenchment back to sexist and racist forms of universal white male power,[3] I am even less convinced that OOO is the way to retrieve more appropriate historical ideas for today's complexities, especially when Harman returns to a mid-twentieth-century white male philosopher who was also silent on these issues.

Of course my arguments need to be connected more explicitly to the matter of architecture: Why give such importance to subjectivity and its respective sexed, political, social and environmental worlds, rather than settling for a philosophical re-orientation via the object? My response is that architecture needs to properly take account of historical, conceptual and material differences that compose planetary subjectivities and ecologies. By cultivating these affirmative and negative differences, architecture's modes of production and reception might be better developed for our future needs: from the nature of its capital and markets to its phenomenological experience, the diversity of architectural identities and in the role of technology. Each of these 'matters of concern' (to use a well-known Latourian phrase) is active in the formation of architecture.

One of the most prominent debates in which these relations have pertinence is digital 'parametric' design. Harman has written about this and taken part in conversations with digital designers, such as Patrik Schumacher. Although Harman is now professor of philosophy at SCI-Arc, known for its commitment to digital parametric design agendas, he has expressed his scepticism about parametric designers' claims for innovation. Indeed, parametricism's claims are problematic, especially when it is used to create conservative forms of finance and markets that benefit state and corporate interests (see, for example, OMA's CCTV Tower in Beijing), or in theorizations which

repeat standard models of avant-garde scientific progress (e.g. Lars Spuybroek's *The Sympathy of Things*, 2011, which perpetuates classical aesthetic and scientific ideals under the guise of a contemporary computational DNA).

In contrast to retelling these standard narratives of universal modern power and invention, my historical and theoretical work has focused on *other* 'non-human' architectural modes of thinking, making and practising, which modernist architectural history and theory elides or disempowers, in order to critically open up diverse and equitable understandings of 'life' (human, non-human and planetary) and of the built environment.

My practice aims to explicitly develop an interdisciplinary concept of ecology from across art and design, science and the humanities, so as to contribute to more equitable social and political forms of architecture. This 'relational architectural ecology' rejects standard humanist moral theories of autonomy by undertaking a study of a premodern concept of substance in Spinoza's seventeenth-century metaphysical philosophy (i.e. a philosophy which is not determined by standard disembodied humanist or scientific theories of existence or identity). As a historiographic project, my engagement with Spinoza's early modern philosophy in *The Ethics* (1677) recognizes that his thinking about life is from a period very distinct from our advanced global, technological and capitalist urbanisms. However, as I show below, Spinoza's writing has many correspondences with our own period, partly because his theory of 'subjectivity' is not consistent with eighteenth century's institutional and disciplinary codification of power in legal and moral thought, and partly because at this moment of time, the Republic of Holland was undergoing intense mercantile, urban and social transformation, including housing speculation, in a manner that has some resemblance to today.[4] Moreover, my discussion is explicitly located within the context of increasing global pressure that architecture better address environmental issues of sustainability, resource-depletion, pollution and social inequality, and in which computational architectural design markets also claim to ally themselves with environmental interests but do not seriously address increases in social, political and environmental inequality and vulnerability.

At a time when mathematics, geometry and computation are yet again presented by technoscientific proponents as 'new' universal design solutions, but the profession still fails to provide equal working conditions (in the UK, 50 per cent of the students who train in the discipline are women, yet compose less than 30 per cent of the profession),[5] can we really say that current digital design discourse addresses humane, environmental or planetary well-being (i.e. to concretely create affirmative sex, racial or social alterity and diversity)? Do these new technoscience design agendas sufficiently address the need for 'care' in non-human ecologies or in the well-being of global and local communities beyond the design elite?

Ethical Non-human Life

Spinoza's ethical inquiry has a good deal of critical sympathy with questions of power in society today. His short essay is an unusually 'ecological' form of aesthetic and scientific thinking in which he proposes a rational, geometric concept of biodiversity. In contrast

to digital architecture's claims for modern material, geometric and ecological objects, Spinoza's early modern essay is a powerful conceptual and ethical tool for improving our models of responsibility and authorship, and of the non-human agency located in material and ecological relations. Two key concepts form the basis of Spinoza's non-human thought: his concept of Nature or Substance, and his concept of 'conatus', or self-determining agency.

Firstly, 'substance' is a complex ecological term because it does not merely designate extended material beings, structures or relations.[6] Instead, Spinoza considers it to be the complex, immanent (i.e. divine) biodiversity of life in Nature. Together with Spinoza's other complex concept of life, 'expression', substance immanently constitutes a plenitude of realities. Each expression or mode of substance is unique: from the divine to the common entity, from the non-anthropological entity or environment to the singular human. Rather than Harman's non-relational or withdrawing singularity, this is an ethics of relational difference, in which each entity has its own distinct specificity but is also always in relation with other modes of life.

Secondly, Spinoza emphasizes substance's agency independently of human conceptualization. This productive power (*Natura Naturans*) is nature's capacity for transformation, together with its multiple powers of modal expression (*Natura Naturata*).[7] Substance is therefore a 'univocal' concept of biological and physical life, of material and immaterial manifestations and, for our purposes, of architectural and geometric thinking and design. Thus, in contrast to contemporary geometries or topologies that classify natural processes into disembodied or non-ontological mathematical logics, Spinoza's 'natural' biodiverse geometry calibrates all entities at all scales which are irreducible to simple digits or units of computational code.

In addition, Spinoza's inventive *geometrico ordinare* method allows him to show, step-by-step, how each entity's material and psychic powers (the affects) are uniquely individuated *and* relational. As a result, both human subjects and geometric figures are manifestations of nature-in-process: utterly unique expressions of substance that will range from the specificity of a particular organic or inorganic entity to a species, region, phenomena or environment, to particular physical or psychic expressions, such as architectural ideas or designs. Spinoza's examination of this planetary plenitude is therefore akin to a kind of geometric ecology which is constituted from difference, rather than formal or material self-same relations.

Non-human Difference

Since the 1950s, feminist philosophers and theorists have already convincingly shown that complex material, social and cultural concepts of sexed modes of life and technology exist in art, culture and science, which have far-reaching value for non-human architectural design. Political philosophers of power, difference and subjectivity from the 1960s onwards, including Foucault, Derrida, Deleuze and Guattari; together with feminist thinkers, such as Irigaray, Butler, Grosz, Haraway, Barad, and Braidotti;[8] and significant feminist architectural practitioners[9] have shown that Western subject-centred thinking does not address the complex reality of other non-standard life-worlds. In addition, these discourses show that 'other'

post or non-human subjectivities and relations *existed* before and outside modern Enlightenment narratives of neutral scientific progress that assign their alterity to irrelevant, negative or misguided definitions of life.

Moreover, if we take seriously the extent to which anthropocenic (capitalocene[10]) planetary relations are now direct threats to environmental, climatic, economic, social and political life, isn't it time we build architectural ontologies that reflect more socially sophisticated understanding of these modes of life? Rather than referring back yet again to normative biological or unsexed reproductions of the same, aren't understandings of sexually differentiated non-normative material life now necessary? Frequently, discussions of computational evolution still expose their primary design agenda to be the reproduction *self-similar* forms (even if they claim to be non-hierarchical, non-authored or topological), for example, the common design reduction of D'Arcy Wentworth Thompson's *On Growth and Form* ([1915] 1942) to a simple model of *morphological* re-production. An interaction between experimental biology and speculative architectural design merges into a positivist design tool, which reduces the specificity of the 'original' biological diversity of life to a self-same computational metaphor or representation. Thus, given this reduction of difference to standard ambitions of self-same reproduction, how do such evolutionary computational designs improve the social and political production, dissemination and consumption of architectural design?

Writing after and in close debate with Descartes's 'Discourse on method' (1637), Spinoza was aware of the power of scientific and mechanical models of matter, but he did not extend these into total definitions of life or reality. And, like Descartes, his 'universe' was neither mechanical nor value-neutral. Twentieth-century ecological thought has also recognized this: for example, in contrast to a computational reduction of different material relations, Arne Naess refers to Spinoza's thinking as a precursor for his 'deep ecology', especially for its capacity to explain the rich complexity of human, natural and built relations without recourse to instrumental or human-centred concepts of life:

> This cleavage into two worlds … [of facts and values] can theoretically be overcome by placing, as Spinoza does, joys and other so-called subjective phenomena into a unified total field of realities.[11]

Spinoza's theory of substance/nature therefore not only generates absolute biodiversity or alterity in all beings (whether they be women, men, animals, trees, stones, geometric figures etc.) but also promotes enduring and 'deep' value, rather than 'shallow' opportunism. Feminist philosophers, Moira Gatens, Genevieve Lloyd and Rosi Braidotti, have previously explored how Spinoza's affirmation of otherness is a precursor to modern sex difference discourse – a proto-theory of sex difference.[12]

Although Spinoza does not explicitly equate ethical life with sexed difference in the *Ethics*, he does insist that all existence, human or otherwise, is composed of complex irreducible differences. As I have suggested above, feminist philosophy has also developed this political and material sensibility in its critiques of scientific and humanist discourse and in its analysis of advanced technology. Haraway's 'sympathetic

critiques' of advanced technologies, Braidotti's digital 'ethics of care', Grosz's feminist analysis of Darwin's theory of sex difference, Code's socio-ecological thinking, Barad's intra-agental realism and Stenger's ethics of science, all figure here.[13]

There are occasional acknowledgements of sexual difference in digital architectural literature, but when its occurs, it is generally taken to be either a standard matter of biology or aesthetics, rather than a transformative concept of agental or bio-*political* materiality. For example, Greg Lynn's introduction to *Folding in Architecture* (2004) notes: 'from the identical asexual reproduction of simple machines to the differential sexual reproduction of intimate machines'.[14] Lars Spuybroek observes that sex difference is present in Ruskin's critique of Darwin's theory of evolution, but his discussion reinforces standard observations about beauty and sex.[15] Thus, despite these brief discussions, there is still little evidence that sex difference has been actualized as a real 'other' self-determining agency in digital architecture's practitioners, cultures or artefacts.

Hence, if digital design also continues to be disinterested in the real social and environmental inequalities that compose today's global capital markets, its claims for innovation are paradoxically limited by its own idealist concepts of production which do not match twenty-first century's needs, right across the planet (i.e. the primary concern in much digital design is the production of market and commodity value, rather than seriously seeking to improve social or ecological values for those excluded from financial and corporate control).

Non-human Advanced Technology

Other architectural historians have been sceptical about the claims for material and social transformation made by digital design, including those who have asked how effective or even desirable these methods are for meeting the challenge of designing environmental and social security into buildings and cities today.[16] Antoine Picon has observed the scientific hubris that underpins many digital design practices, to some extent in alignment with the concerns I raise about the reliance upon disembodied or neutral histories of technoscience in the discipline. In the article, 'Architecture and Mathematics: Between Hubris and Restraint', Picon asks if other parametic (geometric) relations are possible which do not rely on historical notions of infinite technological and material transformation.

Picon observes that Leibniz's (and Newton's) mathematical invention of calculus provides a historical origin for infinite form-making and evolutionary computational design. However, in Spinoza's writings, we find a conceptualization of geometric infinity produced, not through an infinite divisibility of parts but through the infinite indivisibility of substance, in which the link between 'Nature' and the particular individuation of the subject (be it human or non-human) is more accentuated. Spinoza's concept of infinity has more direct reference to the production of difference within nature (i.e. a biodiversity) than the mathematical differentiation of calculus. For Spinoza, because geometric thinking is concerned with the production of individuated subjective difference across the human and the non-human, difference is qualitative/substantive, not just quantitative. Modern design calculus may offer a multiplicity of

form-making, but on its own, it cannot account for differentiated material agency in subjectivities. Moreover, if we recall that, for Spinoza, the production of difference is an ethical project, focused in the concept of 'joy' or 'care of the self', then his thinking constitutes a fascinating source for addressing the inherently interconnected issues of twenty-first-century planetary, political and social (e.g. gendered, racial and financial) well-being.

Nevertheless, Picon's discussion also reveals the long-standing technical architectural reluctance to engage in feminist theories of relations. Hence, when building and design methods follow strict enlightenment concepts of scientific neutrality in which 'truth' or 'knowledge' is necessarily autonomous from its site of production, the consequent ecological or technological ideas or objects will also reflect this absence of differentiation. Such scientific principles in architecture highlight the ongoing reliance of the discipline upon exclusive and essentialist enlightenment divisions in the definition of human sense as female/feminine versus the associations between masculine/maleness and neutral, disembodied, scientific reason. Frequently, these translate into standard conceptual forms of ontological power in which subjectivity differences are considered either local irrelevances to the objective authority of scientific reasoning or irrational corporeal corruptions of scientific autonomy (e.g. omitting gender, race or social formation in the construction of object-oriented knowledge). But if architecture is to develop its scientific methods to more fully address questions of planetary, environmental, urban and local diversity, inhabitation and well-being, surely it is also necessary to rethink this split between supposedly 'proper' scientific reasoning and alterity. Rather than repeating these exclusionary epistemological splits, the discipline might create more effective approaches to social and natural ecologies if it also recognizes a reflexivity between its technological (e.g. digital and computational design) and scientific methods and sex difference.

Without interrogating these 'natural' distinctions, feminist architects (male and female) also continue to be relegated to minor a-technological realms of artistic, literary (irrational and political) or domestic design, rather than seen as offering alternative sexed modes of science and technology. In addition, if architecture elides the historical and cultural specificity of individual subjectivities and communities as part of its political, technological, financial and governmental constitution, its reliance on technoscience is also left unchecked and treated as apolitical. On the other hand, if feminist architects also refuse to critically engage with issues of ubiquitous technoscience in the discipline, the negative ontological splits between female sense and male reason are also left intact, and feminist critiques of the relationship between architecture and nature are again relegated to the sidelines for being exclusive, romantic or naïve, rather than practices that can reconfigure the ethics of relations between the human and the non-human.

Thus, while Spinoza's thinking is clearly 'not of this time', it resonates with contemporary ontologies of difference that resist the reduction of life to simple human-centred (i.e. anthropomorphic) or instrumental accounts of nature to resources for the extraction of financial and political value. Instead, if we examine Spinoza's theory of a relational ecology in the *Ethics*, we might find a very inspiring scientific method of difference, what Donna Haraway has called 'situated practice'.

I have previously written extensively about how situated practice operates in the work of environmental artist, Agnes Denes, whose artwork, *Wheatfield: A Confrontation* (1982), has become an iconic ecological and architectural imaginary of advanced urban and capitalist societies. The image of Denes in a field of wheat in front of the Twin Towers highlights the complex imbrication of built, social and environmental relations which form the planet's increasingly urbanized environments.[17] Over the past thirty years, it has been widely reproduced in artistic, environmental and ecological publications and exhibitions, including the influential Harvard volume, *Ecological Urbanism* (2010), in which it appears without any reference to Denes's intellectual or disciplinary aims.

While the project might be considered an idealized opposition between a more apparently horizontal nature (although clearly a human-made agricultural) versus a vertical urbanism, it can also be read in a more complex manner; for example, as a critique of advanced capitalist management of nature, the figure of the feminist practitioner is a political imaginary who questions 'natural' enlightenment laws of global trading, economics, food and waste relations. So, while Denes might be questioned for the idealism of the work, *Wheatfield* is nevertheless a powerful critique of one of the leading Western centres of integrated globalized technology and economics, issues which need to be even more urgently addressed since the 2008 financial disasters in global regulation and finance, rising social and political tensions over access to energy resources and the failure of advanced capitalist countries to seriously address the likelihood of irreversible climate change. Finally, it is worth noting that Denes's 'eco-logic' demand to 'think globally and act independently' dates from 1968,[18] reminding us that historical examples of feminist practice contain powerful ecological imaginaries which predate the more recent ecological work of celebrated environmental architects and thinkers such as Felix Guattari (*Three Ecologies*, 1989) by twenty years.

In the early 1990s, Denes went on to develop a project titled, *Tree Mountain: A Living Time Capsule* (1992–96), to celebrate the 1992 Rio Summit's World Environment Day. With funding from the Finnish government, this project also showed her engagement in human and non-human ecological relations. By collaborating with the local community to plant the trees in a spiral, Denes proposed that the silver fir woodland would register changing ecological and artistic 'climates' during its human and non-human life spans.[19] Within the late-twentieth-century context of international climate change talks, this geometric 'ethics of care'[20] reconfigured the disused quarry site from its previous function of extracting short-term material and financial assets into an 'in-process' ecology. Denes's practice of care through a geometric ecology of human and non-human agency, therefore, has a similarity to Spinoza's seventeenth-century ideas.

Although Denes's geometric figurations are Euclidian and modern, her technologies of care nevertheless share a 'critical intelligence' with Donna Haraway's reconfiguration of unsexed technoscience into situated, sexed ethics of non-human companionship and responsibility. Haraway's 'companion species' figurations critique the construction of 'life' by neutral value-free advanced technologies. Instead, her promotion of sexed and situated techno-social ecologies shows how non-exclusionary political and biological difference is constructed in non-human filiations within and between species.[21]

Returning to the more familiar architectural *oikos* of housing – and given the critical state of affordable housing provision in advanced capitalist economies – architectural approaches that are in sympathy with Denes and Haraway's 'ethics of care' are critically required. In the UK, the lack of truly affordable housing has been described as a 'humanitarian disaster',[22] resulting from the systematic decline in post-war social house building that draws largely from contemporary (but not unsolvable) financial and governmental factors.[23] Although these issues continue today, since 2008 architects, built environment professionals, charities and community groups have also developed varied solutions.

Urban environmental design strategies also now feature as staple requirements for good urban design and governance, although these are also commonly used to sell increase property value and private interests, making little substantial interventions into carbon reduction or increasing social responsibility. Good practice does, however, exist, for example environmental landscape architect Robert Thayer's bio-regionalist 'life-place' theory, which has informed urban designers to sustainably design non-human and human elements through public and private partnerships.[24] Ian McHarg's widely known analysis of complex regional ecosystems and microclimates has also continued to be a valuable basis for environmentally responsible approaches, and urban environmental design strategies.[25] Nevertheless, we are now in critical need of far better corporate, state and societal responsibility in designing and building not just sustainable but properly enduring biodiverse, non-human ecologies (rather than ecologies that continue to serve short-term economic interests). Given the vulnerability that human and non-human planetary existence faces, architects and philosophers are therefore among those communities who can choose to cultivate their skills to improve our infrastructures of care and ecological life-worlds: from the design of private homes, the public space of the town or city, to private and public sectors of education, housing, health, governance, science, technology, energy, agriculture and the environment.

6.2 Graham Harman's Response to Peg Rawes

I will start here with canonicity because Rawes talks about it in her chapter (among many other things). Rawes question to me is: 'Why are you having so much recourse to Heidegger, a male, mid-century figure?' Male and mid-century are two different problems, but they both have to do with canonicity. As for the point about Heidegger being mid-century, I agree that you would have trouble if you were doing science based on mid-twentieth-century figures. If you are doing genetics and just confining yourself to Crick and Watson's papers, genetics has moved a lot, so you have to do a lot more than that. In philosophy I do not really see it as being problematic. In fact, Heidegger is even earlier than mid-century; he was flourishing most in the 1920s, so his best work is almost 100 years old. But that is not a very long time in philosophy. I do not think the speed of philosophy can necessarily be measured in decades, but only in centuries. It takes a long perspective to see how slowly conceptual shifts occur, so I would even defend going to philosophers even much earlier than Heidegger such as Spinoza, as Rawes does.

As for the fact that Heidegger was male, of course, I cannot do anything about that. He is simply the philosopher that I think is the most important in the twentieth century. But there is also something a bit more concrete going on in Rawes point, which is that Rawes seems to be referring to what are called the new materialist feminists, who are doing something very different from what I am doing. Rawes seems to suggest that I should be taking what they are doing more seriously.

My problem with the new materialist feminists, would, again, be that I think it is problematic to link an ontology with a political commitment. We should never get to the point where we think, 'Feminism must always be materialist.' This is because ontologies and politics shift over time. In the last few decades, leftism has been socially constructivist, while the right wing has been essentialist. The right wing has said there are certain things that are true by nature and we should not tamper with them, while the left has said that things are socially constructed and can be changed. There are occasional exceptions, but for the most part, there has been a constant correlation where the right wing has preferred the essentialist orientation and the left wing has preferred constructivism. But if you go back to the time of the French Revolution, it is the opposite. Who was appealing to nature and natural rights? It was the revolutionaries, the Jacobins. And who was appealing to the historical accretion of power structures and historically relative institutions? It was the conservatives in France. You cannot really tether a particular ontology to a particular political position. I have had arguments in the past about this with Peter Hallward, who is very much a man of the left, and he happens to think that only a relational ontology goes well with political leftism. But I do not think there is a political connection at all. In fact, I think you can have a very right-wing relational philosophy.

So first of all, I think it is important that feminism not put all its eggs in the materialist basket, just as I do not think it should put all its eggs in the anti-essentialist basket. Karen Barad talks about this. She says, you can see why this happens, why many feminists have anti-essentialism as a key part of their toolkit, because you can see how a reactionary position would say: 'It is the essence of woman to stay at home and care about the family.'

Let us consider Edward Said's *Orientalism*. The problem that this book addresses is people making essentialist statements about Arabs and the Middle East. Fine, but what is the problem with essentialism? Is it really a problem to say that people and cultures and genders have certain features that are not necessarily visible at any given moment? I do not think that is the real problem. The real problem with essentialism is the claim to *know* the essence. Is it really a problem to say that Arab culture has certain features that Western cultures do not have? I do not see that as problematic at all. If you go and live somewhere, you can feel a different kind of lifestyle, and indeed you are *expected* to be culturally sensitive, and what this amounts to is knowing the ways in which the new culture differs from your own. The problem does not arise until somebody claims to have privileged *knowledge* of these differences, such as: 'The Arabs are essentially lazy and disorganized and need to be governed by well-schooled races.' Well, of course, that is politically sinister. But the problem is not that the essence is there; the problem is that somebody claims to have made direct contact with the essence. In other words, the problem is *epistemological* realism, which thinks that not only is there a reality but

I can also know it because I am following correct procedures. But I do not see what is so politically awful about saying that there is a reality but I *cannot* know it directly, and therefore I should be cautious making any sweeping judgements about specific peoples or genders. This sort of realism is simply not tied to any kind of essentialist oppression, because how can I do that if I do not know your essence? I am just recognizing that you have one that I cannot grasp; you have many surprising features that I cannot claim to master. I think that is actually politically beneficial, although I do not want to say that my ontology is inherently politically beneficial. Any ontology can serve just about any political master.

Rawes also names three object-oriented tendencies in architecture. I actually agree with some of them, but not others. Rawes talked about how someone might defend discrete objects beyond their histories of production and reception. I do sometimes defend doing this. In literature, for example, we have what is called New Historicism, which has been a very dominant school since the 1960s in literary criticism. This is the idea that you cannot view literary texts as autonomous objects outside the historical conditions under which they were written and the effects they had on various people. But I think you can. The proof of this is that not all aspects of a text's history are inscribed in a text. There are things that happened in Shakespeare's life that did not leave a trace on some of the plays. There are things that do, and you can pay attention to those, and they can augment your comprehension of Shakespeare. But you cannot just promiscuously assert that everything that happened in Elizabethan England somehow leaves its trace, so that Shakespeare's plays are really a product of Elizabethan England, not of this individual genius playwright.

I think you do have to talk about discrete objects to some extent. Discrete objects are able to incorporate some of their environmental influences while rejecting others. That is what makes them objects. Not everything that happened in your life so far has left a trace on you. I think some things that happened to you are important, while others are trivial and meaningless. An event can be important to one person and trivial to another, or important to both, or trivial to both.

Rawes also says someone might take an object-oriented approach in architecture by having recourse to the objective laws of physics and mathematics. That is certainly not what I am trying to do. For me, physics and mathematics are not privileged discourses. All intellectual disciplines are about objects, and the physics and mathematics of those objects do not exhaust them more than anything else does. It is Meillassoux, one of my fellow speculative realists, who is a bit closer to that approach. But I reject this.

Rawes ends up appealing to Spinoza, whom she says accounts for diversity in his philosophy. I have never accepted that. Spinoza is the philosopher of one substance, and of course everyone who defends Spinoza tries to say you cannot simplistically take that to mean that there is numerically one thing. But that is like when people say that you cannot say that Heidegger is anti-technology because that would be too superficial and obvious. Well, actually, Heidegger *is* anti-technology. Heidegger would not be a fan of iPads, which he would simply view as more stockpiles of standing reserve. So I think you have to stick to the first-glance contours of Spinoza's world and say that he is indeed a holist, there is a single substance and the attributes and the modes are derivative of the substance. I do not see how diversity can ever come

from this unity. I talked about a communication problem in the case of God being the causal medium, or the mind being the causal medium. For me communication is the central problem in the history of modern philosophy. I think Spinoza solves this by fiat. You do not really find this problem in Spinoza because everything is there as part of the same substance in advance. I think we find too much of this in certain Deleuze-inspired philosophers such as DeLanda, who says that reality is 'both heterogeneous and continuous'. Well, how convenient. Things are diverse *and* they are linked as one. It means that the problem of how things exert influence on each other is simply defined as a pseudo-problem from the start, so of course it will never make any progress.

Rawes also cites Arne Næss and Deep Ecology. Deep Ecology is very holistic, and as much as I respect people who defend ancient trees from lumber companies and such things (and I really do respect this kind of activism), it often has a rickety intellectual basis. Philosophically it has a basis in holism, but also in the idea that humans and the holistic world are radically divergent, and therefore any interference by humans with nature is a kind of tampering with the natural balance. I think it has philosophically bad reasons that Latour has criticized well. Humans have always been manipulating nature. Humans have been altering plants to suit our own needs, and often humans have *improved* nature. I would not sympathize with deep ecology to that degree. I do sympathize with ecology; we are messing things up pretty badly, but the mere fact that we are touching nature does not mean that we are tainting it. I would not agree that there is a pure zone called 'nature' apart from humans. The fact that Rawes appeals to Arne Næss and Spinoza and holism suggests the kind of problem I was talking about, that if you take the Spinozist turn, there tends to be the wrong sort of reverence for nature, so that nature is this all-encompassing productive force that humans should not mess with.

6.3 Peg Rawes Interview: A Feminist Philosophy of Relationality

Jessica Reynolds: We would like to begin with a general question about whether the relationship between philosophy and architecture is important today and, if so, why?

Peg Rawes: It is important in the sense that both philosophy and architecture are concerned with the production and construction of realities. They are two disciplines that will always keep the very concrete and the very abstract in their sights. Reality can operate in terms of the concrete, mundane, common senses, and it can also be abstracted and radicalized towards modes of operation with revolutionary and/or aesthetic potential – potential for the utopic and therefore the political.

◀ **Graham Harman:** *If Rawes really means to equate the political with the utopian, I have to disagree. The utopian, rather, is an attempt to replace the political with the moral or the ethical. Politics in the usual sense is not just an obstacle to the perfect world we could have if everyone would just stop being so violent and greedy. Politics is the place where the nature of the best society is hammered out, usually in ways that satisfy no one completely.*

Peg Rawes: That is where I find philosophy and architecture together: both disciplines are about modes of construction, both material and immaterial. From the outside, philosophical thinking is very valuable for teaching in the way that it can demystify terms and techniques within a discipline. Because of philosophy's relationship to critique, it provides students with the tools to examine the modes of production of their own discipline.

Jessica Reynolds: How do you see philosophy or philosophical thinking being taught in an architecture school? Previously history and theory classes played an important part, but today these classes seem to be diminishing and the responsibility seems to be moving to studio, which is often under-resourced for this purpose.

Peg Rawes: Institutions are struggling about how to incorporate it and give it time, and consequently there is real pressure on the history and theory disciplines. It is problematic when theory is presented as an illustration of a design ethos in a design studio by tutors who may work with theory to augment their position. This shuts down critical thinking. The problem is that there is not enough time for students to engage with materials well enough, so they end up with very abbreviated modes of understanding.

If I am working with philosophy or literature with students, we read the original text in a very close, classical, literary, critical way. Similar to the way that design deals with the physical reality of architecture, in literary theory, you have to deal with the physical artefact of the object of study in the first person.

Joseph Bedford: How does the recent shift from philosophies of language and subjectivity (e.g. Heidegger and Derrida in the 1980s) to post-human philosophies of materialism, things and objects (e.g. Latour and Hayles today) relate to the pressure on history and theory in schools?

Peg Rawes: The fact that architecture often deals with urban mass culture means that there is an attraction to theories of material phenomena, worlds and reality. But I am concerned that there is an instrumentalization of such theories, which become about solving the problems of the designer.

◀ **Graham Harman:** *I am actually worried about the opposite danger: that philosophers might want to legislate to the designer, who has very different problems to tackle than philosophers do.*

Peg Rawes: I would define our recent philosophical history differently to you. I would not differentiate phenomenology and post-structuralism on the one hand and the new non-materialist and materialist mediated theories on the other hand.

◀ **Graham Harman:** *I love phenomenology, but it is idealist to the core. Even Merleau- Ponty, who seems to be the one who gets into the flesh and pulp of the world, is only claiming that the world looks back at us just as we look at it. He has nothing to say about object-object relations when no humans are around, he just takes the old human-world relation (the centre of all modern philosophy) and makes it reciprocal. Materialisms in the humanities all make this same step and they think*

it is a big advance, but it is not. If you leave object-object relations to the sciences, you are still in the year 1781, philosophically speaking.

Peg Rawes: In the way that I have been trained, there are different modes of material thinking, and phenomenology has a very strong relationship to both material expression as well as to post-structuralist and Derridean thought. This is where I would question how Harman defines materialism. I do not see materialism as being only determined by the notion of the hard sciences, and Harman would share my scepticism of neuroscience as a new materialist solution to subjectivity and life, where concepts of representation and complexity in the world are reduced to classical scientific models.

◄ **Graham Harman:** *On the contrary, I think there are many forms of materialism other than those of the hard sciences. 'Materialism' dominates the humanities at the moment, and not at all in a scientistic sense. What both forms have in common, however, is that both reduce the world to its interaction with humans: either the mathematizability of the world (science) or its impact on human reality (the humanities). Foucault is often called a materialist, for instance, but Foucault has nothing to say about objects in my sense.*

Peg Rawes: There are other types of materialism. I would bring in feminist or post-structural philosophers, whose materialism is part of a historical process. I disagree with Harman that Heidegger is the most productive point of departure, because I do not think Heidegger deals with capital or historical materialism.

◄ **Graham Harman:** *Capital and historical materialism share the same mistake, which is their assumption that they basically know what the primary stuff of reality is, and perform all of their analyses on the basis of that assumption. My conception of philosophy is committed to philosophia or love of wisdom rather than wisdom itself. We cannot ever be sure that our conceptions are perfectly cut to fit reality – that is why I am a realist, not a materialist. Materialism thinks that it already knows the secret. I do not think I do, and neither does Heidegger. Reality recedes from our attempts to grasp it.*

Peg Rawes: I would not want to totally ascribe to a Marxist approach, but I do find it peculiar that Harman refuses to engage with capital and the idea of historical materialism.

◄ **Graham Harman:** *Refuse to engage? No, I am simply not there yet. Remember how long it took Derrida to publish on Marx.*

Peg Rawes: Historical materialism is not about materialism as a purely universal homogeneity. It is also about psychic material, such as people like Lefebvre and others have examined.

Freud and Darwin produced very interesting materialist thinking that was far more imbued with sensibilities of the immaterial than many people give them credit for. Freud's science of desire was about the psycho-physical-biological relation; Darwin

looked beyond the purely biological. To reduce their thinking to a purely biological materialist philosophy is problematic. I do not see a split between earlier philosophical projects and the current conversation about materialism.

Feminist philosophy offers a critique of the universal homogenous concepts of subjectivity and autonomy in Western thinking.

◄ **Graham Harman:** *You cannot critique subjectivity adequately simply by claiming that it is always embedded in a material world. What you need is an adequate conception of that which escapes every possible world, every possible context. This is what autonomy provides. You cannot defend the Egyptian people in 2011 by saying that they are 'material' or 'relational,' but only by accounting for their ability to jump outside their particular situation. This is why Badiou's philosophy, with which I have many other problems, is the best philosophical account of Egypt that we have so far.*

Peg Rawes: Feminist philosophy says that although previous traditions offer some brilliant and wonderful constructs of reality, these are often unsexed, gender-neutral and lack an emphasis upon difference.

◄ **Graham Harman:** *There is no philosophy more friendly to difference than my own. As I see it, any relation (whether conceptual or causal) is a translation, and that means nothing is ever transported in identical form into a mind or anything else.*

Peg Rawes: Feminist philosophy argues for a far greater emphasis on the difference that actually exists in reality. It starts from sex difference but then extends to the capacity to rethinking subjectivity in general. It offers a critique of the modern theory of the subject that takes as its origin concepts of a single autonomous self (e.g. poor versions of Descartes' philosophy). The feminist project sees this as a philosophical construction that is untruthful to reality, and so it seeks to expand the Cartesian construction through psychic, material and biological analyses. If you look at De Beauvoir and more recent iterations in post-structuralism, you find an argument for a materialism of difference that has been overlooked.

Harman does not seem to want to engage in difference as a mode of analysis. Difference does not have to come out of the Derridean conversation. It can exist in many different modes of reality and in the history of philosophy. I turn to Spinoza, for example.

Joseph Bedford: Harman's position is that of a self-declared naïve metaphysician recovering the idea that one can think about the fundamental ontological structure of reality – much like the pre-Socratics once did. He remarked during his contribution to the exchange that he does not know how his ontology will connect to historical reality or with politics. He said there could easily be both a left-wing interpretation of it and a right-wing interpretation of it, and that his job as an ontologist is simply to get the ontology right.

Peg Rawes: What I am saying about difference is a critique of his ontology. He does not address the question of subjectivity. Subjectivity for him still is the autonomous, historical, Western male.

◄ **Graham Harman:** *Insofar as I understand what Rawes is saying here, it is incorrect. Subjectivity for me is not autonomous. It is relational through and through.*

Peg Rawes: This comes through with his rejection of subjectivity in favour of objects.

◄ **Graham Harman:** *What I reject is the notion that the human subject is something ontologically different in kind from all other objects. I do reject that, and if Rawes does not then I would argue that she is going down the wrong path.*

Peg Rawes: Feminist philosophy, which predates current forms of non-humanism, already identified that the concept of woman, as a historical, cultural, conceptual reality, has been outside of humanism – never assimilated, always other. Woman has never been part of humanist subjectivity.

◄ **Graham Harman:** *And if this is the case, then feminism is well-equipped to make the step beyond humanism. But ultimately, rejecting humanist subjectivity does not do much good if it merely says that the subject is actually embedded in material practices, or difference, or anything else along those lines. As long as the human is taken to be 50 per cent of any ontological situation, with all object-object relations left to the natural sciences, then we are still just operating within in a fancy version of Kant.*

Peg Rawes: Harman's writing tends to de-historicize previous historical philosophical projects, in my view, such as feminist philosophies, that already offered a critique of the constitution of reality through subject-object relations.

◄ **Graham Harman:** *Some of the new materialist feminists (such as Rosi Braidotti in Frieze recently) claimed that I have not cited their early arrival at the same breakthroughs as my own. But they are not the same thing. Look at Karen Barad, for instance, a very systematic thinker. Barad also claims to challenge the subject-object relation, but she ends up making them more dependent on each other than ever before. This is the point of her fascinating appeal to Niels Bohr, whom she utilizes marvellously. But the human is always there on the scene for Barad. Latour does this somewhat too, of course.*

Peg Rawes: I think that to be a philosopher who just operates on ontology without a view of how ontology is political is problematic today.

◄ **Graham Harman:** *I have never claimed that ontology is completely apolitical. My claim, instead, is that one should not be in too much of a hurry to rush to political conclusions, since it is then far too easy to settle for some off-the-shelf version of socially acceptable Leftism. I am not interested in joining everyone else, lickety-split, in shouting down trade agreements or Wall Street banks or trying to out-radical other people at parties. I am interested in generating new conceptual alternatives for politics and other topics. My newly published book on Latour's politics may signal where I am headed politically.*

Peg Rawes: This seems like an idealist approach to me, and I would argue that philosophy needs to be engaged. Most of all, though, such an idealist approach seems problematic for architects because it risks reinforcing their own sense of autonomy

and lack of engaged critical processes. Architects need these in order to make real political material choices – choices about how they practice within the market place; with respect to capital; with clients, governments and regulations; with new techniques such as digital tools; etc. If Harman takes the position that his own philosophy is not going to be substantially affected by the his engagement with other fields such as art, literature and architecture, then I would be concerned that this is a withdrawal from the conversation which has the potential to inform his philosophy.

◄ **Graham Harman:** *Who says I won't be affected by it? I've been affected a great deal by my encounters with artists, architects, and theorists in both domains.*

Peg Rawes: In feminist philosophy, the idea of retreat and withdrawal is an outdated, unproductive approach and, in the end, withdrawal does not change anything.

◄ **Graham Harman:** *Rawes makes it sound like feminist philosophers have long since disposed of the notion of withdrawal. Where was this done, might I ask? OOO is a new orientation, and as far as I know my conception of withdrawal (which is considerably more extreme than Heidegger's) has not been addressed in print by any of the thinkers Rawes has in mind. I would look forward to such a dialogue, but it has not yet happened.*

Peg Rawes: It means that there is a level of autonomy and certain constituencies that will benefit from this, but there are many others that will not.

Feminist philosophy offers a different project, which is about a resistant and differentiated subjectivity.

◄ **Graham Harman:** *A 'resistant and differentiated' subjectivity sounds promising, but by definition it is still a subjectivity. I am not defending either 'the avant garde male genius' or its opposite: presumably a collective teamwork based on difference. The autonomy I have in mind is that of the object. Today's Internet, for example, can hardly be ascribed to a single genius, male or female. But neither can it be viewed as a collective sum of individual, egalitarian human actions. It is that which resists and shapes all human efforts. So, I would rather speak of a resistant and differentiated objectivity.*

Peg Rawes: That is very different from the notion of autonomy in the classic sense of the avant-garde male genius. Today's negative or critical theories of architecture still manifest this old idea of autonomy and do not seek to engage and transform governance, sustainability, ecological responsibility, social and metal health, civic responsibility etc.

◄ **Graham Harman:** *Why is Rawes linking negative/critical theories with autonomy here, when she knows that I support autonomy but am utterly opposed to critique as the basic model of human intelligence?*

Jessica Reynolds: Could it be that Harman does not so much deny the subject as argue that the subject is also an object to be treated in the same category? How does the feminist position respond to that?

◄ **Graham Harman:** *Here Reynolds gets it exactly right.*

Peg Rawes: If you say that there is a need in architecture to think through concepts of object-ness rather than through production of articulate and empowered subjectivity, then you are fictionalizing the role of architecture. It is a very flattening process and a dangerous myth. Architecture deals with material things, but the relationship with the human is essential.

◄ **Graham Harman:** *Indeed, the relation with the human is essential, just as the human relation with human society is essential. It does not follow that human society is reducible to what humans think of it, and neither does it follow that architecture is nothing more than what subjects (whether empowered or not) decide to do with it. There is a reality in resistance in the things that always remains partly beyond human control and even beyond human access.*

Peg Rawes: So philosophy is not going to provide all the answers to architecture. They are two disciplines that do work very well together, but they each have their own specific aims and objectives, and those should not just be mapped onto each other.

◄ **Graham Harman:** *The point is not for a philosopher of objects to force architects to think about objects against their will. The point is to see that architects have always been dealing with objects more urgently than philosophers have. On this point, philosophy is the student and architecture the teacher.*

Joseph Bedford: When Harman, as with other speculative realists, promises to liberate us from the correlationist circle – the Kantian limit by which we cannot think the thing in itself because we are always still *thinking* – the difficulty for us, if we are concerned with the question of subjectivity, is how to bring that speculative gesture back down to concrete practices such as architecture. I do not think they have an answer for that yet.

◄ **Graham Harman:** *I doubt that we will be the ones to answer the question. This can only come from the practitioners themselves. We offer a general model to shake things up and get people to think about things differently. I can try to dabble in other fields, but it is unlikely that I can provide a skeleton key for all disciplines. Local conditions in each field vary greatly.*

Joseph Bedford: But they are for the moment at least just trying to stir enthusiasm for thinking the real.

Peg Rawes: I completely support that. But I would rather suggest that if you reconstitute the subject so that it is relational and say that we are co-constituted by our world and

our relations around us, then that anxiety of autonomy can be re-distributed. Feminist philosophy has been doing this all along. Meillassoux and Harman are saying that we need to engage with the evidence and the facticity of realities which are geographic, non-human, on a planetary scale, rather than be caught up in Copernican angst. Feminist philosophers, such as Donna Haraway, Rosi Braidotti and Lorraine Code, have done this very successfully.

◄ **Graham Harman:** *Rawes seems to be making two opposite criticisms of me at once. First, she says that I am stuck in an outdated model of withdrawal that leads nowhere. Second, she says that Haraway et al. have already done what I claim to be doing first. Which is it? By no means does my work do what Rawes claim the work of Haraway and others is trying to do. I am not just claiming that humans are engaged with the factiticy of the world rather than being Cartesian subjects. I am saying that reality has bigger fish to fry than always to be interacting with the human subject.*

Peg Rawes: Code has looked at the way climate science uses modelling data and still operates on the basis of control. She argues that it remains limited in its power to change people's relationship to environmental responsibility because the individual identities – scientists, journalists, lobbyists, governments etc. – still operate *as if* they are in control of 'truth', as per the old Copernican model. She says that despite having all these models showing us how we interact with our environment in a non-human way, we are psychically unable to think of our interaction this way, because we are still fixated on control and mastery.

My point is that there is not a real engagement with the critique of subjectivity by Harman, Meillassoux and others. Their philosophy works when you talk about digital technology and social media, but not when you talk about the actual inhabitation of these technologies in the world: their situatedness.

◄ **Graham Harman:** *I am not sure I understand. First of all, Meillassoux and I have completely different positions when it comes to subjectivity. Meillassoux comes from the Cartesian tradition and still very much believes that there are two kinds of things in the world: minds, and dead matter. I find this to be just awful. For me, all objects (including 'subjects') are on the same footing when it comes to ontology. Rawes is right that I am more into the non-situatedness of things than their situatedness, but that is the whole point.*

Peg Rawes: Critique is one of the most poorly abbreviated issues in architecture. One current history goes that the critical project in architecture came out of the journal *Oppositions* and the work of Eisenman in the 1970s and was later developed by a younger generation of people like Robert Somol and Sarah Whiting. Colleagues such as Jane Rendell and Mark Dorrian have drawn attention to the critical as derived from the Frankfurt School within the UK architectural discourse. Then there is another group of theorists, such as Hardt and Negri, and Deleuze and Guattari, who are often now seen as acritical. Koolhaas is also often attached to this group. I am not at all convinced by this rather abbreviated history. For me criticality does not mean just

returning to the Frankfurt School, because the concept of the modern already had a constitutive mode of critique operative within it. Since the seventeenth century, Spinoza, Descartes, Leibniz and Kant were philosophers of critique. There are different histories of critique. The political revolutionary aspect of critique associated with the Frankfurt School is an important historical response to fascism and its political and social formation, although I do not entirely follow this particular notion of critique. It is a fantastic tradition, but returning to Benjamin, Adorno, Horkheimer is not the only option. I do not ascribe either to the argument that Deleuze and Guattari are acritical. Guattari's *Three Ecologies* book is highly critical, dealing with political transformation and radical concepts of alterity in subjectivity, both male and female, and also of alterity in ecology and built-environments. So, I question current historical narratives that say that we are now in a 'post-critical' phase.

◄ **Graham Harman:** *This may be Guattari, who has a lot more of the familiar left critic about him. Deleuze would be a harder case. But Rawes does not mention Bruno Latour, who is a clearer case of an 'a-critical' thinker, and who belongs to a later generation than the other names she mentions here.*

Peg Rawes: The critical project of *Oppositions* came to an end because it was about an autonomous avant-garde. Critique is not dead and we need it. Braidotti takes an argument from Haraway that critique is 'Critical Sympathy'. It is about being engaged and taking responsibility.

◄ **Graham Harman:** *Here I agree completely with Braidotti and Haraway. Critical sympathy and taking responsibility are both good ideas. Aren't we all annoyed by the disembodied devil's advocate who criticizes while pretending to stand nowhere?*

Peg Rawes: It is about having a relationship to the historical and to other modes of production of the self. You can critique advanced technology while understanding that you have a relation to it as well. Feminist philosophy's use of the concept of relationality is not anti-critique; critique is absolutely part of it. It is what Braidotti calls a 'positive oppositional politics'.

◄ **Graham Harman:** *This is very good too. One of the problems with critique is its tendency towards 'beautiful soulism,' the claim to stand above any of the dirty business of politics. Žižek in his best moments also does a nice job of positive oppositional politics, to use Braidotti's term.*

Peg Rawes: That is a far more necessary and far more productive mode of engagement than, for example, current revisions of Italian rationalism.

Jessica Reynolds: How do you find Spinoza helpful in terms of critique?

Peg Rawes: Spinoza criticizes Descartes. In his essay *The Ethics* (1677), he has voices called *scholia*, which are like a chorus of attack on his critics. He is particularly critical of Descartes' theory of two substances, mind and body, being entirely different. Spinoza's

critique is about the constitution of subjectivity and of its relation to the world. This is his theory of substance. He argues that there is only one universal substance that constitutes all life. In this way he undertakes a revolution of thinking in order to establish a new metaphysical ground. It is about changing a relationship between an individual and others, and the physical, material and psychic world. Spinoza produces a positive mode of critique. Many people have been very attached to his theory of affects because he understands critique as enabling change. He does this through a physical, biological, psychic and spiritual set of analyses. It is an attempt to produce an ontology of the world.

◀ **Graham Harman:** *My own view is that Spinoza gets too much good press these days, much like 'materialism' itself. There are serious problems with Spinoza's philosophy that are not getting a hearing right now, but which will be heard eventually when the current Spinoza vogue passes a bit. It is closely related to the ascendance of Deleuze in the mid-1990s. Deleuze has had a profound impact on which thinkers it is acceptable to quote and to admire. Dun Scotus, good. Thomas Aquinas, bad. Spinoza, good. Hegel, bad. Bergson, good. Husserl, bad.*

Joseph Bedford: So Spinoza aligns with feminist philosophies?

Peg Rawes: Yes, each individual mode or expression of life has its own self-autonomous singularity. Even if you have relationality each particular element still has a specificity. Exclusions of either/or are politically problematic rhetorical modes of positioning.

◀ **Graham Harman:** *They are no more rhetorical or politically problematic than claims to stand beyond all oppositions. If you say 'everything is both relational and singular' then you are saying 'cake can be both eaten and kept and to claim otherwise is politically problematic.' It is like people who claim to be beyond both realism and idealism – these people are always basically idealists with a realist alibi. It is not as interesting as it looks at first.*

Jessica Reynolds: How does this relate to Spinoza's thinking about difference?

Peg Rawes: Spinoza argues that substance, or nature, is the most imminent bio-diverse mode from which all life comes. He articulates it in almost forensic detail, looking at the emotions in particular, identifying the difference of each emotion. There is a really close analysis of how what he calls 'the affects' are produced, what their precise mode of expression is, how they affect the individual. It is a detailed psychic analysis, like an early psychotherapeutic text. It is about how to live happily and be joyful. I am currently working on an AHRC-funded project with a philosopher who has expertise in Spinoza, looking at the role of equality and wellbeing in housing.

◀ **Graham Harman:** *This sounds great! I had the impression that no one was really working on the detailed parts of the* Ethics*, and certainly never imagined this level of applied Spinozism was going on.*

Peg Rawes: I am looking at how these relations of human and non-human, and relations of alterity and difference, inform housing design. Spinoza looks at the huge plenitude of expressions of life in physical material forms. He looks at a natural history of the world from stones to trees to horses, dogs, humans of different forms etc. and explains how they each have an agency to express themselves within their environmental context. The psycho-physical sense of the world as an immaterial and material state of affairs is articulated in very precise differentiated modes in Spinoza's text.

Geometry, and geometrical thinking, is also important to Spinoza. He is writing after the invention of algebra but before the invention of calculus. For him geometrical thinking is about a comportment of ethical living. It is a science. He uses the Euclidean method to make all these expressions of the world, but he does not limit geometry purely to a formal method. It is a mode of expressing relationships between distinct individuals in the world. Spinoza gives a differentiated notion of geometry that is lacking in a lot of the current architectural thinking.

◄ **Graham Harman:** *Here I think Rawes is reading more innovation into Spinoza's geometrical method than is actually there. His ontology may end up being ecological in some sense, but the method is a fairly dogmatic seventeenth-century geometrism, one that is brilliantly critiqued by Whitehead in Process and Reality. It has given rise to the misconception that philosophy is about rigorous deductions from unshakeable first principles, which Whitehead shows not to be the case.*

Peg Rawes: He includes nature, substance and ecology within this geometrical process, which is much more meaningful than the ideas about digital ecology today. I am not suggesting, in a design context, we should return to a pre-digital or pre-computational state of affairs, but I do think the way in which the fetishization of computation as the new design language is problematic.

◄ **Graham Harman:** *We agree here as well!*

Joseph Bedford: It would be interesting to compare your critique of parametricism with Harman's critique of it. Harman says that relationality is at a dead end and that we need to take a step in the other direction to think about how things are always also *unrelated*. You seem to be saying that emphasising relationality over non-relationality is the right direction to go in, but we need a more genuine, or a richer, more diverse, more sexed version of relationality. You critique parametricisim because, despite its image of relationality, it is still stuck in an older Cartesian framework.

◄ **Graham Harman:** *Nicely put by Bedford. This is an interesting difference between Rawes' critique of parametricism and my own.*

Peg Rawes: Yes, it is a total fiction to say that the concept of the architect as author has been replaced within the parametric by the script. Architects working in the

parametric mode tend to generate designs that are male, private, hermetically sealed and totally asocial.

◄ **Graham Harman:** *This statement goes three or four bridges too far. Schumacher may be the one who coined the term 'parametricism,' but his entire two-volume manifesto is an encomium to the work of the most successful female architect of all time, Zaha Hadid. She may not embrace all of Schumacher's theoretized version of it, but when reading Schumacher there is no doubt he is trying to theorise the output of Zaha Hadid Associates. And is Zaha's work really private, hermetically sealed, and totally asocial? I do not see how. If anything, she is a crowd-pleaser easily appreciated by a lay audience, not a monastic avant-gardist. And let us be fair to Patrik. It is an open secret that he deserves a lot of credit for helping to make Zaha's unusual drawings buildable.*

Peg Rawes: They then go into fabrication processes, which are not constituted by any relational or public engagement with the world. They are fine in themselves as a set of computational architectures, but I would want to present a very clear line between what I am talking about in terms of geometry and, for example, what Patrick Schumacher is talking about in terms of parametricism. Computation does not deal with difference and so cannot offer insight for engagement with the world. The concept of the author is totally unradicalized and untouched. It is almost more isolated, singularly returning to the architect and their computer screen. It is extremely conservative and blind to its own lack of innovation.

◄ **Graham Harman:** *Again, I think we need to take into account that Patrik and Zaha have one of the most fruitful architectural collaborations of our time or any other. Has this not done a great deal to challenge the notion of a solo avant-garde male author, more than any dry theoretical meditation has done? Zaha Hadid Associates should be a-dream-come-true for anyone who hates the romantic male genius. Zaha is even the more famous of the two.*

Jessica Reynolds: Did you agree with Harman's provocation when he suggested that the task of the architect might be to precisely 'open up the space of the non-communication, surprise and retreat and create jagged differentiation'?

Peg Rawes: This is where his object-oriented ontology might engage with the feminist project. Harman is more political when he argues that we need to be able to choose what kinds of relations we engage. The feminist project also does not try to produce correspondence. This is where Butler, Irigaray and Haraway are all really important. They help us understanding absolute alterity, which does not mean non-communication. The fact that there is an absolute alterity that cannot be repositioned onto another is what generates a relation.

◄ **Graham Harman:** *I agree with this. But if this is the case, then why does Rawes consider my concept of withdrawal to be old-fashioned and out of date? And why does Butler come down so very heavily on the side of performance rather than*

autonomous reality? Absolute alterity is not that different from what I mean by objects, except that some advocates of absolute alterity do not want alterity to be made of individualized chunks, while I insist on the necessity of this.

Joseph Bedford: Harman appears to define relations as objects because he says that if two things are in relation to one another, then their relation itself is effectively another object which they are on the inside of. An example would be to say that two people in a relationship together are on the inside of their relationship as an object. Both of them relate to their relationship as an object. The reason why he treats relations as an object is that he wants to emphasise that the relation cannot be reduced to its component relata. It has its own effective and inaccessible reality. So in Harman's model everything is both always related to and always alterior to everything. So I am wondering whether you would say that this is similar to Levinas, et al. I wonder if Heidegger is the common basis because his phenomenology has the tensions of revealing-concealing and one-many, which are perhaps behind both Levinas and Harman's philosophies.

◄ **Graham Harman:** *Nicely put. Yes, that is it.*

Peg Rawes: I would not want to push the Levinas example. Irigaray and also Tina Chanter have written on Levinas, distinguishing him from the Heideggerian tradition so there are differences.

◄ **Graham Harman:** *There are certainly differences, since Levinas is an individual thinker. But Levinas is quite explicit about his intellectual debt to Heidegger, and this from a man who had every reason to erase Heidegger from memory for political reasons. There are two main differences, I think, and radical alterity is only one. The other is the radical surface in Levinas: the enjoyment of bread and cigarettes as ends in themselves, not just as equipment pointing elsewhere.*

Peg Rawes: I am not particularly attached to the phenomenological basis of the Heideggerian formation as you describe it. Harman himself is trying to reconfigure that as well. For me, the phenomenological approach in architecture is too apolitical.

◄ **Graham Harman:** *The phenomenologically oriented buildings I have seen, primarily Zumthor's, are beautiful to look upon. Calling them apolitical spectacles, however, is also the sort of thing that is been said about Frank Gehry's new Vuitton museum in Paris, and I understand why Gehry responded with a vulgar gesture to that charge. What is wrong with amazing spectacles, when most buildings are hideously ugly? Let us not underestimate beauty, which ultimately may be more interesting than politics, even harder to achieve.*

Peg Rawes: It is a universalizing project. It is not good at articulating the material forms of buildings and the processes of production or of design; it is one of those discourses that has become very benign. It works beautifully in Western modernist design schools but it offers a comfort zone that is not helpful beyond that. People retreat to it in order

not to deal with the reality of design. When they do come across difficult questions that are political, financial, regulatory, they retreat to phenomenology again because they have not been given the kinds of skills to engage with those kinds of debates with any authority. But when they go into practice, this is exactly what they have to do. It is a shock to the student who leaves university having spent this beautiful time developing their own private design language within the discourse of phenomenology, when they are suddenly hit by practice and all these material forms of production which are economic, legal and institutional, leaving them feeling very disempowered. It has been used as a problematic safety net. Also, because of problems facing the environment, we cannot live with a 1950s conversation about phenomenology.

◄ **Graham Harman:** *Rawes's concerns in this paragraph do need to be taken seriously. I am not familiar enough with the state of education in the field to know whether I agree with her claims about harmful effects on students.*

Peg Rawes: For me that is why feminist philosophy and Guattari's questions about alterity and a conversation about materialism are necessary.

Joseph Bedford: So Harman reveals his roots in phenomenology partly by this absence of the political conversation?

Peg Rawes: There are political phenomenological conversations that have existed. Husserl, who Heidegger rejected, was political.

◄ **Graham Harman:** *Only in the sense that everyone is a bit political. Husserl did not have much to say about politics; Merleau-Ponty did, but it came from outside phenomenology. I am inclined to agree with Leo Strauss, a real reactionary of course, that what is distinctive of some of the great twentieth-century philosophers (especially Husserl, Whitehead and Bergson) is how stunningly little they had to say about politics with comparison to Plato, Aquinas, Spinoza and Hegel.*

Peg Rawes: Heidegger was political also if you read his 'The Question Concerning Technology'. Husserl's book *The Crisis of European Sciences and Transcendental Phenomenology* (1954) is a very political book, written just before the second world war and is about the instrumentalization of technology in increasingly fascist Europe. You can get political phenomenology. It does not have to be apolitical. It just tends to be used that way within architecture.

Jessica Reynolds: How relevant the question of autonomy is today then. Do you think it is just totally outdated?

Peg Rawes: I am aware of current conversations about autonomy going on around Pier Vittorio Aureli's teaching at the Architectural Association at the moment. It is an attempt to deal with a political architectural identity. I am sceptical about this approach, however, and I do not think it is the way forward. This version relies on the classic universal male; it relies on an avant-gardism that assumes there is a post-critical scenario, which again I do not agree with.

◀ **Graham Harman:** *I worry about the constant negative marking of males. Is not there the danger of essentializing in the bad sense when we say that males like working alone and trying to be geniuses while females like being involved in relations of difference, and that only the latter has any future? This seems political in the wrong sense of the term.*

Peg Rawes: This is where the approach of feminist philosophy says you do not lose criticality by having a conversation that is relational because the relation is built through critical sympathy. There are a lot of ideas about collective participation, some of which are very interesting, but they have become slightly ubiquitous. There are colleagues in feminist design practice who deal with it through interesting reconstructive methods. But I think these ideas have become a kind of shorthand now. There is a conversation about autonomy or resistant authorship which probably does need to come back to the fore. I do think that architects need to deal with the biopolitical structures of governance – legal, social justice, environmental regulations – these are structures that you cannot deal with by oneself. Architects need to work with others. The idea of retreating to the single architect is an utterly romantic, out of date, dysfunctional concept. The western notion of the architect is under threat, competing as it is with developers, outsourcing, 3D-printing, self-build etc. Architecture as a profession may only last another fifty to one hundred years. But I think it is a mistake to think that autonomy is the way to try to avoid that. That version is fine for the romantic visionary paper architect or artists, but the profession has to deal with infrastructure and that will require relational subjectivities.

◀ **Graham Harman:** *Again, I sense that there is too much critical concern, in the ideas of Rawes and others, with dumping the notion of the avant-garde author. What is interesting about things like the internet, 3-D printing and urban infrastructure is not only that they have no individual authors but even that they have no collective ones. These things take on a life of their own that goes well beyond the cumulative egalitarian contributions of people in relationships. In our era, the objects have become the primary authors.*

Joseph Bedford: One final question. Do you think there is any mileage at all in talking about an object-oriented architecture? Is there a potential for some of the philosophical concepts that Harman has put on the table to be relevant to architecture today?

Peg Rawes: We already have enough of an object-oriented architecture in the way we go about our historical studies, in the way the building sciences approach the building, in the way that we train architects in school and the way the architects understands their identity. I do not think we need a new version of that called object-oriented architecture. Architects therefore need to be more cautious here and say, 'Hang on, have we not already been there?' I would say, 'Yes, we have been here before.' Advanced cybernetic technologies in architecture after the Second World War were already a historical example of what Harman is talking about. There is a positivism about those models. They did not have the sense of withdrawal that he is trying to introduce, but nevertheless they are object-oriented.

◄ **Graham Harman:** *If they are not talking about withdrawal, then they are not object-oriented, unless you take 'object-oriented' in the literal sense: as if it meant 'any architecture that uses inanimate objects.' Of course any architecture does that, but it does not mean that it deals with those objects as being a surplus beyond any human interaction with them.*

Notes

1 This chapter draws in part from 'Spinoza's Geometric and Ecological Ratios', in Manuel Shvartzberg and Matthew Poole (eds), *The Politics of Parametricism* (London: Bloomsbury Academic, 2015).
2 See the UN's Intergovernmental Panel on Climate Change (IPCC) report of October 2018, which identifies a twelve-year window for ensuring that global warming is kept to a maximum of 1.5°C increase, https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/, (accessed 6 January 2019).
3 Although I am referring here to the current state of public politics in the United States and the United Kingdom in 2018, my 2014 talk also raised concerns about gender, diversity and inclusion inequalities. For an extended discussion of feminist reason and public accountability, see Peg Rawes and Doug Spencer, 'Material and Rational Feminisms: A Contribution to Humane Architectures', in Helene Frichot, Caterina Gabrielsson and Helen Runting (eds), *Architecture and Feminisms: Ecologies, Economies, Technologies* (London: Routledge, 2017), pp. 153–163.
4 Peg Rawes and Beth Lord, Equal by Design (2016), [Film], Dir. Adam Low, UK. Lone Star Productions.
5 See Laura Mark, 'Number of Women Architects on the Rise in AJ120 Firms', *The Architects' Journal*, 4 June 2015, http://www.architectsjournal.co.uk/home/events/number-of-female-architects-on-the-rise-in-aj120-firms/8684222.article (accessed 3 January 2019).
6 Baruch Spinoza, *Ethics: Treatise on the Emendation of the Intellect and Selected Letters*, edited by Seymour Feldman (Indianapolis, IN: Hackett Publishing, [1677] 1992), p. 34.
7 Ibid., pp. 51–52.
8 See, for example, Judith Butler, *Bodies That Matter: On the Discursive Limits of Sex* (New York and London: Routledge, 1993); Donna Haraway, *When Species Meet* (Minneapolis: University of Minnesota Press, 2008); Luce Irigaray, *This Sex Which Is Not One*, trans. Catherine Porter with Carolyn Burke (Ithaca, NY: Cornell University Press, 1985); Elizabeth Grosz, *The Incorporeal: Ontology, Ethics, and the Limits of Materialism* (New York: Columbia University Press, 2017); Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, NC: Duke University Press, 2007), and Rosi Braidotti, *The Posthuman* (Cambridge: Polity Press, 2013).
9 See architectural history and theory by colleagues such as, Zeynep Celik, Dolores Hayden, Peggy Deamer, Lori Brown, Paul Preciado, Karen Burns and Parlour, Jane Rendell and Hélène Frichot.

10 See Jason Moore, *Anthropocene or Capitalocene? Nature, History and the Crisis of Capitalism* (London: Kairos PM Publishers, 2016) and Donna Haraway, *Staying with the Trouble* (Durham, NC: Duke University Press, 2016).
11 Arne Naess, *Ecology, Community and Lifestyle*, translated and edited by D. Rothenberg (Gateshead Tyne and Wear: Athenæum Press Ltd., 1995), pp. 253–254.
12 Moira Gatens and Genevieve Lloyd, *Collective Imaginings: Spinoza, Past and Present* (New York: Routledge, 1999); Rosi Braidotti, *Transpositions. On Nomadic Ethics* (Cambridge: Polity Press, 2006).
13 See Barad, *Meeting the Universe Halfway*, Haraway, *When Species Meet*; Rosi Braidotti, 'Posthuman, All Too Human: Towards a New Process Ontology', *Theory, Culture and Society*, vol. 23, no. 7–8 (2006), pp. 197–208; Elizabeth Grosz, 'Sexual Difference as Sexual Selection: Irigarayan Reflections on Darwin', in Peg Rawes (ed.), *Relational Architectural Ecologies: Architecture, Nature and Subjectivity* (London and New York: Routledge, 2013); Lorraine Code, *Ecological Thinking: The Politics of Epistemic Location* (Oxford: Oxford University Press, 2006), pp. 175–192; and Isabelle Stengers, *Power and Invention: Situating Science* (Minneapolis: University of Minnesota Press, 1997).
14 Greg Lynn, *Folding in Architecture, Architectural Design* (Chichester: John Wiley & Sons, 23 April 2004), p. x.
15 Lars Spuybroek, *The Sympathy of Things: Ruskin and the Ecology of Design* (Rotterdam: V2_Publishing, 2011), pp. 293–294.
16 See chapters by Peggy Deamer and Christine Cogdell in Shvartzberg and Poole (eds), *The Politics of Parametricism*.
17 Agne Denes, 'Notes on Eco-Logic: Environmental Artwork, Visual Philosophy and Global Perspective', in special issue: 'Art and Social Consciousness', *Leonardo*, vol. 26, no. 5 (1993), pp. 387–395.
18 Ibid., p. 387.
19 Ibid., pp. 390–391.
20 See Braidotti, 'Posthuman, All Too Human: Towards a New Process Ontology', and 'Architectural Ecologies of Care', in P. Rawes (ed.), *Relational Architectural Ecologies: Architecture, Nature and Subjectivity* (New York: Routledge, 2013), pp. 21–44.
21 Donna Haraway, *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991) and *Staying with the Trouble*.
22 Rowan Moore, 'Britain's Housing Crisis Is a Human Disaster. Here Are 10 Ways to Solve It', *The Observer*, 14 March 2015, www.theguardian.com/society/2015/mar/14/britain-housing-crisis-10-ways-solve-rowan-mooregeneral-election (accessed 3 January 2019).
23 See Rawes and Lord, *Equal by Design*, and Peg Rawes, 'Housing Biopolitics and Care', in Andrej Radman and Heidi Sohn (eds), *Critical and Clinical Cartographies: Embodiment, Technology, Care, Design* (Edinburgh: Edinburgh University Press, 2017).
24 Robert Thayer, *Life Place. Bioregional Thought and Practice* (Berkeley and London: University of California Press, 2003).
25 Ian McHarg, *Design with Nature* (Garden City, NY: American Museum of Natural History, Natural History Press, 1969).

7

Patrick Lynch

7.1 Patrick Lynch, The Resistance of Things

Modern phenomenology first appeared as a philosophical movement within German universities in the early twentieth century, coincidentally with the birth of modern art and architecture.[1] Arguably, they are remarkably similar. In particular, they share a common emphasis on the role that perception, temporality and spatiality play in our representation and understanding of the world.[2] Cubist painting reveals *how* we see rather than *what* we see, relocating painting as a mode of perception, and vision as one aspect of a field of perceptions, including also interest and desire. Phenomenology is concerned with perception in a global sense, and specifically with the situated character of thought – the reciprocity of philosophical enquiry and worldhood.

Arguably, Martin Heidegger's insights in *Being and Time*[3] are quite straightforward. Rather than attempting to answer questions about abstract ideas, that is the 'tradition' of philosophy known as epistemology, philosophers should begin with what they know, Heidegger claimed, examining the world as we find it. This should not be mistaken for solipsism or relativism, since it is clear that if we examine ourselves, the idea of an aloof constant Cartesian self dissolves. On the other hand, if we examine the world in which we are situated, the Cartesian duality, of being and world, blurs.

At this moment, the world does not blur, nor dissolve: it 'resists' appropriation, whilst revealing its stability.

Heidegger's insights concerning the role of temporality and spatiality in one's perception of reality are remarkably similar to the insights of cubist painters, I'd like to suggest. In both the paintings of Juan Gris and the philosophy of Martin Heidegger, things in the world are not revealed in terms of perspective as objects (Kant's notion of 'the-thing–in-itself') but as 'equipment' that we engage with in different ways.

Phenomenology is anti-object, anti-perspective, ranged against a duality between mind and body, perception and world. Thus both can be said to be anti-objectivity and anti-subjectivity, at once anti-Cartesian and anti-Kantian. Heidegger is quite clear in *Being and Time* in fact that his work must 'be grounded in full detail', in order that Descartes's '*Cogito Sum* has been phenomenologically destroyed'.[4]

Directing emphasis on perception, Heidegger's critical method reveals the heuristic nature of philosophical knowledge, and also, he claims, the 'inter-subjective' character of consciousness. This emphasis on situation re-situates philosophy – radically re-orients

it, in fact – within the lived experience of 'Being' and what Heidegger called 'The Worldhood of the World'.

The role of artworks and of architecture in this philosophy of 'learning-by-experience' is potent, as it suggests that we can only engage with the world fruitfully in participation and that art works can teach us how to be more fully human. I'd argue that it is the revelation that 'some kind of world must come into view' that makes Heidegger's philosophy of everyday life close to his understanding of the importance of art experience and is why he describes the place of work as a play room (*Spielraum*).

Heidegger calls this phenomenon 'worldhood' in *Being and Time*, and he emphasizes the capacity of individual beings to experience Being, that is, the transcendent experience of 'Being in the World'. Transcendence in this sense means transcending autistic selfhood and is achieved by 'interest' and 'involvement' in tasks and activities that ground us in worldhood. Tasks like working, walking, etc., engage us in the world through tools and in human situations, sometimes with others. Heidegger's work on spatiality emphasizes the temporality of events as a measure and counters the prevailing tendency post-Descartes to describe the world simply in terms of material quantities and space as uniform void (*Res Extensa*). Heidegger's famous example of somewhere being described colloquially as 'a pipe smoke away' captures the essentially existential character of human measurements and suggests to me that we can talk in terms of Temporal Scale. What is critical in Heidegger's work is that for him thinking is not something that occurs in a distanced relationship with things and that in fact accurate thinking 'de-severs' the distance between self and world. The tendency of human beings to sever themselves from reality is one aspect of Being, but it is not 'natural' or inevitable Heidegger believed, since Being is also something that occurs through language and thus is oriented as much towards confusion of terms as it is towards public encounters.

Heidegger prefaces his description of his project in *Being and Time* 'the design of the treatise', by quoting Plato: 'for manifestly you have long been aware that when we use the expression "being" we who used to think that we understood it have now become perplexed'.[5] Heidegger is referring us back to a much older tradition of philosophy than what he calls 'modern scientific ontic thinking'. He is not interested in simply discovering what things are like, but rather what Being is like – what it means to be in our world. Whilst it is tempting to think that Heidegger is nostalgic and seeking what has been lost in his etymological enquiries, it is fairer to his ambitions to take seriously his claim that 'Being is the transcendens pure and simple'.[6] He emphasizes that whilst the 'state of Being of Dasein is always in some way familiar (*Bekannt*) … If it is to be known (*Erkannt*) … such a task explicitly … takes itself … as the chief exemplification of the "Soul's" relationship to the world'.[7] Transcendence is the goal of philosophy as an ethical endeavour. Heidegger declares in the introduction that this goal is not simply to prove something but also to make the case for awareness of what is possible for humans and for our world. In 'The Worldhood of The World' chapter, he draws our attention to the fact that 'Churches and graves are laid out according to the rising and setting of the sun – the regions of life and death, which are determinative for Dasein itself with regard to its own most possibilities of Being in the world',[8] establishing this horizon as that which transcends custom and habit. Yet custom and habit ('the workworld') is

what he intends to study, since 'Philosophy is universal phenomenological ontology'.[9] We have to bear in mind that Heidegger is not merely a materialist, and he is emphatic that 'Higher than actuality stands possibility. We can understand phenomenology only by seizing upon it as possibility'.[10]

Heidegger's ambition in studying Being, and specifically the worldly character of Being, is to seek to reveal a transcendent and universal structure of worldhood. His assessment of the motivation of Being is that it 'uncovers the "Reality" of the world at its most Real'.[11] So, Heidegger's philosophy could be summarized as the last totalizing effort to 'interrogate' the world in the manner of 'the ontological sections of Plato's Parmenides or the fourth chapter of Aristotle's Metaphysics'.[12] Heidegger believed not only that modern man's 'powers are essentially weaker' but also that 'the area of Being to be disclosed is ontologically far more difficult than that which presented itself to the Greeks'.[13] Rather than using this as an excuse for imprecision, Heidegger saw in our struggle with Dasein's almost inevitable inauthenticity – our tendency to 'pass over' and to 'thrust aside' an authentic experience of Being-in-the-world in favour of quasi-objectivity based on mathematical measurements, on the one hand, and aesthetic 'mere looking', on the other – an opportunity. This was the challenge of the modern age as he saw it, a struggle with modernity and with philosophy that no longer cared for Being.

His method is to begin by 'preparing a fundamental analysis of being in the world', which he calls Dasein (Being There), and then he proceeds in Division II of *Being and Time* to describe how Dasein is essentially temporal and what this means: thence 'Being' (part 1) and 'Time' (part 2). Modern philosophy is based upon Descartes's 'Method', which distinguishes between Nature (*Res Extensa*) and Being (*Res Cogitans*).

Descartes's famous dictum 'Cogito Sum', or 'I think therefore I am', makes an absolute distinction between things that do not think and things that do, even between the body and the mind of human beings. Heidegger sets out to destroy this distinction and to find 'ways in' or 'the correct phenomenal departure … for access to the phenomenon of worldhood so that it will not get passed over'[14] – ways into thinking about Being itself as a 'real predicate'. Being is essentially worldly, and the world reveals to us the nature of Being; since the world itself exhibits characteristics of Being, Heidegger begins by asking us how we exist in the world, what aspects of our 'everyday lives' might give us insights into how we exist and experience Being. This is a radical break with recent (and still current) attitudes towards what philosophy is and does, and Heidegger's difficult task for us is to examine the ways in which we experience reality whilst we are within it.

Heidegger describes '*Umgang*', or dealings (Umgang can also be translated as assignments), also as 'taking up relationships towards the world' which are predicated upon the fact that things 'meet up with Dasein', which gets its 'ontological understanding of itself in the first instance from these entities which itself is not … But which it encounters "within" its world, and from the Being which they possess'.[15] So, not only do things possess Being too, they could be described as part of a structure of relationships based upon care. Yet since Descartes, we have become accustomed to treating things as pure quantities available only to mathematical assessment freed of any existential involvement with them (materialism). What Heidegger wants to do is to re-orient this assumption radically. His manner of doing so is to refer to every aspect

of human activity and to seek within it ways in to rethink Being. Heidegger points us towards forgotten knowledge such as Aristotle's description of Practical Wisdom (Phronesis) in Book VI of his Nicomachean Ethics. Whilst in the modern world 'even practical behaviour has been understood as … "non theoretical" and anti-theoretical',[16] Heidegger proposes to seek within the world of work in particular an authentic understanding of the oriented and directed character of human affairs, exhibiting in fact 'its own kind of knowledge'. This knowledge (or what Aristotle would call Praxis) is superior to modern scientific method since it brings us into direct circumspect contact with the worldly nature of things (equipment) and thus the worldly character of Being is 'equipmental' rather than 'experimental' (as Descartes claims).

The 'kind of knowledge' proper to dealings that involve care is present in 'what we encounter as closest to us'.[17] Heidegger uses an explicitly spatial image to describe how what is closest to us 'is the room', and not simply things in it; and thus a room could be described as the primary model of the structure of worldhood since 'what we encounter is not "between four walls" in a geometrical-spatial sense, but equipment for residing'. The spatial structure of equipment Heidegger calls the 'arrangement', and it 'emerges' as we begin to experience a room, 'and it is in that (arrangement) that any "individual" item of equipment shows itself. Before so, a totality of equipment has already been discovered'.[18] Spatial settings are coherent before we pay close attention to them if they are at all coherent, and in fact, they are coherent because we don't have to pay close attention to them (Heidegger makes this point later to show how broken equipment is remarkable only for being 'unserviceable' for the task that they are intended for, so what is revealed is the structure of the spatial setting that they are part of, not their individuality). The door latch is part of a room and 'no matter how sharply we just look' at the 'outward appearance of things', we will only encounter aesthetic distance unless we 'grasp' something and use it (p. 98). Heidegger makes the point that this is true also for disengaged scientific observation – scientific distance – because only when we deal with things do we experience 'its own kind of sight'. Thus knowledge and sight here are co-joined as 'insight' (*Einsicht*) rather than the disinterested or 'objective' looking (*Sehen*). What structures this is the realm of work, but what stabilizes it is in fact the world all around us (*Umsicht*) that is 'already' there before we perceive it.

'Work' is the 'referential totality … within which equipment is encountered'[19] and thus a 'workshop' is a particular kind of room for working, and it is located in a public world. Before describing how it is situated in the world, Heidegger urges us to look in detail at what work entails. 'Work', Heidegger clarifies, is 'not merely useable for something' but also a matter of 'using of something for something',[20] and this might be timber or leather or whatever. Interestingly he also notes that 'the river is water-power; the wind is wind in the sails', and so it is not simply materials as things that are revealed by work but also energy (he returns to this in his essay 'The Question Concerning Technology'). Energy might be a useful way of thinking about the structure of worldhood – not as a net of infinite extensity (world as *Res Extensa*) but as a forest of finite, if self-renewing, energy. Work ultimately succeeds in bringing us closer to the 'Da' of Dasein as 'earth'.[21]

Heidegger is careful to avoid anachronisms, conscious perhaps of the archaic or primitive appearance of his hut in 1926; and so whilst it may be tempting to consider

'equipmentality' a synonym for craft, Heidegger explicitly counters this by pointing out that even mass-produced things retain the sense of a figure for whom clothes, for example, are cut. Even if this is simply a random average, the work still retains a sense of directedness and specificity. Work is therefore a form of projective thinking (a commission),[22] and thus is a 'form of knowledge' based on 'our concernful absorption in whatever work-world lies closest to us, (and) has a function of discovery'.[23] In this way Heidegger points us towards the heuristic character of knowledge, and of Being in general. He also suggests that work, as an encounter that leads to discoveries in human situations, is particularly valuable, since this knowledge is situational in character, practical and grounded in social encounters. This type of practical knowledge or practical wisdom (what Aristotle calls Phronesis in his Nicomachean Ethics) arises from work that occurs within human habitats, and, Heidegger infers, it is superior to the alienated activities that take place within laboratories or garrets. These comments are consistent with his stated aim to discredit the Kantian distinctions between what is supposedly rational and practical knowledge (science) and subjective and useless knowledge (art). Heidegger's emphasis upon the value of handwork and of the situation of work, as a form of practical, situated, designed thinking, has serious consequences for a practical art such as architecture obviously – both where and how we do this sort of thinking is called into question. At the very least, the character of places of work comes into view as being of concern for architects, and more importantly the nature of work understood as Practical Wisdom, and its relation with the ethical dimension of Praxis, comes into view. The character of work habits, as directed thinking, is brought to the surface. The ethical orientation and directedness of work is clear in Heidegger's insistence that time is flowing in one way, against the 'aroundness' of the Umwelt (environment).[24] Directed thinking, philosophical and design thinking, involves circumspection, care, looking around and also working towards something in the future. Directed thinking is therefore both spatial and temporal, rather than autonomous or introverted. In other words, it is a form of work, situated somewhere quite specific, with a goal in mind. It is impossible here to avoid making the point that the purpose of the tools in a workshop is lost when one sees them as objects and to insist on their role as equipment that furnish a room and enable other things to be made, written and embodied. Spatiality situates both objects and subjects and overcomes the theoretical divisions between objectivity and subjectivity that dogged academic philosophy, until Husserl and Heidegger re-united thinking with worldhood in the early twentieth century.

Heidegger concludes by urging us to acknowledge his findings and to proceed to see that 'space intuited formally', is the basis of a new and real phenomenology. He refers us negatively to this 'insight', claiming that we 'most clearly' see that 'When the world loses its specific aroundness … [it] gets *deprived of its worldhood*'.[25] Heidegger calls spatiality 'situation' later in *Being and Time*, which he claims 'can hardly be confused with an empty habitus'.[26] Situation is the ground of Being. It is not objects or tools alone that situate us in a room, or ground us in the world, but also the world of time and custom and habit (Decorum). 'The world is, as it were', Heidegger claims, '"further outside" than any Object can be'.[27] What makes it possible for us to situate new things and new inventions is that they are 'encountered within-the-world'. This leads him to

conclude that 'this "subjective" world, as one that is temporally transcendent, is "more objective" than any possible object'.[28]

In his later work Heidegger elaborated on his belief that 'the physically-technologically projected space' of 'modern man' leads us to assume that the world is a thing available for 'utter control'. In contrast to this materialist conception of the world – one that 'is only as old as modern technological natural science' – Heidegger saw in contemporary art some of the characteristics that define Being. Sculpture defines the world 'by demarcation' and by 'setting up an inclosing and excluding border'. In his essay 'Art and Space',[29] published alongside lithographs and accompanying Eduardo Chileda's urban sculptures at San Sebastian, Heidegger quotes Aristotle in his preface: 'it appears, however, to be something overwhelming and hard to grasp, the topos' – that is, 'place-space'.[30]

One way of grasping this overwhelming condition is provided by Chillida's sculpture Heidegger infers, not only because 'Sculpted structures are bodies' but because these demarcate borders and territories. Are these 'articulated spaces, artistic space, the space of everyday practice and commerce', he asks, 'only subjectively conditioned prefigurations and modifications of one objective cosmic space?' And if this is so, how is this possible if we now only believe in 'objectivity of the objective world-space'?[31]

Immediately preceding this somewhat esoteric and even pathetic statement, Heidegger deals with the essence of dwelling as 'the release of places toward … the preserve of home', comparing this to the 'brokenness of homelessness' or 'complete indifference to the two'.[32] This emotional and psychic dimension of space is participatory, is a mode of 'involvement' and 'interest' in 'places as a region'. The embodied nature of territories resists aesthetic disinterest. I think that if we replace the word 'sculpture' with 'architecture' in the next passage, we get close to the problem, which faces us in terms of dwelling in design: 'sculpture would be the embodiment of places. Places, in preserving and opening a region hold something free gathered around them which grants the tarrying of things under consideration and a dwelling for man in the midst of things.'[33]

'In the midst of things' describes the situation that we find ourselves called to work in as architects. The first thing to recognize, Heidegger suggests, is that 'Emptiness is not nothing. It is also no deficiency'.[34] He continues, 'In sculptural embodiment, emptiness plays in the manner of a seeking-projecting instituting of places.'[35] It seems to me that this embodiment – demarcating of territories – is intrinsically an architectural characteristic, as is his call to us to recognize the presence of things in what appears to be emptiness. This suggest that art refers us to things outside of and defined by the object-like presence of a material thing – not to the 'failure' of the space it occupies, the lack that needed individual human fulfilment – but instead, Heidegger cites an analogous situation described by Georg Christoph Lichtenberg in regard to language: 'If one thinks much, one finds much wisdom inscribed in language. Indeed, it is not probable that one brings everything into it by himself; rather, much wisdom actually lies therein, as in proverbs.'[36]

This colloquial and idiomatic sense of language – what Heidegger calls 'idle chatter' in *Being and Time* – is something like tradition, not in an academic sense but as one aspect of global knowledge: an aspect of one's heuristic knowledge of the world that

we are situated in by language and things. Architecture is not referred to directly as something that enables us to dwell, or to dwell poetically, but what is described is the 'equipment' of a room that 'de-severs' us from distanced attitudes towards the world. These things are at hand but not necessarily dominating our visual field or holding our attention. They are part of a field of references that orient us and enable the 'instituting of places' – something that he believed embodies 'the truth of Being'. Paradoxically, this 'unconcealement of Being is not necessarily dependent on embodiment', Heidegger declares. One of the aspects of art experience is that something 'special' – cosmic even, a residue of 'sacred' in a secular situation – is revealed to us. Heidegger ends 'Art and Space' by citing Goethe: 'It is not always necessary that what is true embody itself; it is already enough if spiritually it hovers about and evokes harmony, if it floats through the air like the solemn and friendly sound of a bell.'[37] It is almost impossible to continue with words to fill this space of course – to do so sounds and feels sacrilegious. Even if Heidegger's intention is not to make a religion out of art, the 'special' character of spaces experienced in reaction to, or exactly because of what art 'should' do, recovers some of the depth of the quality of experience that grounds us in what is common. Heidegger suggests that art should not be 'a domination of space' or 'a technical conquest of space', suggesting to me that what he means by 'special' is in fact what is ordinary and worldly. His only direct description of a building is the famous example of a Greek temple in 'The Origin of the Work of Art',[38] which as well as 'raising up' the hill on which it sits towards the sky (the gods) also 'saves the stone' that it is made of. What Heidegger means by this, I think, is that in making this stone special in construing a building, and in demarcating a place, the architect has revealed its stone-ness to us, saved it from being discarded and 'passed over'.[39] In doing so, he has drawn out from us attention to what is there already. This is exactly the same way in which a poet describes the world to us – precisely as something other. What I mean is that Being is World, for Heidegger, and that like proverbial language, it is a common ground. Common Ground is revealed in art and in buildings as something that counters the modern 'scientific-technological' tendency we have to ignore or to avoid the world in favour of theoretical or aesthetic alternatives to it. The revelation of this escapist tendency as avoidance is something that art does too – which explains in part its potency for Heidegger.[40] It is a form of object-based materialism that ascribes no meaning to things other than their financial or exchange value, calculated in weight or size, that which they can be directly transformed into for profit. In contrast, what art should and can offer, Heidegger suggests, is 'orientation'.

Orientation describes the conditions and horizon in which architecture operates within, too, and where it encounters its Being. This ontology is not object oriented, I suggest, but civic in character,[41] by which I mean the point at which an individual project transcends its functional or formal limits and becomes part of a place, and in which the cultural ambitions of an individual project – and of an individual architect – become situated within the urban order (*Civilitas*) of a place. Specifically, every object is situated and exhibits 'worldhood', and Heidegger is even more specific about the grounded character of buildings. The task of architecture, therefore, might be described as the continual reconstruction of its civic character and the rhythmic re-making of Civic Ground.

In his essay 'Weak Form', the Catalan architect Ignasi De Sola-Morales claimed that even if it is no longer appropriate to build bell towers or bells,[42] the memory of the sound of one is relevant to us, even in its absence. This argument makes a case for a form of cultural memory based upon the mimetic reconstruction of redundant civic structures, a form of typological, monumental urban melancholy. This mode of poetics is certainly appealing and is part of the paradox of the power of objects – their power to act as images and to carry cultural associations, even when freed from their traditional uses. Another aspect of the ontology of objects, Heidegger insisted, is that things exhibit 'worldhood' and resist appropriation and consumption. We cannot entirely overcome the resistance of things.[43]

7.2 Graham Harman's Response to Patrick Lynch

Lynch dealt with Heidegger a lot in his chapter, and there are considerable areas of overlap between what he said and my own work. Lynch favours the side of Heidegger that deals with the practical over the theoretical, that deals with basic orientation in everyday life, with the unspoken wisdom in language, with relations and so forth. My concern here is that if you follow Heidegger in that direction, you end up with something like Schumacher's reading of Luhmann, a reading that makes Heidegger a relationalist when he is also a non-relationalist. I consider that to be a misreading because in it, everything is defined by its place with respect to everything else in a giant holistic grid of communications. I do not think Heidegger is a holist. Admittedly Heidegger does see himself as a holist, because, he says that you cannot talk about a tool in isolation and that all tools feed into a big system, where everything is defined in terms of all the other things. Lynch was not the only speaker to talk about how everything gains its reality from everything else: my shoes gain their reality from the fact that sidewalks are hard and that is why the soles have a certain hardness and durability. Yes, all equipment refers to all other equipment, but remember that Heidegger is not just the theorist of equipment. He is also the theorist of *broken* equipment. This requires that things do *not* fit together seamlessly and that things are not in a holistic system; things break. How could things break if they were not something more than their place in the system? They could not. The hammer could not break if it were nothing more than its current hammer-use. The hammer has secrets held in reserve that allow it to have surprising uses. So Heidegger is not a holist at all, but an anti-holistic thinker, whether he likes it or not. He is someone who talks about things held in reserve that rupture systems. He is not a systems theorist any more than Luhmann is: they are both anti-systems theorists in a way. They are talking about what can disturb systems, not about what makes systems function smoothly.

There was a great debate in the history of philosophy about space between Leibniz and Samuel Clarke (who was the surrogate for Newton in this debate), which relates to what I am saying about relation and non-relation. Newton thought space was an empty container into which things enter. Leibniz thought this was nonsense and held that space was a system of relations. Leibniz's argument was made by asking the question:

Can you move the whole universe fifteen metres to the west? Leibniz said that that was clearly a nonsensical question because if *everything* is moving, then comparatively nothing has moved. He said this for time as well. Can you say that the universe could have been created eleven months earlier than it was? What would that mean? Since everything is now eleven months earlier, you would not be able to notice. I happen to think that both sides were wrong. I think space should be viewed as the *interplay of relation and non-relation*. When we talk about space, we are talking about both the whole space of the universe and about individual spaces. We are talking about the fact that I am not currently in Tokyo. I can get there by a series of complicated actions, but I am not there now. There are different spaces in the universe, and if you try to treat architecture only as a system of relations, rather than the interplay of relations and non-relations, then there would not be anything to build. You would end up with a big holistic unity where the universe would be one thing. It would be an *apeiron*. But we cannot have an *apeiron* because there are individual spaces that are not other spaces. It seems to me that a better way of looking at architecture would be to see it as being about creating non-relational, withdrawn, secret areas where you can retreat from the world or locate certain specific functions that other parts of the world do not have. In a way, architecture is about creating a non-relationality of space, even more than relationality. I would not follow Heidegger's relational model for architecture.

7.3 Patrick Lynch Interview: 'The Tool Is Useful Only to the Man Who Knows How to Use It'

Joseph Bedford: Seeing as Harman's object-oriented philosophy is part of a broader intellectual trend across the humanities to address things, or objects (as opposed to subjects), and non-human actors (as opposed to humans), can we begin by my asking you what you think of this general trend?

Patrick Lynch: I'm just re-reading Latour again at the moment actually, so my take on this is that the period that we find ourselves in is unusual because modern theory, which was positivistic and which led to the belief that things were going to get better, is now in crisis. The humanities are questioning the paradigm of modern theory because human beings, with their own self-serving arguments, have enabled the destruction of the planet. I think that two things are coming to an end: firstly, the teleological project of Marxism, which is now seen to be both practically and intellectually impossible because of its debts to positivism and the crisis of ecology that this presaged; and secondly, its inverse, relativism, which responded to the death of modernist positivism by relating everything to personal experience. There was such self-satisfaction during the last twenty years or so of neo-liberalism, as if otherwise critical people thought, 'Well, we got it wrong with theory, but it's ok, because we can rely upon ourselves.' They have both now come to an end.

I think that the interest in the non-human could be productive for architects because it is a way to question our nineteenth-century positivistic attitudes. Certainly,

Heidegger, whom Harman is working with and against, accepts the idea that animals possess worldhood.

◄ **Graham Harman:** *But he calls it 'world-poverty,' which he marks as clearly inferior to the 'world-forming' of human Dasein.*

Patrick Lynch: His 'Letter on Humanism' is also critical of humanism. Yet Heidegger thinks that human life is still distinguished from animals by language and intentionality. The problem I have with what Harman is doing is that his understanding of architecture as object-based is formalist, and that is exactly what I think needs to be questioned at the moment. Formalism itself grew out of the enlightenment and positivism as a way of looking at buildings as a manifestation of either individual subjectivity or economic and materialist objectivism. Formalism did not produce good buildings or cities.

◄ **Graham Harman:** *Not really. I do think formalism is a useful counterweight to the fiesta of relationism that we see throughout the arts, humanities, social sciences and even physics (see Lee Smolin) today. But formalism usually refers to form as something abstract and visible. For me, form is something concrete and invisible: it has points in common with the medieval concept of substantial form, but little in common with any modernist conception of form.*

Patrick Lynch: I can understand why Harman is doing object-oriented philosophy and why 'material culture' as a phrase over the last fifteen years or so has come to prominence.

◄ **Graham Harman:** *I am a realist, not a materialist. Those who wave the flag of 'materialism' today have little interest in the material, except in its interplay with humans. Human beings remain at the centre of the picture.*

Patrick Lynch: It is a rejection of neo-liberal, narcissistic subjectivity and positivistic 'theory'. But I am not sure that 'material culture' quite describes why human habitats look the way that they do. It is not simply because of materialism that our communication occurs. Fundamentally, communication is what human habitats are about. As an architect, I have a problem with Harman's object-oriented approach being applied to architecture, because I do not really talk about objects so much as objectives, parameters, constraints, conditions, aspirations, needs, desires. I think that describing something as an object is a very backward way of looking at it.

◄ **Graham Harman:** *Architects no doubt must take all of these things into account: objectives, parameters, constraints and so forth. But what emerges at the end of this process? Does the building remain nothing but a bundle of objectives, parameters and constraints? No, it is something that has taken on a life of its own, quite apart to what the architect took into account in designing it. In short, it has become an object. Of course it is not what you talk about: it is what exists independently as a surplus beyond everything you did talk about.*

Joseph Bedford: Along with the phrase 'non-human', phrases like 'post-human', or 'post-humanism', have also come to prominence. What do you think is meant, first of all, by 'humanism'? It seems that we could see Humanism (capital *H*) as referring to an anxiety that people have had about the rampant destruction of nature by the human race, but the word 'human' or 'humanist' (small *h*) is also used more colloquially to talk about the 'human scale' of a building or its relation to the human body. (One thinks of architectural details such as Alvar Aalto's metal balustrades wrapped in leather that make them warmer to the human hand.) These two senses of humanism seem to be caught up in each other. Peter Eisenman's famous gestures in his early houses challenge the bourgeois domestic subject by putting a column through the bed or hanging a stair upside down. He claimed this de-stabilizing of human inhabitation showed how 'Man' was now washed away like 'a figure drawn in the sand' (à la Foucault).

Patrick Lynch: Eisenman is really problematic for me. Humanism in architecture is not anthropomorphic, in the sense that it is not about giving buildings human attributes. It is not about formalism, whether symmetrical or asymmetrical and organic. Nor is humanism primarily a matter of subjectivity. Giving buildings 'human scale' is more about urbanity and the public aspects of the imagination than it is about subjectivity. The humanist project came out of the Florentine city-states of the Italian Renaissance. The key figure was Alberti. His architectural work arose from his early work on *oikos*, or human affairs, on the homestead and the management of money and livestock. It had to do with questions of guilt around wealth in Christian culture. His view was that, after the ancients, one demonstrated goodness by making a city more beautiful. He saw beauty or ornament as *Natura Naturans* – nature that has been improved upon by man. You could say that this improvement by man became linked to the Reformation and to the Calvinist belief that human beings were fulfilling God's divine will through making money. And you could say that this then turned into the idea that the planet belongs to us, and we can do what we want with it. But while Calvinism had to do with the accumulation and hoarding of wealth in the private realm, it does not define the humanism of Alberti, who was concerned with the conversion of wealth into civic architecture. He was concerned with the embodiment of civic values.

For Alberti, questions of use, the role of nature in human affairs, economics and, ultimately, the home are about the city as exemplary human habitat. This is what the best aspects of Humanism mean, I believe, and this is why it is still relevant today to architects after all the caveats regarding the hubris of human beings.

◄ **Graham Harman:** *Here I agree with Lynch. Some anti-humanisms are merely an attempt to deploy recent French philosophies in ways that do not take into account the fact that architecture really is for humans in the end. Object-oriented philosophy is not an anti-human project.*

Patrick Lynch: Crucially, a city is not something that you can think of as a thing or an object, just as buildings are not primarily objects, but settings for typical situations.

◄ **Graham Harman:** *But cities are also settings for atypical situations. By 'object', I mean simply that which cannot be reduced downward to its pieces or upward to its effects. The city clearly cannot be reduced upward to its effects, as Lynch implies, because no architect or urban planner can foresee all the situations that arise. Furthermore, a city often has a stubborn logic of its own that resists the efforts of the most rational planners.*

Patrick Lynch: In a similar way, our bodies are not primarily objects. Bodily experiences are first of all situational.

◄ **Graham Harman:** *Bodies do not just promiscuously interact with all aspects of a situation. In this respect, the body (whether human, animal or inanimate) chooses its own context. The body also sleeps, which is a way of comparatively withdrawing itself from the context.*

Patrick Lynch: It is impossible for animals to understand the world in terms of objects. A crab does not think of a stone as an object. It has an imaginative relationship with it.

◄ **Graham Harman:** *I am not sure how objecthood runs counter to imagination. Quite the contrary: the object is that which, lying beyond our grasp, or the crab's, opens up the space of indeterminacy where imagination thrives.*

Patrick Lynch: A stone might be an anvil for a bird who is using it to try and crack open a crab shell. These things do not exist as pure objects but as *things* with which humans and animals have an imaginative involvement.

◄ **Graham Harman:** *Here Lynch seems to be thinking with Heidegger's terminology, where 'object' is a pejorative term for what happens when a 'thing' is reduced to the correlate of a representation. I simply do not use the terms that way. My 'object' is roughly equivalent to Heidegger's 'thing'. I use 'object' because of its resonance with the crucial debates around this term in Brentano and Husserl.*

Patrick Lynch: It is this fundamentally situational aspect of experience that led Heidegger to start thinking about 'world' in terms of how we engage with things. Worldhood is not a 'subjective universe' but a series of involvements, territories, situations, relations. Tim Ingold has argued recently that there is nothing subjective about world.

◄ **Graham Harman:** *This is the same thing that orthodox phenomenologists say when defending themselves: 'since the mind is always involved with the world, phenomenology is not subjective'. But it does not really matter if the world is always in the picture. The problem is that the human subject is always in the picture too, which means that for phenomenology it makes up 50 per cent of any situation that philosophy can describe. This is what we Speculative Realists call 'correlationism'. It*

leaves us unable to talk about object-object interactions, for instance, unless some human is there to observe them.

Patrick Lynch: It is participatory. It involves drives and desires and physical biological forces. They are oriented. This explains the resurgence of interest in Heidegger's work for geographers such as Jeff Malpas, for anthropologists such as Ian Hodder and for cross-disciplinarians such as Lambros Malafouris.
I think that post-humanist philosophy needs to be very careful because it gets itself into naturalism – the Romantic sense that nature has its own order and does not need human beings.

◄ **Graham Harman:** *I would not mix naturalism (which often merges with scientism) and romanticism (which tends to be the very opposite of scientism). It is a pretty sweeping claim to say, as Lynch does, that any consideration of a world distinct from human access to it is motivated by a 'prelapsarian faith'. Hardly. It is based exclusively on the philosophical argument that objects must be a surplus beyond their current relations since if they were exhausted by those relations they would be stuck in them forever.*

Patrick Lynch: Naturalism is only a version of prelapsarian faith in an Edenic, untainted paradise. This view becomes doctrinaire very quickly. Humanism in Alberti's case was a challenge to Christian doctrine. The writings of Plato and Aristotle offered Renaissance scholars and artists a way to get away from Medieval feelings of sexual guilt and away from thinking about the human body exclusively in terms of biological reproduction. Neo-Platonism is behind nearly all of the things that are part of the reinvention of the city (*Renovatio Urbis*) and in particular the situated character of architecture that is part of that reinvention. Renaissance Humanists believed that the human body is capable of much more than reproduction, committing sin and dying. Those Florentine city-states could build an architecture for the city because they resolved the problem of guilt about spending money on anything other than a cathedral, into a question of perfecting nature. Notions of goodness and beauty come back to bear upon human consciousness, which you can see clearly in Dante's *Divine Comedy* and Botticelli's painting that elide Venus with Mary, etc. Thus the religious and the democratic aspects of culture reside next to each other in Renaissance cities and in their festivals. We can see this in images of ideal cities: in the paintings of Piero della Francesca, for example, and in literature. Only a city can accommodate such differences. Up until quite recently, the city was understood to be a place in which you were free to fulfil yourself – to wear a number of different masks, play a variety of roles. All of these differences were supported and enabled by architecture.

◄ **Graham Harman:** *This function of the city seems like a very good one. Objects, too, are able to play many different roles – which is precisely why they cannot be reduced to any particular role in an instrumental context, but must have a private reality outside that context.*

Patrick Lynch: Advanced capitalism flattens those distinctions and makes everything the same. So humanism is a much more complicated and interesting thing than the simple anthropomorphic reading of it that you get from Wittkower and which Eisenman, in your example, uses to critique inhabitation. Just because a building is symmetrical, it does not mean that it is inevitably like a body; and the idea that when you make asymmetrical architecture it is somehow anti-humanist is silly. One of the legacies of positivism is the naïve belief in causality. Formalism is just one example of this but, arguably, functionalism is only its obverse. What is lacking in both formalism and functionalism is a sense of the rich background of cultural motivations that one sees manifest in situations and which are ultimately represented in buildings and cities.

◄ **Graham Harman:** *Though I agree with Lynch that form and function are just two sides of the same coin, our reasons for thinking so are in diametrical opposition. Lynch seems to think that both form and function are too neglectful of the rich environments that surround them. But I hold the contrary: form and function are both too outward-directed, each in its own way. Function enslaves an object to its relations, while form enslaves it in relation to a viewer who sees it from outside.*

Joseph Bedford: How do you actually work with the idea of world, or worldhood, in your own practice as an architect?

Patrick Lynch: It comes into our practice partly through the way that architectural questions relate to the cognitive, mnemonic aspects of apprehension. Orientation is one of the fundamental things that never goes away. Norman Foster makes fantastic diagrammatic buildings but you can never find the entrance. They are always the wrong way around. Often he puts the entrance on side streets. The reason for this is that he is optimizing the programmatic characteristics of a building for the clients, who almost always want to make more money. The only thing Foster will compromise diagrammatic clarity for is the elegance of form. Despite what he calls the 'Calvinistic' aspects of his upbringing and ethos, there is a fundamental unworldliness about his office, his buildings and his working methods. This is the same for the way that most architectural offices work today, and it is reflected in the architecture that they produce. The ways in which architects are trained and the ways they operate are not very worldly. It is as if they do not exist in rooms full of things, or other people making things, talking about them, holding them up to the light, checking them, pinning them up on the wall, thinking about them, going away again, discussing them.

Joseph Bedford: Your contribution to the exchange was very much about worldhood. To illustrate your talk, you placed a series of photographs of Peter Markli and Hans Josephsohn's studios in the background. These appeared as examples of 'rooms full of things' – tools, pens, glasses lying on the edge of the desk, etc. They showed the world of the architect and artists. Could you say a little more about those photographs, because I understand you took them yourself?

Patrick Lynch: Josephsohn died in 2012. He had built himself a studio in the 1950s and continued working in it for half a century. He had been a very good friend of Peter Markli

for years. When we visited Peter Markli in Zurich recently, Steve Routh from Markli's office had a key to Josephsohn's studio and he let us visit. Everything had been left as if he were just using it: a fag put down, a cup of tea, a cup of coffee. What was so powerful about it was that they are now reduced to objects because he is not going to come back. Everything was, however, still connected. They still made up a room. The last things that he was working on were hung on the wall and were related to the half-finished things next to them. They were also related to the stuff scattered around that he had collected.

In sport, if you have a coach or a teacher, they will often say that you are holding a golf club the wrong way or you are hurting your back because you are running in the wrong way. At some point you were given some bad advice, they told you to do something that might have worked when you were a certain size, but you have grown and developed and it does not work anymore. You never notice how important the *way* in which you work is. Likewise you never realize how important is the room which you inhabit. Obviously one should not fetishize the working environment. But I am not talking about things themselves so much as the relationship between things.

Peter Markli's studio was interesting because he was working in it when we visited. He has got two studios in fact. One is his drawing office and one is his own studio on the other side of town. He likes to be in his drawing office on Saturdays, just drawing. He has an old-fashioned piece of wood with paper taped to it. It is not even a drawing table or a parallel motion. It is just a triangle and a T-square. A lot of the drawings are free-hand charcoal and he pins them up, and smokes a lot, and drinks a lot of coffee. He generously offered us a glass of whiskey when we turned up.

So I think the workplace is really important. That is what my work about Heidegger has really been about. Let us take the example of the hammer that everyone focuses on. Heidegger is talking not so much about the hammer as about the workroom. He is talking about his desk and about how the desk is paralysed without a pen. So it is the interrelationship of all of these things together that makes human being situated in the world and spatialized.

◄ **Graham Harman:** *The hammer is part of a relational context for Heidegger as long as it is working smoothly. As he puts it, 'there is no such thing as "an" equipment'. What Heidegger fails to notice is that this holism cannot be maintained precisely because individual items in the context can break. The fact that the hammer can break proves that it does not just fit smoothly into its context but threatens to erupt in singularity at any moment.*

Patrick Lynch: What Heidegger is getting at is that the essence of being human is, in a way, being *less than human*. The things that get in the way of being in the world are things that make you notice *yourself* and think about *yourself*. This is what Freud would call neurotic.

Architecture situates certain activities that are situational anyway. We are sat at this table. The sun is going down so I have turned the lights on in preparation for you coming, knowing that it is going to get dark at a certain point. I have also brought cakes because it is after lunch and it is going to be teatime soon. So the situation involves apprehension. There is a whole series of things that make up our situation that are not

based on the architecture per se. Take this building. It was a school building and it has a certain amount of freedom for these types of activities. It has high windows, which were designed to bring as much light in as possible while stopping the children from looking out. Now we use it as an architect's office but still the windows relate to our situation, just in a different way. We are taller than children and can see out. The light is very good to make models with because the windows are so tall. They also give us a connection to the seasons. It orients us.

Joseph Bedford: I understand Harman's critique of what Heidegger calls the 'structure of references', meaning that there is a limit to how much things can be in relation to one another. Harman's argument is that if there were not a moment when some things were withdrawn from their relations to their world, then there would not be an opportunity for things to form alternate relations with other worlds, and you would not be able to explain how anything changes in the universe. So when the hammer breaks, it breaks from the world momentarily before it fuses into another world, but in that instant, an object withdraws from its worldly relations in order to take up new ones. Harman seems to be just trying to say that there is a limit to relationality.

Patrick Lynch: It is true that objects are withdrawn and they resist appropriation. It is because they resist appropriation that we cannot consume them.

◀ **Graham Harman:** *Not at all. 'Object' for me is not a taxonomical term that excludes humans. Instead, it places humans on the same footing as hammers: both are objects. Remember, all I mean by object is an entity that is not reducible to its pieces or its effects – and this is just as true of humans as of hammers. By no means do I insist on a distinction between humans and inanimate things. But objects are mutually detached no less than mutually attached.*

Patrick Lynch: By calling a hammer an object, however, Harman is reverting to an ontological distinction between human things and the world; that is exactly what Heidegger attempted to overturn. Heidegger wanted to prove that human beings are as much *in-the-world* as trees, animals or water. He challenged the Cartesian move to make humans something separate from the world. The hammer is a very specifically man-made thing. It is not a rock that a bird can imagine is like an anvil. It is very particular. It does not lose its characteristics. The characteristics of the hammer just retreat into the background when they are not being used. I do not think that the hammer breaking reveals the limits of relationality. It reveals the *possibility of the relationships between things*. Situations are not all set up for only one thing to happen in them. There are degrees of freedom through which you can possess spaces for certain activities or not. The hammer is not as important, I think, as the spatial setting and the degree of orientation towards certain specific activities and the degree of freedom for other things to happen. It is this degree of freedom that gives us a city.

◀ **Graham Harman:** *This degree of freedom is also the best argument for object-oriented philosophy. There are no degrees of freedom at all if things are defined exhaustively as made up of their relations. If I were nothing more than my relations*

(this is no straw man: Latour and Whitehead say so), then I would never be able to get up from this chair and leave my apartment. Insofar as a city provides degrees of freedom, it is a perfect example of an object.

Joseph Bedford: It would be good to talk about what you are saying in relation to the Christian Kerez House with One Wall, because Adam put it on the table for us all to discuss, and you responded to Adam after his contribution from the audience. One of the ways Adam described the house was by thinking about the house without people. Your response was to emphasize the context surrounding the house and its relation to the city. Could you unpack your comments a bit more?

Patrick Lynch: When I saw the house, I immediately thought that from the limited imagery that Adam showed us, it is clear that it is in the suburbs of a city and there are lots of villas around it – probably from the nineteenth century. Perhaps the house is on a lake outside of the city, maybe Lake Zurich, or Constantz. Then in the twentieth century, I would imagine that the land was divided among the children of wealthy families, and modernist houses were built there. Perhaps new wealthy petrochemical industrialists moved in and built houses there too. So the Kerez house would be an example of a new typology of taller villas that you would now have to build because there is not much land anymore. Now, if it is on a poor site, because all the other sites have been taken by previous generations, the only thing Kerez could do was make the most of the view from the upper floors by making the envelope glass. It is as if the whole of the ground floor does not exist. It is just a car park, a garage. I can imagine that Kerez just maximized the yield for the client by knowing what you can do and what you cannot do with structure. Making a whole house with one structural wall that is also the staircase is incredibly efficient. The client probably loved it for that reason. So I would even guess that the Kerez house is a speculative development; that it is all maximum floor area and maximum views because these things sell. Would Kerez have done that if he had had a specific client and a site higher up the hill where you could landscape the garden and create a real ground floor? I suspect not. So the house is *of the world* in this kind of way.

Joseph Bedford: Adam also used the Kerez house when speaking about the way the precedents and images that an architect uses during the design operate as objects. If one thinks of the way an architect like Le Corbusier would have had many ideas that he would employ differently across his oeuvre, one can see how these ideas have a certain independence from their context. I recall reading Enrique Miralles writing about teaching a studio in Barcelona and asking his students halfway through the design process to change their site and then see what of their schemes remained when they were configured to a new site. He described it as an exercise in understanding what was independent of context and coming from the architect's imagination.

Patrick Lynch: I do not think a context should be understood in a picturesque sense. Context is also economic and ecological. The orientation of the building towards the sun and orientation towards what is front and back is key. And when you dislocate a project from one location to another, it should change.

◄ **Graham Harman:** *Certainly. The interface with the environment will need to be different in all sorts of ways. But why commit oneself to the radical position that these changes make the building an entirely different one? In any field, there is a difference between important and unimportant changes.*

Patrick Lynch: Sometimes, however, you have a site that is south-facing which is also the front entrance. This creates a particular problem. I think there *are* recurring motifs that the architect uses that are independent of context. An architect's creativity lies in reinterpreting what they know as the recognizable characteristics of something and in redeploying it in a certain location. Context is not just 'what does somebody think it should look like' or just a question of 'responding to a listed building'. Those things are part of the questions you ask yourself, but they do not automatically give you the answer. The degree to which it is possible to contribute to the city has to do with motifs that you carry around with you. These motifs are more like rooms, or things that your imagination inhabits.

Let me give you an example of a project we are working on, which hopefully shows you how I think being an architect is more about thinking about worlds and decorum than about objects and 'contextualism'. We are working on a convent project right now for some nuns. It is effectively an old people's home because there are not that many young nuns, and the elderly nuns that live there live in a listed Georgian house. The council will not allow them to put a lift in because it is a listed building. One of their number recently had to move to a nursing home where she died and her sisters felt that this was terribly sad that they had abandoned her. So they are going to sell that house and build a new building to create a place to die with dignity. It will also be a place for people from all over the world to come and learn English. There is a pedestrian route across the site, a ramp that gets you into the church, which we need to maintain, and we need to make it 1:20 to follow European legislation. To get planning consent, you have to address how a disabled person in a wheel chair will get around the building. So we have run a ramp around a long colonnade that is effectively a cloister. The nuns are all left-wing feminists, though, and do not want it to look too much like a convent. So it is more of an abstraction of a convent.

There is also something in England called 'life-time homes'. If you were injured in a car accident, you should not have to leave your house. You should be able to live in it throughout your life, whatever happens to you. Therefore every new dwelling needs to have a room at ground floor which you can build out into a bedroom and there needs to be a disabled bathroom, or at least a room that is big enough to be fitted out as a disabled bathroom. Our design places a chapel and oratory on the ground floor at the front. It would be wrong to place bedrooms there because you would see the nuns walking around in their pyjamas. But the planner asked that there be something somewhere where, if the lift broke, one of these elderly nuns could sleep on the ground floor. I thought about this long and hard, and I said, 'Well, the chapel is going to have two pieces of furniture in it, right? One is a table and the other is a catafalque.' I told the planning officer what a catafalque was – that it was a low table onto which you place a coffin. And he said, 'Oh right.' And I said, 'Yes, you're thinking what I'm thinking aren't

you? They could sleep on the catafalque couldn't they, if the lift was broken.' And that is how the building passed regulations.

So you see, objects are all things that are interconnected in the world, and their interconnections are weirder than you could make up.

◄ **Graham Harman:** *Things are not just connected: they are also disconnected. This is another important lesson of Heidegger that is often forgotten. Consider his example of the jug in his essay 'The Thing'. The jug is what stands in itself, apart from our observing it or our act of creating it. The jug holds the water whether we are there or not. The relation to the human is not what is essential to the jug. Even its relation to the water is not what is essential, since the water can be removed.*

Patrick Lynch: That is what I have learnt from Heidegger and what I have learnt from being an architect. Heidegger's ideas about being-in-the-world, or 'worldliness' you might say, is actually really important for architects as it offers a way of thinking about things that can be savvy, worldly – 'in the midst of things' but not cynical or compromised – sensitive to the forces at play.

Notes

1 Edmund Husserl founded the Yearbook for Philosophy and Phenomenological Research at Freiburg in 1912 and published his *General Introduction to Pure Phenomenology* in 1913. Heidegger's habilitation thesis, directed by Heinrich Rickert and influenced by Husserl, *Die Kategorien- und Bedeutungslehre des Duns Scotus* (Duns Scotus's Doctrine of Categories and Meaning) was submitted at Freiburg in 1916. *Being and Time* was published in 1927. References to this follow the English pagination in the Macquarrie & Robinson translation ©1962, Basil Blackwell, Oxford, 1993. Heidegger's insights into the spatial character of being were taken up by architects quite early on, and one of his first public engagements after the war – when he was still blacklisted as a teacher – was to address a conference on housing shortages in Darmstadt in 1951, at which he delivered his famous talk on 'Building, Dwelling, Thinking' (see 'Building Dwelling Thinking', in Martin Heidegger (ed.), *Poetry, Language, Thought* [New York: HarperCollins, 2001], pp. 141–161). Rather than address this text directly in this chapter, something that has been done many times before by architects and critics (including Kenneth Frampton, etc.), I aim to focus on the part of *Being and Time* that is most directly concerned with spatiality, as arguably this is most relevant to architecture – 'The Worldhood of the World'. My argument, in sum, is that Heidegger's thought is emphatically oriented against an object-based ontology and that this chapter of *Being and Time* makes his position evident.

2 Cf. Dalibor Vesely, *Architecture in the Age of Divided Representation: The Question of Creativity in the Shadow of Production* (Cambridge, MA: MIT Press, 2004), pp. 282–315, etc. for a wide-ranging discussion of the conflux of technological and cubist thinking in this period; and also Alberto Pérez-Gomez and Louise Pelletier, *Architectural Representation and the Perspective Hinge* (Cambridge, MA: MIT Press, 1997), pp. 317–368. Vesely makes a similar case for the similarities between

surrealist thought and phenomenology in 'Surrealism, Myth and Modernity', in *Surrealism and Architecture: Architectural Design* 2–3 (London: AD Profiles 11, 1978), pp. 87–95.

3 Martin Heidegger, *Being and Time*, trans. J. Macquarrie and E. Robinson (Oxford: Basil Blackwell, 1993). First published in 1929.
4 Ibid., p. 123.
5 Ibid., p. 20.
6 Ibid., p. 62.
7 Ibid., p. 85.
8 Ibid., p. 137.
9 Ibid., p. 62.
10 Ibid., p. 63.
11 Ibid., p. 141.
12 Ibid., p. 63.
13 Ibid.
14 Ibid., p. 93.
15 Ibid., p. 85.
16 Ibid.
17 Ibid., p. 98.
18 Ibid.
19 Ibid., pp. 99–100.
20 Ibid., p. 100.
21 Or as he puts it at the conclusion of Division I of Being and Time, the 'hummus' (earth) that constitutes homo-sapiens (the other constitutive part being Time, which could be equated not just with material (earth) but with world; thus our essential mode of being in the world, as material mortals, is temporal – or a Being-Towards-Death).
22 The etymology of commission includes both mission and missile; it is directed thought, with an aim in mind.
23 Heidegger, *Being and Time*, p. 101.
24 Unwelt is usually translated as 'environment', yet 'Um' implies 'being about' – the closest we get to it's German use is in 'circum'; hence circumspection is 'looking around'– taking care of where we are. This meaning is clear in the German and English tautologies that emphasize 'environmental awareness'.
25 Heidegger, *Being and Time*, p. 147. Italic original.
26 Ibid., p. 347.
27 Ibid., p. 417.
28 Ibid., p. 418.
29 'MARTIN HEIDEGGER: ART AND SPACE', translated by Charles H. Seibert, Loras College: 'Die Kunst und der Raum' by Martin Heidegger was originally published by Erker Verlag, St. Gallen, 1969, accompanied by lithographs by Eduardo Chillida. An exhibition entitled Encounter with Artists: Art and Space, at The Guggenheim in Bilbao, 5 December 2017–15 April 2018, investigated Heidegger's work in relationship to sculpture and spatiality: see https://www.artsy.net/show/guggenheim-museum-bilbao-art-and-space; and https://frieze.com/article/art-and-space; and https://observer.com/2017/12/curator-manuel-cirauqui-on-art-and-space-exhibition-at-guggenheim-bilbao/. I wrote about the Heidegger-Chillida collaboration at length in Patrick Lynch, *Civic Ground: Rhythmic Spatiality and the Communicative Movement between Architecture, Sculpture and Site* (London: Artifice, 2017).

30 Aristotle, Physics, Book IV.
31 Martin Heidegger, *Art and Space* (The Hague: Nijhoff, 1973), p. 4.
32 Ibid., p. 5.
33 Ibid., p. 7.
34 Ibid.
35 Ibid.
36 Ibid., p. 3.
37 Ibid., p. 8.
38 Martin Heidegger, 'The Origin of the Work of Art', in *Poetry, Language, Thought* (New York: HarperCollins, 2001).
39 Cf. John Sallis, *Stone*, (Bloomington and Indianapolis: Indiana University Press, 1994).
40 Cf. Andrew J. Mitchell, *Heidegger among the Sculptors: Body, Space, and the Art of Dwelling* (Stanford, CA: Stanford University Press, 2010).
41 See Lynch, *Civic Ground*.
42 Ignasi De Sola-Morales, 'Weak Form', Sarah Whiting (eds.), in *Differences* (Cambridge, MA: MIT Press, 1997), pp. 58–59.
43 The fallacy that things do not exist independent of one's perception of them, and their representation, continues to haunt object-oriented philosophy, especially the work of Graham Harman, whose work I have up until this point studiously avoided treating as an object of enquiry. It is not a mode of thought taken entirely seriously, arguably, by many professional philosophers today, despite the recent enthusiasm for object-oriented thought amongst architects. See, for example, Stephen Mulhall, "How Complex Is a Lemon? Review of *Object-Oriented Ontology: A New Theory of Everything* by Graham Harman," *The London Review of Books*, vol. 40, no. 18 (27 September 2018), pp. 27–30: 'Harman nevertheless believes that neither sort of encounter really is direct, and indeed that no conceivable mode of human access to objects could be anything other than indirect. And he assumes that if that is so, these encounters cannot offer genuine access to the objects themselves. He is led in this direction because he thinks that – as he puts it in various places – to encounter an object in any way is to translate that object, hence to transform it, hence to distort it; as a consequence, he claims, we are everywhere and always surrounded by fictions: "Any real orange or lemon, as I perceive it, is a vast oversimplification of the real citrus objects in the world that are submitted to rough translation by the human senses and human brain … All of the objects we experience are merely fictions: simplified models of the far more complex objects that continue to exist when I turn my head away from them, not to mention when I sleep or die." So many dubious ideas are compressed into these remarks that it's hard to know where to start unpicking them. To begin with, even if our purported model of a lemon is too simple to capture its full complexity, a simplified picture of an object can still get some things about it right, just as a rough translation can capture some aspects of a remark's meaning perfectly well. A simplification leaves things out, but it doesn't necessarily introduce things that are not there, so it need not be either a distortion or a falsification; and it can always be further complicated so that it captures more of its object. Or does Harman think there could be no such thing as a fully accurate model of an object because the object is infinitely complex and there cannot be an infinitely complex model? Setting aside worries about what "infinite complexity" might mean, this would amount to the bizarre idea that anything less than an absolutely complete representation of an object must absolutely misrepresent it … Harman's policy of treating "simplified-translated-distorted-false-

fictional" as a chain of synonyms conflates importantly distinct ideas, and thereby implicates the respectable ideas towards the beginning of the chain with the flaws we associate with those towards the end. But never mind the gratuitous introduction of fictionality as the chain's final prejudicial link; why are we talking about "oversimplified models" of lemons in the first place – as opposed, say, to our best available conception of this real citrus object? The passage I have quoted, with its emphasis on the senses and the brain, strongly suggests that Harman is endorsing a natural scientific account of how human perception operates, then drawing metaphysical conclusions from it. In doing so, however, he implicitly privileges the case of material objects, rather than maintaining the assumption of ontological plurality to which he claims to adhere. He also treats this theory as a truthful account of the reality of human perception, when by his own lights it must be entirely fictional. And even if that account were true, it does not self-evidently legitimate the metaphysical conclusions he draws from it. Many philosophers would deny that human beings are really model-building theorists of their own experience at every moment of their lives, as distinct from, say, engaging in such refined intellectual practices only in laboratories and research institutes. Indeed, for the phenomenologists Harman most respects, the assumption that modelling or representing is our most basic relation to the world is a distinctively modern fallacy. And more generally, erecting metaphysics on the basis of physics is an exercise in naturalistic reductionism: it is a version of the scientism that Harman begins his book by denouncing.'

8

Peter Carl

8.1 Graham Harman's Response to Peter Carl

Carl said in his contribution that he felt like I was trying to *sell* him something – and actually, I am. I think you need to be a bit of a salesman. He also says there are a few places where I turn philosophers into slogans, which I admit is true, but, when you have to compact all of your life's work into ten short chapters, as I did in the *Quadruple Object* book, a certain amount of simplification has to occur and that requires simplifying the history of philosophy. So I plead guilty to that charge, but it was inevitable, and in many respects useful.

Carl also seems not to like my representation of Heidegger's *Fourfold*, which he said I 'lay out flat like a pancake'. He also said that it comes from Plato and that Heidegger never really explains the fourfold, so you have to reconstruct it. The best place where Heidegger talks about this is his 1949 Breman lecture 'Insight into What Is', which just came out in English for the first time last summer. It was Heidegger's first post-war appearance. He was de-nazified and so he could not be a professor anymore, but he gave this lecture at an industrial club in Breman to a non-academic audience. He talks there about earth, sky, gods and mortals. You have to do a lot of work to figure out what he is talking about. Most of the attempts have not been very good. Most commentators will say things like this: 'The world is made of earth, sky, gods and mortals, because we all eat food that comes from the earth, we are all nourished by rain that comes from the sky, we are all mortals and some people believe in gods.' It really gets that lame. And it simply does not work.

First of all, Heidegger never does these sorts of taxonomies. That is the most anti-Heideggerian thing you can think of, the notion that there are four *kinds* of things: people, deities, potatoes and melons that come out of the ground, and stars and planets in the sky. But Heidegger does not split things into kinds of objects; he does not do taxonomies. These have to be metaphorical terminologies. That is the first principle I am working from. The other is that fourfolds in philosophy tend to result from the intersection of two dualisms. You split the world one way, and you split the world a second way. So you could say all objects are either electrical or non-electrical, and Italian or non-Italian, and so you end up with a fourfold of non-electrical non-Italian things, electrical Italian things and so on. But you are not going to cut the world in any interesting way if you do that. So you have to find out what is the right way to divide up the world.

The first axis in Heidegger is based on his distinction between the hidden and the revealed. The second axis in Heidegger is the difference between the one and the many. And I will explain what I mean by that: the one and the many. Heidegger has a famous term called 'the ontological difference'. It is one of his key concepts. It means the difference between *being* and *beings*. The problem is that the difference between being and beings means two things simultaneously. On the one hand, it means the hidden versus the revealed, and on the other hand, it means the one versus the many, because for Heidegger *Being* itself is one, and as soon as you start talking about individual beings, Heidegger starts calling you superficial. You are focused on mere entities when you should be talking about Being itself. Unless you are talking about certain privileged entities such as peasants, wooden shoes or Greek temples, Heidegger does not like to hear the talk of individual beings. They are not important to him like they are for Latour. If you start playing with these structures, what you will find is that Earth (which is of course hidden for Heidegger; Earth is what hides and is never revealed) is also a unified term. Heidegger never talks about many Earths. Earth is a unified quasi-liquid, holistic network from which everything sprouts. And if you look instead on the level of the revealed, what is the unified moment? It is mortals. *Mortals* does not refer to people as a *kind* of entity; instead, mortals refers to the experience of Angst or being-towards-death. Because for Heidegger when you experience *Angst*, you lose any consideration of individual beings and you see the world as a whole that stands at a distance from you. That is what is so terrifying for Heidegger about *Angst*. Why is there something rather than nothing? You are not asking about individual things, like lions or chairs, when you ask about mortals. The world as a whole stands at a distance from you. I will not bother to spell out the rest, but gods and sky play a similar role on the side of plurality. Heidegger always refers to gods in the plural, and that is not just a rhetorical slap at monotheism. Instead, it refers to the fact that there are many gods, and the gods only hint at their presence. They do not become present to us. And the same for sky on the side of that which is revealed. That is my reading of the fourfold. Carl seems supportive of it because he concedes that I do my homework, but he still seems sceptical about it.

Finally, Carl seems to be a holist. I have said why I am not a holist, because if you start with the world as a unified whole, you can never get to individual things. But he also calls himself a phenomenologist, which I once was myself. I still respect phenomenology, unlike many contemporary younger philosophers who despise it; these people often come from a background of Deleuze or Badiou and have no interest whatsoever in phenomenology. I still have a lot of interest in phenomenology; I think it is the most important school of twentieth-century philosophy. But on the points where Carl calls himself a phenomenologist, I would call myself a 'noumenologist'. The *noumena* of course are opposed to the phenomena. In Kant the *noumena* are what we can never directly encounter, though they must be there. I would propose a *noumenology* instead of a phenomenology. I think there are indirect ways to talk about the properties of things-in-themselves. Whereas phenomenology says 'to the things themselves', I would say instead: to the things-*in*-themselves! They are not 'worthless' at all, and they should not have been kicked out of philosophy the way Žižek, Badiou and Meillassoux want to do. The *Ding an sich* should be brought right back into the heart of philosophy, and the heart of architecture as well.

8.2 Peter Carl Interview: Practical Wisdom, Morals and Ethics

Joseph Bedford: Both you and Harman share the concept of 'depth' or 'finitude' as central to your philosophical positions, so to ask how a concept of depth might inform a possible approach to architecture, it might be useful to start by comparing the understanding of depth that you put forward in the exchange with that of Harman and ask if they are mutually opposed or if they are potentially complementary? If I might summarize, depth, as you described it is a depth of the historical, cultural, lingual and resolutely human world, and it has a structure to it, such that Heidegger's pen as you presented it in the photograph of Heidegger sitting at his desk in his hut, 'depends' on a sequence of involvement with the paper, desk, books, room, landscape…

Peter Carl: Yes, a structure of dependencies; that is, there are lower and higher levels of freedom, lower and higher levels of conditions and possibilities…

◄ **Graham Harman:** *A structure of dependencies requires, as its obverse, a structure of independencies. Otherwise, there is no way for anything to move or change. That is to say, unless entities are partially independent of their current dependencies, they will not be able to detach from them and form new ones. This argument comes from Aristotle's Metaphysics, against the Megarians: an oldie but a goodie.*

Joseph Bedford: Harman, however, has dismissed the 'structure of reference' in Heidegger as too holistic. In his view it unjustifiably centres our account of the universe on Dasein. He and his fellow speculative realists name this centring on the human world *correlationism*, and they see it as the trap that philosophy has fallen into since Kant. Correlationism, in their view, limits what reality can be said to be, to that reality which appears to *Dasein*. Harman's concept of depth aims to 'expand', or sometimes he says 'democratize', its use beyond the centrality of human involvements. His withdrawn depths of real and sensual objects attempt to permit reflection on the involvements that take place between objects. So with this sketch comparison, would you say that these two concepts of depth are mutually exclusive and opposed to one another or, potentially, compatible?

Peter Carl: What I want to say first of all, and being blunt or less diplomatic than I was at the public exchange, is that I think an object-oriented ontology is a contradiction in terms. Despite Harman's protestations regarding *Ding-an-sich*, his philosophy moves in a similar direction. Notions like object, or, relations, are simply inadequate to the phenomena as they present themselves.

◄ **Graham Harman:** *Nothing in what follows justifies or even clarifies Carl's statement here. First, how are objects and relations inadequate notions? No explanation is given. Second, why are we speaking of phenomena, which are just a part of reality?*

Peter Carl: The whole point of ontology is that it accounts for the structure of being. Yes the *to onta* of Aristotle are certainly the basis for Heidegger's use of the term

'ontology', but it is interesting that ontology as an account of reality, of what is real, as an '*onto-logos*', emerges very late and only at about the same time as Descartes; from a man named Jacobus Lohardus.

◄ **Graham Harman:** *Yes, but the relevance of this is unclear. Furthermore, since everyone uses words like 'ontology' and 'metaphysics' differently, let's specify my sense of these two terms. Unlike most people, I use them as synonyms. Since 'metaphysics' has sometimes been overloaded with pejorative associations in recent decades, 'ontology' is sometimes a more neutral term better fit for certain contexts. The date of its origin is of no concern.*

Peter Carl: Husserl opened the problem of phenomena versus fact. 'Fact' is usually just seen as something clear and distinct like that which is crafted in a laboratory, and Husserl began to point towards the contexts of things.

◄ **Graham Harman:** *I would say just the opposite. Husserl's breakthrough has to do with the decontextualization of intentional objects, not their contextualization. The eidetic reduction happens by getting rid of all of an object's accidental qualities and situations and gaining an intuition into its essence (I happen to think this is impossible, but no matter).*

Peter Carl: But then Heidegger displaced the matter away from the subject into the background, into the worlding world.

◄ **Graham Harman:** *At first glance, Heidegger is a more favourable case for Carl, since* Being and Time *starts with referential contextures (i.e. networks) of tools, and shows some contempt for the notion of decontextualized entities. But I would venture to say that Heidegger misreads his own tool-analysis. He thinks it shows us that all tools are mutually referential, such that 'there is no such thing as "an" equipment'. But his passages on broken equipment contradict this holism. The hammer can only break because it was never fully assimilated into the tool-system. Objects always retained their autonomy.*

Peter Carl: So *Dasein* is the opposite of 'logo-centrism', and it simply names the conditions for the modes by which we are accountable to Being, which only manifests itself through our particular involvements. With regard to 'depth', therefore, our involvements with being are manifest at different levels. This is something Dalibor Vesely has emphasized in Merleau-Ponty, and which he finds prefigured in Plato's Divided Line symbol in *The Republic*, surviving into Christian theology via Neoplatonism as the *Catena Rerum* (Chain of Being).

The idea of *levels* can be contrasted to the idea of *flatness*. Flatness is the perception of reality as a kind of statistical distribution of possibilities of information, within what is considered an aggregate of objects or people (Harman's concept of objects is an example).

◄ **Graham Harman:** *Flatness has nothing to do with statistical distributions, so I am not sure where that came from. There are two separate concepts of flatness in philosophy that must not be conflated. The earlier one is the negative sense of the term, as found in Roy Bhaskar, who treats epistemic philosophies as flattening all reality into its accessibility for humans. The other positive sense of the term is that used by Manuel DeLanda, who uses flatness to refer to the fact that we start out by treating all entities equally in our philosophy, not presupposing some special privilege for the human entity.*

Peter Carl: I would insist that it is only possible to make sense of flatness because of the depths in which we are implicated: that is to say, the more primitive phenomena orient the more sophisticated phenomena. This is what makes it possible to have our more sophisticated discourse. Without our habits and customs, the capacity to talk at all would be impossible. Every word would have to be questioned and traced back to some sort of agreed origin.

◄ **Graham Harman:** *I agree that we can only make sense of the surface because of the depths in which we are implicated, though flat ontology has nothing to do with surfaces. Where we really disagree, though, is on Carl's notion that habits and customs represent depth. This is the wrong way to read Heidegger, as though social practices were depth and theory were surface. In fact, social practices and theory are both equally on the surface. The depth comes from the things themselves.*

Peter Carl: The standard example of flat discourse is that of the sciences and this has created the long-acknowledged problem of accommodation between the two styles of discourse. Whilst it is possible to understand the empirical sciences from a moral position, the reverse is not possible. Latour reprises this problem as 'fact versus value', but I suggest the term 'morals' or 'ethics' instead of 'values'.

◄ **Graham Harman:** *This reading of Latour's Politics of Nature is incomplete. He does not preserve fact and value in that work. Instead, he mocks them, even as he concedes that both were onto something. 'Facts' for Latour become the alterity outside the polis, to be detected by scientists and moralists. Politicians are found on the value side, by which Latour simply means the immanent side of the polis.*

Peter Carl: Morals operates within pragmata. Ethics is a separate domain, a philosophical speculation regarding the good, that is, our situatedness in cosmic conditions. I do not think it is possible to develop a theory that relates morals to ethics. They are simply two territories that communicate. Moral judgements always make do within particular circumstances and particular people, and very often with people who do not get it or only partially get it.

I have come to realize that Latour's Actor Network Theory is almost as bad as Harman's object-oriented ontology and I can see why they talk to each other.

◄ **Graham Harman:** *None of what follows clarifies the reason why Carl thinks OOO and ANT are both bad. Calling Latour a 'positivist' is a bit unusual, though I suppose you could use that term insofar as Latour views the world as nothing but actions, denying any depth beneath them. But it would simply be impossible to ascribe that view to my philosophy, which is nothing if not an assault on the positivity of facts.*

Peter Carl: Latour insists on the positivism of tracing the structure of the background as a series of links, as if tracing chains of causation. What falls outside the links he calls 'plasma'. If anything, the background operates more like a culture. Within culture judgements are made and unmade, are the object of embarrassment or thrilling insight. So to say that we should locate design among the objects of a relational universe seems to me to be a very chaotic enterprise and I honestly cannot see why to do it.

◄ **Graham Harman:** *My notion of the universe is not relational, so Carl must be referring to Latour here. Even so, I am not sure why design would be excluded from a relational model of the universe if Latour is right. I happen to think he is not right in his thorough relationization of the world, but ANT is too important a theory to be summarily dismissed like this.*

Peter Carl: I still think Harman misses the point on Heidegger's hammer, because Heidegger really *is* pointing to the world. It is about the conditions in which grabbing hammers are meaningful.

◄ **Graham Harman:** *Carl is trying to humanize the tool-analysis, and admittedly Heidegger himself probably would not complain about that. But the meaningfulness of a thing for Dasein does not exhaust that thing. It is also a dark and gloomy nucleus beyond our grasp, which is precisely why it can sometimes break.*

Peter Carl: A hammer is simply a window into that depth, into Being, or the Being of beings. To reduce all that to objects is to flatten it.

◄ **Graham Harman:** *How? My argument is that something in beings always withdraws from any relation, and that this withdrawal is plural. Heidegger sometimes behaves as if plurality were merely a surface-effect and Being were therefore One. But I argue that there is also a plurality of the depths. Being is nothing other than the Being of beings. This model of cryptic, withdrawn entities does not seem to me like a flat model at all.*

Peter Carl: What I criticized about Harman's interpretation of the fourfold more or less sums up the problem. For him it is a flat diagram. For me the fourfold is a much more dynamic world, addressing what communicates implicitly, what is called into play through involvements.

◄ **Graham Harman:** *Four is a perfectly dynamic number, and it is not just slang for 'many' in Heidegger's writings. There are four poles of the fourfold for some very good*

reasons. But despite the mirroring of the fourfold, it is not all about involvement. There is a good deal of non-involvement there as well. The jug, in his essay 'The Thing', is what holds water whether humans are there or not. Indeed, the jug is still a jug even if the water is missing, because the hollow space inside the jug will still be there. Heidegger's thing can relate, but only because it is as radically autonomous as Being itself.

Peter Carl: I think Heidegger's term 'strife' (as in his 'strife of earth and world') returns to something like the origins of geometry in Anaximander and its dependence on political orders and the phenomenon of justice. It returns to what is captured in something like geometry before it became the autonomous discipline that it became in Hellenistic culture. But even in Hellenistic culture you can see as late as Proclus that geometry is understood in much the way Plato described it, as the structure of *analogia* offering a preliminary glimpse of ontology rather than a purely autonomous structure. I cannot understand how Harman would cope with such a phenomenon. I see his philosophy as a strange impasse.

◄ **Graham Harman:** *Autonomy does not jeopardize strife but is the very condition of it. If everything is relational, that is not strife. Recall that for Heidegger, strife is between 'earth' and 'world'. The earth is that which never becomes visible, that which differs from every presentation. If this were not the case, earth would be another world, and no strife would occur.*

Joseph Bedford: Harman is part of a broader trend within the humanities, which is why he does overlap well with Latour, and why many people see his effort to go beyond the privileging of Dasein in Heidegger's philosophy as complementary with posthumanist thinkers such as Donna Haraway. There is a general sense in which his object-oriented thinking appears to help us get away from anthropocentrism and, with this, to get us away from various problems associated with a certain form of anthropocentrism such as European nationalism, colonialism, animals abuse and ecological crises.

Peter Carl: Yes, but to repeat, I do not find any anthropocentrism in Heidegger.

◄ **Graham Harman:** *I agree about these texts, but that does not mean that there is no anthropocentrism in Heidegger. In the first place, he chooses to begin by interrogating Dasein, which he even admits in one lecture course was not necessary (its the Kantian legacy that traps us in always starting with the conditions of human access). There is also the fact that Sein and Dasein are forever locked in correlation with one another. He does a lot to get past the anthropocentrism of this, but never fully pulls it off.*

Peter Carl: If anything it is precisely the reverse. 'What is a Thing' and 'What is Called Thinking' are all about de-centring anthropocentrism and putting the emphasis upon the priority of world.

Joseph Bedford: My sense is that this post-humanist trend in the humanities is about trying to get a better understanding of the full complexity of reality by trying

to understand the reality that escapes the world as it appears to us in our human involvements.

Peter Carl: What is the 'reality that escapes the world'?

Joseph Bedford: Well, one way in which it has been framed by people like Quentin Meillassoux was that there are clearly fossils that we can find within our world, that appear to us and, yet, that show us evidence of a reality that existed before our human world even came into being. The *arche-fossil*, as Meillassoux puts it, is a kind of window onto the reality outside of our world.

Peter Carl: By 'world', you seem to mean 'known-to-us', which is not what Heidegger means by world. This is either a version of Derrida's 'specter', a phenomenon created by known-to-us, or part of a more interesting problem addressed by Descola's book *Beyond Nature and Culture*.

◄ **Graham Harman:** *Descola's book is very interesting indeed.*

Peter Carl: Descola names the attitude to nature that dominates the West as *Naturalism*, and he places that in a matrix with three other kinds of possible involvements with natural phenomena, which he calls *Totemism*, *Animism* and *Analogism*. The fact that nature has a voice is not so much a problem of anthropocentrism, because nature was never simply nature anyway. Nature was always discriminated in terms of the things, obligations, claims that come from particular monkeys, particular trees, particular lakes, the movement of the sun etc. History has already always been taking place in the context that we generalize as 'nature'. The important point here is not seeing nature and culture, *physis* and *nomos* as oppositions, that is, one being 'natural' and the other 'artificial'. Culture should be understood as an interpretation of the natural conditions.

◄ **Graham Harman:** *This is one of the central insights of Bruno Latour, whom Carl has largely trashed so far.*

Peter Carl: And we can interpret these conditions more or less well. Despite our being able to tell the difference, we still tend to interpret them less well. I would prefer to say that what we are talking about is really alternative manifestations of our involvement in the strife of earth and world.

Joseph Bedford: When I attempted to suggest there is a general trend in the humanities to recover an 'objective' mode of thinking, or a new realism, I was really trying to get at how I think this might be on the agenda now because I think it is a response somehow to a general contemporary anxiety about the state of current global economic, planetary and socio-political system. I was trying to suggest that one of the reasons why it could be valuable to make a 'speculative turn' or to recover *metaphysics* in a less naïve way could be as part of an effort to develop new intellectual tools to address global, economic and ecological contexts which are so complex that they cannot be accounted for by us so easily if we restrict our mode of thinking about them to the way that the world appears for us.

Peter Carl: There are two questions here: one concerning the meaning of complexity the other concerned with understanding. Your last comment suggests that you are still not persuaded that orientation to world is the opposite of anthropocentrism.

> ◄ **Graham Harman:** *Nor am I persuaded in my own right. Just because humans are always counterposed to objects does not mean that we are beyond anthropocentrism. As long as humans are always there as 50 per cent of the situation, it is still anthropocentrism. What about object-object relations? Subject-object relations are not enough to overcome the overpowering dominance of the Subject, no matter what elusive alternative names one might give it.*

Peter Carl: I would suggest that there is a confusion regarding 'objectivity'. I suggest that there is epistemological objectivity, which is about control of knowledge for the Cartesian *ego cogitans* and according to Cartesian prescriptions regarding 'method', and there is ontological or ethical objectivity, which is about orientation in reality. The latter is more 'primitive'; it speaks to what is common to all and provides the basis for the former, which is more sophisticated, but also more limited. Epistemological objectivity is in fact the basis of all the 'metaphysics' of how I know what I know that, paradoxically, manifests itself in the search for systems and patterns. I find this to continue even in the move from Structuralism to Post-Structuralism. To me morality *is* the question. Morality is the capacity to make judgements about what is good. The practical is a sphere that is always 'making do'. It is always approximating good, given particular resources, or capacities. And we have to say that this always includes incapacity, arrogance, stupidity, personal corruption etc. I turn to James Joyce's *Ulysses* here because I find it very illuminating on these questions of practical wisdom, morals and ethics. I am still not sure whether it needs to be told as a narrative, but Joyce's prose puts in play how much the so-called 'interior monologue' is actually a cultural phenomenon. It is not simply individuals processing fears and hopes and putting them into a language that is more or less common; individuals are always already cultural, and always involved with situations of decorum.

Joseph Bedford: I agree with your sense that Joyce's writing reveals the world of human involvements and how it has levels and how there is a communication taking place in his writings between morals and ethics in our practical situatedness. But if I can take for a moment an example from Joyce, I might try another way to advance my question about the complexity of our global economic, planetary and socio-political crisis, which I am suggesting could be a context for the speculative turn. There is a moment in *Ulysses* where Joyce compares the telephone cable to an umbilical cord…

Peter Carl: … What Joyce has done there is make thematic that way of understanding. He combines technical and religious vocabularies with a little swipe at Eliot by translating words such as *telephonata elevata*, into a parody of the Hindu chant that finishes off the *Waste Land*. For Joyce, there is pain and suffering, but it is not a wasteland.

Joseph Bedford: Let's take the telephone as exemplary of even more complex instrumental advances of the world around us today, all the way up to the algorithms that now underpin our everyday activities and movements, of global banking, flights

and the food chain. These are the kinds of things that I suggest are problematic because of their relative invisibility to our world. They have massive consequences on our world, yet they themselves do not show themselves easily to human understanding. Does Joyce's attempt to approach the phenomenon we can name 'the problem of the telephone cables' through their resonance with cultural associations that appear to us in our human involvements with them help us grasp their invisible complexity? I am wondering if there is not a role for a more sophisticated metaphysical thinking, or a new approach to the thinking of objects by subjects that goes beyond the naïve metaphysics that is forbidden within phenomenology. There seem to me to be complex invisible constructions that are a product of human society, something that cannot quite be got at through a Joycean sense of wit alone.

Peter Carl: Yes, this returns to the second part of your earlier question – which I would characterize as: 'What is the ontological status of all the big number and system-like phenomena which are so prominent in current cultural description?' The complexity of the telephone system or the global banking system has to be positioned against richness. Colin Blakemore, the neurophysiologist, gives the most clear example of what I mean by the difference between complexity and richness: if complexity is like the molecular structure of the Himalayas, then richness is like human language or the human brain. It is also seen in the problem of artificial languages. You cannot simulate a conversation with algorithms. Emergence promises the miracle of getting richness from complexity, but it is really only the other way around – you do not get ants or neurons, or even atoms, all by themselves, the way they appear in science textbooks or laboratories. They are embedded in deep structures of order; and in this sense, complexity depends upon richness. Emergence is still an open possibility, but even the robotics people have realized that there is simply a huge amount of information in the context.

Joseph Bedford: I can agree that richness is prior to complexity then, but the reason I mentioned complexity in relation to the example of the telephone system is to suggest that the invisibility of complexity is another example, other than the arche-fossil, of a case in which we are always surrounded by a reality that escapes our world…

◄ **Graham Harman:** *Yes, so can I.*

Peter Carl: What is this 'escapes our world'?!

◄ **Graham Harman:** *Carl's view seems to be that the world (viewed as a system of relations with humans at the centre) has no outside. If that were truly the case, there could be no surprise and no change.*

Joseph Bedford: Another example could be the bees. Nobody knows at present what is happening to the bees – why they are all dying. There is something very complex going on, to do with the interaction of all the things that humans make, or perhaps just things going on in the natural ecosystems, and we do not fully understand it. This

is, I think, what I mean by invisible. There is a complexity there for which it might be useful to have metaphysically fashioned tools of some kind to try to help us prepare ourselves to grasp it. The answer to what's killing the bees might not appear through the question of the human iconography of bees in our culture. It is something about real objects relating to each other in complex ways that we have not conceived of yet, but perhaps I am just talking about a need for greater scientific knowledge, if this is not using oil to put out the fire.

Peter Carl: We are repeating the issue of known-to-us. It is like the Galileo problem. He thought that it was God who knew things *extensively*. It was God that knew the totality, but human beings, or rather, clever empirical scientists like himself, knew things *intensively*. For Galileo, to know things intensively is to have the formula for how the ball drops or falls under acceleration. From this you can apply your formula to all balls. But then Hume said there will always be a ball that is going to fall outside your experience, so you cannot say it will apply to *all balls*. He effectively re-situated the problem in terms of custom and experience. There is here a confusion between the *general*, pertaining to the extensity of phenomena, and the *universal*, pertaining to the intensity or depth of meaning. In order to get your formula about balls dropping, you have to have your language in place already, which means you have Being, manifest through your culture. This is what I mean when I say that the more primordial precedes the more sophisticated. So in that sense, complexity is an artefact of our discrimination as much as it is of sheer multiplicity of telephones or banking exchanges. The degree to which the current metaphors for the whole veer between economics and information is an index, to me at least, of the degree to which we are willing to bring all reality to a single conceptual level, for example the complex system, whose continuity is explicit and can be traced, represented in a diagram. Actor Network Theory is another attempt to approach richness as if it were complexity.

◄ **Graham Harman:** *I am not sure I follow the critique of Latour here. He is quite clear that any black box can always be opened, and thus there are infinite riches contained in any point of reality, not just a complexity obtained on the outside. For me this is still not enough depth (since he still thinks things are defined by their relations), but since Carl does not share my insistence on deep withdrawal, I am not sure why Latour's ever-openable black boxes would fail to satisfy him.*

Peter Carl: The kind of continuity in which Latour is interested is not systematic. We have choices, and particularly moral choices, which in the scheme of things are very hard to express as 'rational' choices in, for example, game theory. In order to be a positivist you have to have myth. You simply cannot *live* as a positivist.

In one sense Latour's 'facts and values', or his 'politics of nature' theme, is nothing more than the 'two cultures' debate between the sciences and the humanities.

◄ **Graham Harman:** *Not really. His We Have Never Been Modern is an attempt to blow apart the nature/culture distinction. If he fails, it is not (as Carl thinks) because*

he insists on the difference, but because he conflates the nature/culture distinction with the in-itself/for-us distinction. Thus he is left with no room for a reality-in-itself that science could possibly aim for, and this leads to strange claims such as that Ramses II could not have died of tuberculosis because it was not yet discovered.

Peter Carl: I can appreciate, up to a certain point, the practicality of Latour saying that the way this has to become manifest is political. But lurking behind that is a kind of naïve attitude to democracy. Latour rightly recognizes the degree to which democracy is institutionalized conflict. But to me, that *agon* is the key to our always de-centredness, why Heidegger calls the tension between earth and world a *strife*, and why the philosophy of the polis remains with us as a constant tension between the pragmatic and the paradigmatic. While Aristotle gets rid of Plato's superstructure of ideas he retains from Plato the idea that what a town adds up to is self-understanding. This is what rites and rituals accomplish. They are the 'time out of time' that reconciles primordial origins with contemporary history. In rites and rituals things are always the same and always different. They are re-enactments that take place in different times of history, with different people, and different conditions. That is what Aristotle imports into the *spoudaios* via tragic drama. Now by this Aristotle does not mean himself as a philosopher, and he certainly does not mean philosophy as Descartes or post-Cartesian philosophy practices it, as an individual thinker – what Derrida calls a 'specter', or the body of thought that gets identified with a philosopher like Hegel or Marx. Aristotle means it collectively. He means it as collective understanding and that is precisely what Plato was struggling with. Plato was struggling with the movement between the highest good and the ever-fractious polis that ultimately gets called the bottomless pit of unlikeness or difference. It is a constant movement. Plato gets quite mystical when he talks about approaching the highest good in the *Seventh Letter*. Aristotle decants dialectics into rhetoric, the official discourse of the polis but retains the stratification of understanding in Book VI of the *Nicomachean Ethics*.

The basic point is that you are always *caught up in that world*. You are always secondary, however it is articulated, as myth, or whatever. Plato's dialogues work like this. Socrates depended on his interlocutors to hold the opposite position because what is really creative happens between the participants in the dialogue. And I would say it is the same for hammers and pens – or for telephone cables. We have always been de-centred. We have always been eccentric to the meaning created between people and things, hence the 'Da' of Da-sein, hence also Plato's notion of *anamnesis*, recollection of what is always already there. The so-called morality or the political correctness of the project of 'de-anthropocentrizing' is a bit of a red herring in my view.

◀ **Graham Harman:** *The project of de-anthropocentrizing is not a matter of political correctness, but of objecting to modern philosophy's tendency to filter everything through the human Subject. It is a reaction to the straitjacket in which the brilliant Kant left us. It is not primarily a moral complaint.*

Peter Carl: It has not really understood what Heidegger was up to. I am not for a moment saying that Heidegger wasn't a problem – his fascination with what is translated

as 'destiny' undermined his fundamental insight. It is for this reason that Gadamer's superior understanding of humanism is more informative regarding 'practice'. In the debates you mention I detect a small 'g' good that is achievable, where culture becomes a project, masquerading as a capital 'G' Good that is an ontological theme to which we are always eccentric, which always needs reinterpretation.

Joseph Bedford: So how do we apply this to what architecture should be or do, to what we might do as practising architects designing buildings? In your contribution to the exchange, you almost suggested that architecture should be understood like morals, as a practice of judgements in specific cases, a sort of tact with respect to the decorum of the situation. You suggested that architecture is uniquely like morals in this way and thus able to communicate with morals.

Peter Carl: There is a difference between making architectural judgements when designing and dwelling in architecture once it is there, and that is one of the interesting things about architecture. This tension exists in architecture because it operates at such a fundamental level, because it is both a practice, making specific judgements in specific cases and this practice is devoted to qualifying part of the general background conditions of dwelling. Another way to think of architecture's background role is as a 'horizon for praxis', an articulation of the 'institutional horizon'. Here 'institution' is not, or not necessarily, an official institution like the National Health Service or a parliament; it is rather the more anonymous material, common to all, the basis for ontological or ethical objectivity. Architecture is playing that role for us now, here. It is enabling us to have this conversation. We do not have to go out and check that they have not filled the corridor with lions, or that everybody else outside has become a speaking cockroach.

Joseph Bedford: So could we say that, instead of approaching it through formal, objective or now metaphysical and speculative modes of thinking, we should be thinking about architecture as a 'horizon for praxis' as designers?

Peter Carl: I thought my colleagues in the Harman exchange were struggling with a similar issue. When you say 'should', the question you are working with is what I have been calling *small g good* and *big G Good*, morals and ethics, and how they communicate with one another, and maintain an openness of that communication. For me, the key phenomenon here in helping to grasp that communication is that of *city*. For me architecture can be understood as a local interpretation of city. In this respect I would say yes, an understanding of depth and of architecture as a horizon for praxis, and how to work with that understanding in making new bits of city is certainly what is missing at the moment. It is missing from policy, from planning (generally speaking an instrument for trying to achieve moral ends through technical means, when not simply about land-capitalization) and yes, from most architectural discussion, which is perfectly happy, still, to go on talking about 'form and function', 'form and space', or 'aesthetics'. The code of practice for the Royal Institute of British Architects, for example, does not mention city. It is hard to find who exactly does care about it, because that world is all mixed up in tricky games between transient political parties subject to voting cycles and developers who are capable of coming into a site

and taking what was once ten different activities on a block and turning it into one building with one activity, completely flattening the depth and richness that was there.

Trying to argue for the depth of an urban block is very, very hard. Everybody would just like 'space' or 'form', which are easily filled with criteria for efficiency and profitability. All the developers talk about 'community' and 'public', but generally this means just a glass front made of chain store signs shown in the renderings as the theatre for people in blue skies consuming as their vehicle of happiness. Difficulty or conflict is not considered part of 'public' in the way they see it.

Working with depth in the way that I am talking about it is actually happening more in the schools. There is certainly a lot of it here at London Metropolitan University, where I teach, and there is a lot of it in all sorts of schools, but for some reason, it is not making it into policy and planning. We need to get better at describing the kind of city that everybody calls 'informal city'. It is simply not a texture of misery as it is assumed to be. It is a much richer world than that. Everybody who has gotten involved in informal cities has recognized this. But when you try to put that together against concepts like space and form, space and form always win. But these concepts are empty. Everything has to be supplied. That is where richness is paying a price to complexity. Conceptual understanding as it is exhibited in concepts like space and form always aspires to be logically consistent; that is why it is flat; it is always an effort to try to bring all of reality to a sufficient level of generality that can cover all cases. At the same time 'space' seems to grant radical freedom; but that is like the packaging for 3D modelling software, which promises this kind of freedom as an opportunity and not as the obligation to supply every detail (hence the vast size of AAA video game designers, and still the results look shrink-wrapped, and the games are mostly mindless). The nature of the promise lies in control. It is this promise that has elevated 'system' from a banal term for a traceable chain of causation to something with a quasi-mythic status, as if all forms of order need to conform to a 'system', even politics or language which Deleuze and Guattari still call 'code'. Understanding what is actually going on in something like a block and how it empowers the kinds of people that populate Joyce's *Ulysses* is something else. Nobody has come closer to describing the architecture and the city as a horizon of praxis than Joyce. Certainly no planner or architect has.

The problem with Latour is precisely his understanding of practical life. The concept of 'network' floating in 'plasma' simply is not good enough.

◄ **Graham Harman:** *I am the biggest critic of Latour's concept of 'plasma,' because it is too reminiscent of the pre-Socratic apeiron. It is a monolithic lump without format or differentiation, whereas the depth needs plurality from the start.*

Peter Carl: It is too much of a system. It aspires to logical coherence to too great a degree. It cannot cope with the moral phenomena involved in what a developer is doing when subtracting from the city a topography with many kinds of activities and replacing it with one, inevitably shiny, building and channelling the profits to a few people.

◀ **Graham Harman:** *This is probably true in Latour's early period, where politics seems to be entirely about victory, and where Right without Might strikes a rather pathetic figure. But not so much of Politics of Nature, where morality creeps back into the centre of the polis. In his new book on the modes of existence, morality even turns out to be the centre of the book (though I would admit that Latour is not entirely convincing on this latter point).*

Peter Carl: Today the city is indeed also a problem of extensity as well. There are more people in Tower Hamlets than there were in the Athenian Polis. That is another incarnation of your problem of how richness and complexity negotiate. The sheer quantity of phenomena has its own presence, and power. I agree. Complexity does seem to carry a kind of depth, though. When you name it 'invisible' that seems to me to be too total. The depth of complexity is *not* totally invisible. This is why I am interested in *Twin Peaks*. It takes that market world and treats it like the conventions of tragic drama or chess, with endless possible situations involving the same characters. It is the reason those super attractive weird prom-queen characters in *Twin Peaks* seem both plausible and implausible, just as the furniture seems both plausible and implausible. David Lynch is interested in the way that the superficial goodness that we can buy carries the evil with it. Places and things of comfort are conditioned by stuff that comes from behind you or beside you – so, behind the sofa or in the gap between the wall and the bed where he finds an ominous darkness, where all the things live that you thought you had concealed in your attention to the unconcealed – as Heidegger would put it. In some ways, Lynch is applied Derrida.

Seeing these market forces with all their systematic complexity as an endlessly replayable semiotic system accordingly finds its focus through richness. Complexity has its identity and reality. But cities have always been seen to be opaque in this way, even in the time of Babylon; but in order to cope with it, you have to treat it as a phenomenon of depth and a question of moral judgements. Practical making-do is something like tact. In making something like a chair, there is a tact or resistance involved. The tact is both social – is it a throne or a stool? – and material – is it made of wood or plastic? This tact is emblematic of practice – it takes place in the negotiations with the claims and affordances of the concrete conditions; it does not need an ontology, a city is a sufficient 'world'.

Another way to see this reciprocity between complexity and richness is in the exchange between 'space' and Being. One cannot step outside space because it is infinite; its radical freedom tends towards alienation. One cannot step outside Being; one cannot objectify Being, because it is deep. It is the huge reservoir of conditions by which our freedom is meaningful.

Joseph Bedford: Let me ask one final question about whether there might be a place for speculation somewhere in the practice of architectural design, this time in relation to the kind of speculative analytic thought done by advocates of social justice. On the one hand, we have been talking about the speculative thought attempted by Harman, but perhaps another example could be in the efforts of people like Thomas Piketty or David Harvey, who navigate by mathematics or economic formula towards ethical

ends. They try to raise difficult-to-grasp structural problems in the world around us to a greater level of awareness or understanding. Is there not a place for something like that kind of activity in architecture? Would you value that kind of approach applied also to architecture or are you saying that architects should first and foremost engage in architecture as a practice of tact with respect to the decorum of the situation?

Peter Carl: I do not have rules like that because I think these people are all trying to do good, and there are certainly things to learn. I do not buy all of it. I think you still learn a huge amount about language, even in the research that goes on into artificial languages, just because of trying to stuff it through this small little grid. You realize how important everything that does not fit through that grid actually is. The artificial languages people realize this too, but they are looking to quantum computing and neural networks in the hope of finding a better grid. 'If only we could have a neural network as rich as the brain', they say, as if life were a wet computer. But that leap between a collection of ants obeying simple rules and what they call the intelligence of a hive or a colony is genuinely still a miracle. Words like 'intelligence' are very slippery; sometimes it means data, sometimes information, sometimes knowledge and sometimes wisdom. I think certainly for the immediate future, we most need to understand something like practical wisdom. Practical wisdom is honest about the claims made by our collective involvements: conflict, negotiation, accommodation, collaboration, in people and things. It is honest about the role of partial or incomplete understanding.

◀ **Graham Harman:** *Then why critique OOO, which is based entirely on the notion of partial or incomplete understanding? Carl ought to see my position as an ally, and I am still not clear as to what he so dislikes in the notion of objects.*

Peter Carl: And it is honest about the insights granted by the material imagination. This attunement to the stratification of embodiments ensures that the primordial phenomena – on which morals depend – orient the sophisticated discourses and concepts.

Afterword: Graham Harman

I am grateful to Joseph Bedford and Jessica Reynolds for organizing the 22 June 2013 event in London that appears in edited form in the preceding chapters. There was stimulating discussion that evening, both at the Swedenborg Society and over dinner in Jessica's studio. On a personal level, the Architecture Exchange also provided a good excuse for my father to make his first trip to the UK, which has given us some valued memories to chew on together. Since this book is already fairly thorough in recording the various points of disagreement between me and my interlocutors that evening, I will not elaborate further on those disagreements here. It will perhaps be more useful to the reader if I briefly retell the story of how I became involved with architecture in the first place, before concluding with some thoughts on the present and future engagement of Object-Oriented Ontology (OOO) with the discipline.

OOO and Architecture: Past

In the spring of 2007, I was in London for the now-famous Speculative Realism workshop at Goldsmiths, where I joined Ray Brassier, Iain Hamilton Grant and Quentin Meillassoux in launching a new style of realist metaphysics in the continental tradition of philosophy.[1] That took place on 27 April. But for me it was the fifth and final lecture of a busy week. The second of the five talks had already occurred on 23 April, at the Architectural Association (AA) on Bedford Square: my first-ever appearance at an architectural venue. It was Nina Power who first mentioned that there was interest in my work at the AA, where she taught herself; it was through Nina's mediation that I became acquainted with faculty members Theo Lorenz and Tanja Siems, who kindly arranged an invitation for me. It was an unexpectedly long day that began with my sitting on a jury critiquing student work, a task for which I was completely unprepared and to which I remember contributing little of value. My lecture followed in the early evening. It was a pleasant experience (despite an evolving aggressive dispute with a fellow juror), though not one that seemed destined to lead to anything more. OOO has always been of unusual interdisciplinary interest compared with most contemporary philosophies, and there was no reason at the time to suspect any especial resonance with architecture. At that point, I was more aware of growing interest from artists and geographers. This remained the case even when I was invited to speak further on 23 November of that year at the Architecture

School of the Technical University of Delft, The Netherlands, in a towering structure that burned to the ground not long afterwards. There were two additional invitations in the following years. The first came from Kathryn Bash, who had me speak at Goodenough College in London on 8 July 2009, and on whose doctoral thesis committee at the Bartlett School of Architecture I would later serve. Adrian Lahoud then kindly invited me to fly from Cairo to Beirut, on 25 September 2010, to speak to his Sydney students who had established a studio abroad in a house in the Lebanese capital. All of these further invitations were welcome but still seemed like just further interdisciplinary interventions by a philosophy (OOO) that prides itself on a nearly global relevance.

It was in 2011 that I was finally drawn into architecture in a more insistent and lasting manner. In September I was in New York to give five lectures in a nine-day span, none of them having anything to do with architecture. But while there, I also agreed to have dinner and go out for live music with two acquaintances from my far-off undergraduate days at St. John's College in Annapolis, Maryland: Tina Chiu and David Ruy. I had seen neither of them in over twenty years, and as is usual in such cases, most of the evening was spent in reminiscence and trading stories about the post-college adventures of our classmates. On this visit to New York, I was staying in Washington Heights, and once the night had ended, it would be a long trip from Greenwich Village up to that remote neighbourhood in the far north. Luckily, David (whom I had known for years to be an architect) kindly offered to give me a ride home. I seem to recall that the conversation was initially casual chit-chat, covering sports and other topics, as we made our way through the crowded traffic of downtown and midtown. But once we picked up speed along the West Side –while passing Columbia University and Grant's Tomb, as I recall– David began to make the case that my books were of potential importance for architecture. While remarks of this sort are always welcome, if somewhat disarming, it is unlikely that I took his words especially seriously at the time. Over the years, I had been told by various people that OOO could be of importance in disciplines ranging from media studies to nursing, and I had learned to treat such claims with caution pending further discussion.

What gradually made David's claim of a OOO-architecture link seem plausible was his sheer persistence through e-mail: his willingness to answer my naïve questions about the discipline and provide reading suggestions, and (though I learned of it only later) his evangelizing throughout the profession. No less important was the growing circle of friends to whom he introduced me, beginning at a conference in Istanbul in November 2012. It was only on this occasion that I first learned of the very existence of the Southern California Institute of Architecture (SCI-Arc), where I would lecture one year later and be outright employed in just four years' time. In the meantime, after a lecture in January 2013 at Bartlett, I joined David as well as Theodore Spyropoulous for a long debate over breakfast at Paddington Station with Patrik Schumacher of Zaha Hadid Architects. I believe it was on that same trip to London that I also met Jessica and Joseph at the British Museum, where we made initial plans for the event that gave rise to this book.

From this point onwards, my contacts with architects became too thick and frequent to be worth recording in detail. While David and his circle formed and still

form the backbone of my relation to the field, there were other contacts that left an impression: such as multiple invitations from Michael Speaks to appear at Syracuse University, both upstate and in Manhattan, and eventually to give joint lectures with him in Taiwan. Susan Schuppli and Eyal Weizmann also brought me to Goldsmiths. Most importantly, given what would later happen, I was invited to speak at SCI-Arc on 18 September 2013 and again to give a master class in October 2015. I no longer recall how much of a hand David had in the first SCI-Arc invitation; he was then still teaching at Pratt Institute in Brooklyn and would not join SCI-Arc full-time for a few more years. But my rapport with the SCI-Arc faculty and students was immediate, and I felt inspired by the 'found object' quality of SCI-Arc's one-building campus in a former railway freight depot, in what was then still a reasonably desolate corner of downtown Los Angeles. Dora Epstein Jones and Tom Wiscombe were especially warm and enthusiastic. Since my wife, Necla, had just accepted a faculty position in Iowa, it was clear that remaining in Cairo would be logistically difficult. Under these circumstances, I began to discuss a more permanent position with SCI-Arc, and the negotiations went smoothly.

OOO and Architecture: Present

Thus it happened that a philosopher based in Egypt, who knew little about architecture as late as 2011 and had not even heard of SCI-Arc as late as 2012, found full-time employment at that avant-garde school just four years later. Whether a similar chain of contingencies might have led me into another discipline instead is difficult to know, but I suspect not. For there are good reasons why architecture and OOO make for natural dance partners at this point in time, and I will discuss some of these reasons below. At any rate, I now work at SCI-Arc, though this was unforeseeable at the time of the discussion in this book. Housed in the former Santa Fe freight depot in a formerly dangerous sector of downtown Los Angeles, SCI-Arc is as long and narrow a space as I have ever seen: as long as the Empire State Building is tall, it is said. The typical life of a university professor in the humanities involves sitting in an office, passing between different campus buildings and often teaching in a widely scattered series of buildings. At SCI-Arc, the situation is completely different. Here I have no office (few faculty do), and there are no other buildings to walk to except for one that contains the supply store and a few financial offices. There are only five normal university classrooms in the entire school; six, if you count the back section of the library, where seminars are sometimes held. Most of the rest of this vast former rail depot is filled with studio space where I rarely venture, though I often hear reports from my students of what happens there. Perhaps more relevant than these physical differences from previous academic life is the totally different status I hold, which often approximates that of a student more than a professor. In conversations with SCI-Arc colleagues, I am most often a listener, trying to soak up everything that is said about a profession in which I am still a newcomer. My students are often my tutors, explaining various principles of their craft that they might have learned as freshmen, but which are still partially unknown to me. I read as much as possible and attend as many of the guest lectures as time allows,

considering that I still live in Iowa and come to Los Angeles intermittently. And while I have always enjoyed learning new fields quickly, it is more difficult to do so at age fifty than was the case at thirty-five or forty. Nonetheless, I have become a kind of student again, and there is no better recipe for feeling young.

Being still somewhat disoriented in professional terms, it frequently comes as a surprise to be treated as respectfully here as I am. Why do my SCI-Arc colleagues not simply blow me off as an amateur and a nuisance? Architects have long had time for philosophers, though the trend has accelerated in the past half-century. First it was Martin Heidegger, as seen in the work of the Norwegian architectural theorist Christian Norberg-Schulz, associated as he was with architectural phenomenology and the Pritzker Prize-winning Swiss architect Peter Zumthor.[2] Next came Jacques Derrida, whose deconstructionist philosophy found an echo in architectural deconstructivism, as enshrined in the famous 1988 show at New York's Museum of Modern Art, and in Mark Wigley's thorough study of the potentially deep relation between Derrida and architecture.[3] Peter Eisenman and Bernard Tschumi would also declare a certain allegiance to Derrida–in the former case despite Eisenman's professional friction with the philosopher (and I prefer Eisenman's side in the dispute).[4] Then came the hour of Gilles Deleuze, who was heralded by architects several years before most philosophers realized he was more than a carnival gimmick. A chorus of voices sounded Deleuze's name in the discipline, but Sanford Kwinter may have been the one who was closest to the centre of it, through his co-founding of Zone Books and his many stimulating essays.[5]

Now it appears that Deleuze's sun may finally be setting in the architectural world. This is no indication of a facile need by architects to jump from one fashion to the next but is simply the normal generational pattern found in every zone of intellectual and cultural life. The intermittent shift from one intellectual model to another is perfectly healthy. For if we consider that any theory of anything is inevitably an exaggeration, one that casts light on certain portions of the landscape while leaving others in darkness, then no theory deserves an infinite life span. A theory teaches its lessons; if lucky it helps shape the concerns of the next generation of theories, and it then passes into retirement or – in a few cases – into the status of a classic to be consulted across the ages. The latter seems to be happening currently with Deleuze, who dominated intellectual life in several fields from roughly 1995 through 2010. Quite apart from all accidents of personal acquaintance, OOO arrived on the architectural towards the end of a long Deleuzean wave. Thus, the question to ask is what OOO offers to architects that is not already found in Deleuze. Not much at all, according to our 'frenemy' Patrik Schumacher. As he writes in a recent critique to which I penned a response, OOO in architecture is all about the hidden surplus in an edifice, but in this way, it merely repeats the key insight of the Deleuzean 'virtual'.[6]

Yet there are two problems with equating the Deleuzean virtual and OOO's withdrawal. The first is that in most readings of Deleuze, the virtual has something like a *pre-individual* status, being not fully articulated into individual entities in the manner of OOO's real objects.[7] That is not to say that Deleuze is always candid about this prejudice; in fact, he likes to imply that asking whether the virtual is one or many already misses the point. For example, in chapter 2 of his important early

study *Bergsonism*, Deleuze makes the following curious statement: 'The reader will note that [Henri] Bergson has no difficulty in reconciling the two fundamental characteristics of duration: continuity and heterogeneity.'[8] A footnote to this sentence sends us to consult an 'excellent analysis on this point' by the scholar André Robinet.[9] What makes this so odd is that Deleuze is trying to wipe away the classic paradox of the discontinuous and the discrete, which haunts Aristotle's writings and continues to haunt such fields as physics, mathematics and evolutionary biology to this day, by sending us to consult a piece of Bergson scholarship. By contrast, rather than trying to downplay or avoid the problem, OOO openly argues that reality must be carved up in advance into pre-articulated entities, zones and districts, however difficult it may be to learn exactly what these are. This is no ivory-tower dispute among metaphysicians but has an immediate impact on architecture. The denial of an articulate multiplicity of the world is what leads someone like Schumacher to favour continuous gradients, blurred boundaries between building and environment, cornerless masses and a confessed inability to place doors and windows in anything but arbitrary fashion, over an object-oriented architecture that would take the articulation of thresholds and cut-off points as its primary task. It also leads Schumacher and his ilk to treat architecture primarily as a system of *relations*, in which transparent façades are always better than opaque ones, forgetting that architecture is at least as much about distinguishing one place from another by making them mutually impenetrable. Is the point of a *private dwelling*, after all, to increase its number of communications with the outside world? Obviously not, since it would be uninhabitable amidst maximum sunlight, noise and limitless accessibility to uninvited guests. The second problem is that, contrary to popular belief, OOO is not just a philosophy of inaccessibly hidden depth; this sounds more like Heidegger. For OOO, given the degree to which objects do withdraw, it is the *sensual surface* of the world where everything happens. Causation glides along the top of the world, having nothing to do with its depths. Whereas Deleuze speaks of 'sterile surface effects', OOO instead envisions the hidden depths of the world as sterile, cut off from relations with the outside world. Only when this second point is grasped does the full stylistic breadth of OOO become visible.

In a half-decade or so of working closely with architects, I have benefitted from the insights of dozens of people in the field, all of them impressively knowledgeable about theoretical challenges specific to the discipline. Among those from whom I have benefitted most frequently are, in alphabetical order: Ferda Kolatan, Jason Payne, Rhett Russo, David Ruy, Peter Trummer and Michael Young. It would not be surprising if any of these colleagues were to shock us one day with a key idea that suddenly makes clear what a OOO design language ought to look like. But at present, I would draw the reader's attention to the two implementations of OOO that seem to represent the two extreme possibilities, as if stylistically incompatible with one another. Tom Wiscombe of SCI-Arc has written an article that provides some of the most suggestive tools for an architecture based on a missing or withdrawn real.[10] One such technique is his 'objects in a sack' model, in which mysterious volumes lie half-concealed behind a vague, sack-like outer envelope. Along with this strategy, Wiscombe's article proposes raising the building above its ground on a sort of pedestal, thereby ripping it free from its environment and pushing back against a dogmatic contextualism that for Ruy

poses a danger of ending architecture as we know it.[11] Yet the other extreme possibility, represented by Mark Foster Gage at Yale, shows no elements of mysterious withdrawal in the least. Gage works instead by grafting objects onto other objects in seemingly bizarre chains that often suggest a mock- or neo-Gothic, as in his startling design for a skyscraper on the West Side of Manhattan.

While Gage's surface-oriented approach seems less obviously OOO'ish than Wiscombe's fondness for semi-hidden depths, it is nonetheless also a legitimate instance of object-oriented strategy. For it is often forgotten that withdrawal in OOO is just one of *four* cases in which objects are placed into tense relations with their own qualities, a relation in which they both possess and fail to possess those qualities. [12] Two of these cases are of immediate possible relevance to architecture. For in one sense there are hidden or 'real' objects that can only be alluded to indirectly, even though their qualities remain perfectly tangible or visible. From the standpoint of OOO, this is the site of aesthetics. Objects are no longer Humean 'bundles of qualities', as they tend to be in everyday life, but go missing while leaving their qualities behind, as if these qualities were orbiting a black hole. Yet there are also 'sensual' objects of the kind discussed by Edmund Husserl and other phenomenologists. In this case the object itself is not missing but simply becomes somewhat 'out of joint' with its own qualities. Consider the case of cubist painting, in which the depicted object is neither deep nor hidden but is directly accessible through so many profiles and facets at once that it becomes ridiculous to try to identify the object with them. Hume has no difficulty telling us that a so-called 'apple' is really just a nickname for a set of recurring qualities such as 'red' and 'round', but Picasso would never convince us that a cubist violin is nothing more than a bundle of countless flat planes in which the violin is viewed from many sides. We are still left to wonder what the violin is, *aside* from this dizzying multiplication of pictorial planes.

There is a sense in which the extreme alternatives marked by Wiscombe and Gage were already prefigured in my book on the horror writer H.P. Lovecraft, where I spoke about two analogous techniques in Lovecraft's prose style: the 'vertical' and the 'horizontal'.[13] His vertical style alludes to the absence of an object beyond all possible description of it, and here we catch a taste of Wiscombe. For example, when speaking of an idol of Lovecraft's trademark monster-god Cthulhu, the narrator speaks as follows: 'If I say that my somewhat extravagant imagination yielded simultaneous pictures of an octopus, a dragon, and a human caricature, *I shall not be unfaithful to the spirit of the thing* … but it was the *general outline* of the whole which made it most shockingly frightful …'[14] With such phrases as 'the spirit of the thing' and 'the general outline of the whole', we are immeasurably far from the Humean universe, in which a thing is nothing more than the qualities it displays. Yet Lovecraft has his cubist or 'horizontal' moments as well, in which he appeals to nothing hidden and pretends to be giving an exhaustive description of a thing in terms of its visible qualities, in a manner reminiscent of Gage. Consider Lovrecraft's fine architectural description of a vast Antarctic city that his narrator wrongly believes to be nothing but an icy mirage:

> There were truncated cones, sometimes terraced or fluted, surmounted by tall cylindrical shafts here and there bulbously enlarged and often capped with tiers of

> thinnish scalloped discs; and strange, beetling, table-like constructions suggesting piles of multitudinous rectangular slabs or circular plates or five-pointed stars with each one overlapping the one beneath. There were composite cones and pyramids either alone or surmounting cylinders or cubes or flatter truncated cones and pyramids, and occasional needle-like spires in curious clusters of five.[15]

Even if we read this passage with unusual slowness and thoroughness, I wager that no one can honestly keep all these features in mind simultaneously and bundle them together in a way that exhaustively defines an object. In this way, too, the distinction between an object and its qualities is enacted, though in this case the object is not hidden in the least.

OOO and Architecture: Future

That more or less sums up the current, still relatively early state of OOO in architecture. Enough literature now exists on the relation between the two, that I was able to fill up a syllabus for a OOO and Architecture course in fall 2017. There have also been experimental and more-than-experimental attempts to put some of its ideas into practice. With any luck, OOO will continue to develop in purely philosophical terms over the next decade and more. As for the strictly architectural implications of the theory, that is entirely the job of architects. I am not an architect and will never design a building, whether it be OOO'ish or in any other style. Any new formal design language will come from architects, not from me; thus I am largely in the position of a passive observer, much like a fan of the Boston Celtics or the supporter of a political candidate. The main difference is that I am in a better position than most sports fans or political supporters to encourage or cajole: to explain to my architect friends and my students that OOO *is not* to be confused with Deleuze's theory of the virtual, and so forth. In short, my role is to act as a stimulus, with the hope of being equally stimulated in return.

It often happens that a theory or a style begins to progress most decisively once it gains a clearer sense of what it is really doing. An analogous phenomenon is well known from the business world, as when IBM realized that it was not really in the business of producing typewriters, but of information processing more generally. Now, I happen to think that the philosophical discipline of *aesthetics* may be on the verge of gaining a new sense of what it is about, not to mention a greatly enhanced status within philosophy as a whole. In the 2016 book *Dante's Broken Hammer*, I considered the highly influential ideas of Immanuel Kant, in whose shadow philosophy still resides more than two centuries later.[16] My argument there was that Kant's entire philosophy can be described with the term 'formalism' and that formalism needs to be understood in a very specific sense as meaning the mutual non-contamination of subject and object.

Consider first the workings of Kant's ethical theory.[17] For Kant, an act is not ethical if it is spurred by ulterior motives. A seemingly noble action may be spurred by the wish to avoid hell after death, or to be respected by one's fellows, or to avoid

a sense of guilt that would cause one to lose sleep. The results in such cases may be admirable, but none of it is truly ethical. An ethical act is performed solely for its own sake, in accordance with the duty of all rational beings. It is a formidable theory that has many adherents even today, though we rightly sense something disconcertingly cold, impersonal or abstract about it. This is a result of the ethical *formalism* that leads Kant to place ethics solely on the human side of reality, with the side of the world and worldly consequences playing no strictly ethical role. Perhaps the best critique of Kantian ethics was the one proposed by the colourful philosopher Max Scheler during the early twentieth century.[18] What is interesting is that Scheler accepts and even *praises* Kant's assertion that ethics cannot have any ulterior purpose; he views this as a fundamental step forward, and thus his critique of Kant cannot be viewed as an intellectually retrograde move. Instead, he tries to *pass through* Kant by focusing on a different point. Namely, Scheler notes that individuals and even entire peoples can have a specific ethical calling with its own specific obligations. Examples are not difficult to think of, but here is one: Picasso's former wife Françoise Gilot reported in her famous memoir that Picasso never went to movies in the evening and indeed pursued little conventional entertainment at all.[19] While we might choose to regard this as just another case of personal preference, it could be viewed instead as an ethical obligation of the highest order for someone with the specific talents and consequent work schedule of Picasso. Rather than Kant's favoured universal formulations, we might establish the following very concrete axiom: 'If one is Picasso, then one does not waste evenings in the cinema.' Examples of a national ethical vocation can also be produced. Conceivably, it might be called 'unethical' for a Palestinian in our time to ignore the political travails of her people and devote herself solely to a career in pure mathematics, though one should always be careful in judging about such cases. The general point is as follows: Scheler's way of getting beyond Kant's ethics is to put an end to Kant's formalistic split, in which ethics unfolds solely inside the human subject with the ethical object playing no important role. For Scheler, the ethical unit is no longer the human mind in isolation but a *compound* entity made up of the mind and that which it takes seriously, or that which it loves: the *ordo amoris* about which he elsewhere writes so beautifully.[20]

The relevance of this point to aesthetics and architecture will now be demonstrated. Kant's powerful and influential aesthetic theory can be found in his *Critique of Judgment*, often called the Third Critique.[21] The logic of this work is the same as we found in his ethics. Unlike one's personal preferences for food or weather conditions, beauty is something that demands universality; nonetheless, it has nothing to do with the supposedly beautiful object. Instead, beauty pertains to the universal structure of judgement shared by all humans, and thus is entirely 'in the eye of the beholder' even as it claims to be universal. This is the same formalistic move that we encountered in the case of Kant's ethics: a separation between the object (which has nothing to do with beauty) and the subject (which has everything to do with it). Now, is there a way of 'Schelerizing' Kant's aesthetics just as it happened with his ethics? In *Art and Objects* I claimed that the art critic Michael Fried unwittingly performs such a service for us, by conceding the need for a theatrical fusion of beholder and artwork even though he

seems to condemn it.[22] But it has since occurred to me that an even more obvious way to Schelerize Kant's aesthetics is to turn the discipline of architecture itself. Although Kant does not despise architecture to the same degree as Arthur Schopenhauer, who places it on the same lowly rung as the design of water fountains, there is no conceivable way that Kant could rate architecture very highly. After all, Kant is opposed to all ulterior purposes in aesthetics as in ethics, arguing that art is concerned with 'purposiveness without purpose', insulating it in formalist fashion from any extra-aesthetic considerations. By contrast, architecture is automatically contaminated with concrete human purposes, since otherwise it would be just another form of sculpture. Mark Linder notes, in his helpful book *Nothing Less Than Literal*, that the formalist art criticism of Fried and Clement Greenberg (both of them owing so much to Kant) tends to be suspicious of anything architectural in the arts.[23] We saw that Scheler argued that the basic ethical unit is neither human nor world, but a compound or hybrid entity formed by fusing the two together: through what Scheler, like Dante, calls *love*. The same turns out to hold for aesthetics, with the aesthetic unit being neither the art object nor the structure of human judgement, but a compound entity formed of the two. I have argued elsewhere for why aesthetics must be *theatrical* in this way, despite Fried's powerful claims to the contrary.[24] But architecture, which necessarily fuses an autonomous object with a number of programmatic purposes, automatically flouts Kant's formalist injunction and thereby enacts the general Schelerization that philosophy in our time so badly needs.

OOO aesthetic theory will continue to move further along these lines in the years to come. Whether architectural design language develops in parallel with OOO or in a different direction determined by autonomous principles remains to be seen. But we finally begin to see why OOO and architecture have found such a strangely natural rapport over the past decade. By its very nature, architecture flouts the formalist separation of thought and world that lies at the basis of Kant's otherwise ingenious philosophy. And OOO does the same for its own part, being philosophically committed to renouncing the notion that the cosmos is split up into two basic kinds of things: (1) human thought, and (2) everything else.

Notes

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6 Patrik Schumacher, 'A Critique of Object-Oriented Architecture', in Michael Benedikt and Kory Bieg (eds), *CENTER 21: The Secret Life of Buildings* (Austin, TX: Center for American Architecture and Design, 2018.), pp. 70–89; Graham Harman, 'Response to Schumacher', pp. 90–97 in Michael Benedikt and Kory Bieg (eds), *CENTER 21: The Secret Life of Buildings* (Austin, TX: Center for American Architecture and Design, 2018).
7 For a contrary interpretation of Deleuze that puts him more in line with the views of OOO, see Arjen Kleinherenbrink, *Against Continuity: Deleuze and Speculative Realism* (Edinburgh: Edinburgh University Press, 2019).
8 Gilles Deleuze, *Bergsonism* (Cambridge, MA: MIT Press, 1988), p. 37.
9 André Robinet, *Bergson et les metamorphoses de la duree* (Paris: Seghers, 1965), pp. 28 ff.
10 Tom Wiscombe, 'Discreteness, or Towards a Flat Ontology of Architecture', *Project* 3 (2014), pp. 34–43.
11 David Ruy, 'Returning to (Strange) Objects', *tarp Architecture Manual* (Spring 2012), pp. 38–42.
12 Graham Harman, *The Quadruple Object* (Winchester, UK: Zero Books, 2011).
13 Graham Harman, *Weird Realism: Lovecraft and Philosophy* (Winchester, UK: Zero Books, 2012).
14 H.P. Lovecraft, *Tales* (New York: Library of America, 2005), p. 169. Emphasis added.
15 Ibid., pp. 508–509.
16 Graham Harman, *Dante's Broken Hammer: The Ethics, Aesthetics, and Metaphysics of Love* (London: Repeater, 2016).
17 Immanuel Kant, *Groundwork of the Metaphysics of Morals*, trans. M. Gregor. (Cambridge: Cambridge University Press, 1997); Immanuel Kant, *Critique of Practical Reason*, trans. W. Pluhar. (Indianapolis, IN: Hackett, 2002).
18 Max Scheler, *Formalism in Ethics and Non-Formal Ethics of Values: A New Attempt toward the Foundation of an Ethical Personalism*, trans. M. Frings and R. Funk (Evanston, IL: Northwestern University Press, 1973).
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21 Immanuel Kant, *Critique of Judgment*, trans. W. Pluhar (Indianapolis, IN: Hackett, 1987).
22 Graham Harman, *Art and Objects* (Cambridge: Polity, 2019).
23 Linder, Mark. *Nothing Less Than Literal: Architecture after Minimalism* (Cambridge, MA: MIT Press, 2007).
24 Graham Harman, *Object-Oriented Ontology: A New Theory of Everything*, chapter 2 (London: Pelican, 2018).

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