ARCHITECTURE AND OBJECT-ORIENTED ONTOLOGY

SIMON WEIR IN CONVERSATION WITH GRAHAM HARMAN

WHAT IS, AND WHAT ISN'T, AN ONTOLOGY ?

SW: Ontology is a word that, wherever it goes, changes its meaning. So, to avoid unhelpful confusions - some confusions are generative - what is an ontology? I tend to think of an ontology mathematically, as the set of all things with nothing outside the set.

GH: Whereas metaphysics is an Ancient Greek term famously coined by Aristotle's editors, the word "ontology" first appeared as recently as the 17th century. One aspect of my relation to language is that I like to have a number of synonyms available for every philosophical term in order to avoid repetition. I don't like the sort of pedantic precision which demands that each term have a single meaning that the author is obliged to define exactly at the outset. As an example, many people draw a sharp distinction between "object" and "thing"; Heidegger is the most prominent of these, using "object" in a pejorative sense and "thing" as a more positive term. But I prefer to use object, entity, thing, and unit interchangeably. I also use metaphysics and ontology to mean the same thing, though Heidegger and Derrida have turned the word "metaphysics" into a kind of insulting nickname for everything that ought to be left behind.

SW: To frame object-oriented ontology's position, let's begin with realism. Most people understand realism: we are in direct contact with the things we touch. Once we recognise there are sounds we can't hear, lights we can't see, and that there are all sorts of illusions and misapprehensions, we might easily accept that our view of reality is not so direct, but mediated. We produce some kind of image of reality within us, so it might be called representational realism. What may be surprising to readers without philosophical training is that this too is rebuked by the philosophical tradition of anti-realism.

GH: My position obviously isn't a form of direct realism, since for me it is not only humans who cannot make direct contact with reality: the same holds true even for inanimate entities. Object-oriented ontology (OOO) is better described as a form of what you call representational realism, with the surprising proviso that not only humans and animals do the representing. When two inanimate objects make contact, they cannot do so directly, since neither has direct access to the features of the other. The idea behind OOO's realism is that reality is so real that it can't be exhausted by any particular depiction of it.

Realism is usually defined as a "belief in a world external to the mind." But this way of putting it betrays an anthropocentric bias: why should the mind be the only thing with an outside? Realism should be treated, instead, as a general theory of objects and relations, such that objects are always withheld from these relations and need a vicarious third term to make relations possible. Insofar as reality withdraws from all relation, object-oriented realism might also be called an infra-realism.

SW: So object-oriented ontology is an infra-realism. Since the real is withdrawn, how do we know it's there, or how have you induced the presence of a real that cannot be touched directly?

GH: This is the same question that led the German Idealists to abandon Kant's thing-in-itself: "If we claim to think a thing outside thought, isn't this already a thought? Therefore, there is nothing withdrawn from thought." In this way, the thing-in-itself implodes into something internal and negotiable, whether in the form of a mere external shock or trauma (Fichte, Lacan) or in terms of a provisional and immanent limit eventually

overcome by the labor of the negative through the course of history (Hegel).

The problem with this popular assault on the realism of the in-itself is that it forgets what philosophy is about: philosophia, meaning the love of wisdom rather than wisdom sensu stricto. Socrates does not jest when he says that he only knows that he knows nothing, that he has never been anyone's teacher, and so forth.

Readers of Plato may recall "Meno's Paradox," in which Meno repeats the old Sophist's argument that you can't look for something if you already have it (because then there is no need to look) and you can't look for it if you don't have it (because then you could never recognize it if found). Socrates responds with what is really the foundational insight of Western philosophy: you never really have or fail to have something absolutely, but you have it to a certain degree and are called upon to enter further into its depths.

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According to object-oriented philosophy, there are a number of ways in which we can know the real without knowing it directly. This happens in cases where the real falls out of joint with its surface qualities: as in Heidegger's case of the broken hammer, or in metaphor where the object is ascribed strange properties and therefore becomes unknowable yet vaguely compelling. Language is often used to hint or insinuate rather than to state directly, though the modern era hates rhetoric so much that it forgets how crucial insinuation and innuendo are to everyday speech. The arts, too, are well aware that many things must be hinted at subtly rather than stated in literal terms. Lovers know this as well when sending alluring messages, and comedians know it when telling jokes. To spell

things out in literal terms is just one of the tools of human cognition, and not the one most important for philosophy.

SW: Some of the principles of OOO are: there are objects everywhere, all objects are inside other objects, all objects have objects inside them, objects have qualities, but objects are not only their qualities, it is not possible to encounter a quality without an object bearing that quality.

GH: That's a nice list. I would add that humans also count as objects, even if objects of an unusually interesting sort; for this reason, "objects" do not exist in opposition to "subjects." Also, objects and qualities both come in two kinds (real and sensual), and both kinds of objects can have both kinds of qualities (again, real and sensual) so that reality consists of four possible object-quality pairings. On top of this, objects have only a loose relation with their own qualities. Aesthetics is first philosophy because it studies these loose relations: how they are generated and under what conditions they break apart. Real objects cannot make contact unless mediated by a sensual object, and sensual objects only make contact when mediated by a real one. This still isn't a complete list, but I can never remember everything at once. As our conversation progresses, more features of objects will undoubtedly arise.

SW: Are qualities objects?

GH: The short answer is "no." It goes back to one of the many valid insights still to be found in Aristotle's philosophy. He tells us that whereas sad is always sad and happy is always happy, Socrates can be sad one day and happy the next. That's one major indication that Socrates is a substance. A substance remains what it is even if – within certain limits, of course – its qualities vary widely. By "primary substance" Aristotle means individual things. My parallel term is "real object," which also refers to individual things. Of course, there are a number of differences between the two phrases. First of all, I emphasize the inaccessible elusiveness of real objects, and while Aristotle has more awareness of that than many people realize, he does not emphasize the gap between the mind and the object to the same extent that OOO does (coming as we do after both Kant and Heidegger). Second, Aristotle is more comfortable with natural than artificial things as primary substances, whereas I don't think the natural

vs. artificial divide matters very much: an airplane or a city are real objects no less than a raindrop. Third, Aristotle does not think there can be primary substances inside of primary substances: he holds that the parts of a substance are only potentially individuals, not actually so. For OOO, however, composition in the part/whole relationship does not negate the individuality of the parts, which remain real objects in their own right even while belonging to larger wholes. Despite these differences, OOO is a philosophy of individuals in the same Aristotelian line that passes through some of the Islamic philosophers, some of the Medieval Christians, and Leibniz.

But the long answer to your question is that anything can become an object. That is to say, any quality can turn into a sensual object as soon as we treat it as something enduring that undergoes variation in details. For example, the red of my Mazda CX-5 is initially a quality of the car that can be changed without destroying the car or giving it a new identity. But I could focus instead on the rather unique metallic red that Mazda came up with for this car, and substantify it by focusing on current variations in the red across the car's outer surface, or by variations over time when we compare the car's red when straight from the factory as opposed to now, four years later. Furthermore, there is always a point at which sensual objects can become real, often through the mechanism of social acceptance. The Joker was initially a sensual object, but is now a real one: not in the sense that such a character actually lurks in the night of New York, but in the sense that movie audiences are able to judge which actor's portrayal of The Joker is the most true to the character, which ones are completely insufficient, and so forth. In this respect even qualities such as "green," "strong," or "macho" become real objects

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that even have their own social histories.

SW: Causation in the OOO schema is the interaction of two or more real objects. Whenever real objects causally interact, a sensual object is generated by their contact, and this sensual object acts as the intermediary between the real objects. This is known as vicarious or occasional causation. Also, causation can be symmetrical or asymmetrical. Symmetrical causation is all kinds of contact and causation as we normally think of it, and is well described by Newtonian physics; asymmetrical causation is perception.

GH: Actually, causation in OOO can only have two terms. The reason is that all causation begins with the interface between one real object and one sensual object, which is then modified in such a way that there is an indirect influence of one real object on another or of both on each other. I'm aware that people like to give seemingly subtle analyses in which there are multiple causal factors for any event. These days, multiplicity has a very good press and duality a very bad one, so it's not surprising that everyone goes running for the multiple and the many whenever philosophy is being done. But in fact, when there are multiple factors they must combine beforehand in such a way that only two objects end up confronting each other.

SW: This multiplicity is understandable. When I (a real object) am watching (asymmetrical causation) a movie (a real object), the factors are combined. Yet when I consider myself as comprised of subcomponent objects, my ears hear the sounds, and my eyes see the images, et cetera. It may be the case that all causal events are multiple causal events, and vice versa. The singularity or multiplicity of causal occurrences looks like a question of perspective.

GH: As for symmetrical causation, yes, so-called "physical" causation provides all the easiest examples of this. In fact, I think the symmetry of causation is the important factor here, and what we call physical reality may just be a vulgar nickname for symmetrical causation. But no doubt there are other forms of symmetrical causation than the kind we associate with "matter," which for me is an almost worthless concept. No one really has any idea what matter would be; for OOO there are only forms. Likewise, the human realm provides most of the clearest examples of asymmetry: I as a human can observe long-dead stars, which thereby have an effect on me

even though I can't possibly affect them in turn. But there are probably asymmetrical phenomena even in the so-called physical world. In short, I suspect that the overworked boundary between physical and mental is an accidental product of modern philosophy: not because "all is one," but because the most important dividing lines are located elsewhere.

SW: My work in OOO has been drawn from perception to the problem of memory and consciousness.[1] Consciousness can turn sensual objects into real ones by making memories of them, and vice versa. Consciousness is a machine for making post-sensual objects into real objects. When we think about asymmetrical causation, about perception, the difference between a real object and the sensual object of its perception would vary a tremendous amount depending on the real object. Looking up at the night sky, it's obvious that our sensual object is an infinitesimally small thing, and a profoundly different thing, compared to the real object that is out there. But with much simpler objects like the number 5, for example, what would you say are the differences between the real 5 and a sensual 5?

GH: Let me first say that I wouldn't agree that when looking up at the night sky the sensual object is an infinitesimally tiny thing. This is true only in the limited sense that our field of vision doesn't cover much of the sky and can't penetrate any further than a small portion of the Milky Way. The sensual object, for me, isn't limited to what is covered by the senses. The term is "sensual," not "sensible," after all. Edmund Husserl is the one who says that the senses can only experience the shifting adumbrations of perceived objects while the intellect is able to dig all the way down to the essential properties. For OOO, by contrast, the senses and the intellect are both on the sensual side of the equation rather than the real

> ❝WHENEVER REAL OBJECTS CAUSALLY INTERACT, A SENSUAL OBJECT IS GENERATED BY THEIR CONTACT❞

side.

As for the number 5, I can't say that there is a fully developed object-oriented model of mathematics at this point. I do agree with most mathematicians that mathematical objects have real existence (this is one of the few points where I am a Platonist). But I would not agree that we have some sort of Cartesian intellectual intuition that allows us direct contact with the real number 5; that's Quentin Meillassoux, not me. The question, then, is how we would describe the supposed difference between the real and the sensual 5. One possible path is shown by Imre Lakatos in *Proofs and Refutations,* where he argues –among other things– that mathematical definitions have to be revised in light of mathematical experience, which suggests that mathematics is more similar to natural science than we might expect.[2] If we start to view mathematics in those terms (and I will admit there are certain problems in doing so) then it is easier to see why direct access to the number 5 is less plausible than one might think, just as direct access to gravity or electromagnetism is refuted (in my view, at least) by continued revolutions in these areas.

SW: In causation, sensual objects contain real and sensual qualities, so is it possible that causation involves the transfer of some real qualities? Can we reliably infer the real from this?

In the case of some real objects, like the number 5, are they simple enough that we can locate the real qualities within the sensual object? If I add two 5s in my mind to make a real 10, have real qualities been engaged and retained? Do we have a situation where there is no meaningful difference between a real quality and a sensual quality?

GH: All sensual objects have both sensual and real qualities. It was Husserl who first gave technical precision to this idea. Imagine that I rotate a tennis ball in my hand, at different times of day and in various fluctuating moods. These are "adumbrations," as Husserl puts it: the German Abschattungen. No matter what the adumbrations of the ball may be at any given moment, I continue to recognize this ball as one and the same. Since we are simply talking about experience here, not about reality, I am the one who decides whether or not it is the same ball. If it turns out later that I was wrong, that someone quickly replaced the ball with a different one while I wasn't paying attention, then this pertains to the level of the real object, which is not what we are discussing.

But along with the sensual qualities or adumbrations of the tennis ball, it must also have real qualities. There are certain features that could arise that would convince me that it's not the same tennis ball I initially thought it was: I might realize that my roommate replaced It with another, or maybe it turns out to be a fake tennis ball produced by an artist, or perhaps other such scenarios. Husserl's great error was to hold that the senses give us the adumbrations while the intellect gives us the real qualities. This is merely a symptom of Husserl's rationalist and mathematicist prejudices: he found it inconceivable that there could be any layer of reality impenetrable even to the intellect.

Returning to your question, there is no possible case where real and sensual qualities are one. This is only possible if we believe in intellectual intuition, which I do not. Why not? Because I hold that any intuition requires a translation of form. Here's what I mean. People who think that intellectual intuition is possible think that we can clearly and distinctly see, before the mind's eye, the essential properties of a tennis ball or a dog. Now, such people would never claim that they are bringing the actual ball or dog into their brains. What they are saying, most often, is that they are extracting a knowable form from an object and bringing it into the mind, leaving behind only the "matter" of the object. But there is no proof that anything like formless matter exists. In fact, the notion of matter was only invented as a crutch to prove the existence of direct intellectual access! That is to say, the difference between a tennis ball in reality and the tennis ball in the mind is said to consist in the lack of "matter" in the second case, but this is a mere alibi that allows us to think that the form remains the same when extracted and removed from an object. Yet the form always undergoes translation, and this is why

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intellectual intuition is impossible. In the words of Bruno Latour: "There is no transport without transformation."[3] There is always the question of whether mathematical objects are a special case, whether they alone permit of direct intuition. I suspect not, but all I can do at the moment is suggest this, not prove it.

SW: Yes, certainly. It is only in the axiomatic case of simple numbers that I cannot see any difference between some of the real and sensual qualities. Unlike all other objects, they seem to be stripped of all depth. Continuing with perception, since we, as individuals, are real objects, we only have access to sensual objects which are created by contact with other real objects, and therefore we are truly surrounded by the unreal. Even when we look at ourselves, we can only see a sensual object. It seems as if those Buddhist and Hindu expressions - see without seeing, hear without hearing - are onto something. Without such effortless, causeless perception, we are truly imprisoned in a simulacra wrapping the withdrawn real. This isn't what Baudrillard meant by the term simulacra - since he is a nihilist anti-realist - but in the context of infra-realism, the simulacrum would be the enveloping sensual world around every real object.

GH: Baudrillard meant a lot to me when I began graduate study. And even though I am now a hardcore realist, I'm still impressed by him. His denial of reality doesn't bother me that much; in a sense, Husserl was already a theorist of simulacra. But there is a reality in Baudrillard nonetheless– the reality of the one who observes the simulacra and is seduced by them. We must always remember that Baudrillard is the philosopher of seduction no less than of simulation. And what's so important about seduction? The point is that when we become fascinated by something, we grow so attached to it that we and that thing form a new object, a compound made of ourselves and the thing. Why do I call that relation a new object? Because it meets all the criteria of objecthood established by object-oriented philosophy: it has emergent properties not found in either me or the thing separately, it is impenetrable to outside description or understanding, and it can have different features at different times. In short, the world of simulacra becomes a realist world as soon as the observer starts becoming personally involved with it, and that's what aesthetics is all about.

SW: If the simulacra become real by becoming a compound with the observer, is that an ontological solipsism? It sounds like psychological

growth, and broadening experience, makes more of the world real, which certainly seems to accord with our experience.

GH: It's not solipsism, since my experience of an object and yours are still referring indirectly to the same real object. But there is the same difficulty here as with theories of autopoiesis (Maturana, Varela, Luhmann) since we need a clearer understanding of how the real object, despite being cut off from the sensual realm, is nonetheless able to affect and possibly be affected by the new object that is the compound between simulacrum and observer.

PHILOSOPHICAL DE-ANTHROPOCENTRISM

SW: One of the aspects of your work that has been broadly supported is its anti-anthropocentrism, the refusal to accept anti-realism's separation of everything into two categories, human and other.

GH: We have learned much about the vast size of the universe. On top of that, there are now reasonable musings about possible other universes, whether on the interiors of black holes or in other dimensions invisible to us here. All of this tends to indicate that our species and planet, even our entire galaxy, are fairly minor constituents of reality. By contrast, modern philosophy revolves around the centrality of humans. The reason, of course, is that it is thought we have direct certainty of human experience but only mediated access to everything else, which suggests a crucial status for human thought. In this way, there is a contradiction between the royal importance of humans on the one hand and our speck-of-dust cosmic tininess on the other.

SW: I've never been sure what to make of the assumption of direct access to experience; my own experience never seemed direct to me. I used

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to presume that maybe some other people, like Descartes, actually had direct experience, but later after learning some sleight of hand magic, you see that there are always presumptions built into perception, and these presumptions can be activated and challenged.[4]

GH: The other day I saw an amusing remark on Twitter. When Hollywood depicts interracial couples, so the person asked, why does there always have to be a white person in the couple? Analogously, I would ask of philosophy since Kant: when philosophy discusses a relationship between two entities, why does a human always need to be one of them? The answer is that it doesn't need to be. The relation between two inanimate objects isn't different in kind from the relation between a human and an inanimate object. The latter sort is not in any way clearer or more immediately given. Our access to our own experience is also mediated rather than direct. But since the days of Kant, Alfred North Whitehead is one of the few major philosophers to have seen this point clearly.

Let me just add the following response to some of OOO's critics, who make the political complaint that OOO shifts its focus away from human subjectivity at the precise moment that previously subaltern humans are finally gaining full dignity: as if OOO were pulling the rug out from under the feet of the previously oppressed in their very moment of triumph. I would say that this remark is counterintuitive in the bad sense of the term. When OOO shifts the scope of inquiry from humans to the cosmic vastness of all entities, are human differences of race, culture, and gender not shown to be rather minor, and therefore isn't our human equality more emphasized than ever before? By contrast, if we stick with the modern focus on the human subject, it seems to me we are destined to dwell in the narcissism of small differences, to revel in all sorts of micro-hierarchies within our tiny human sphere.

SW: There are a lot of assumptions packed into the political critique of OOO's infra-realist anti-anthropocentrism that require longer discussion. Politics typically engages in motivated reasoning, looking for effective language. But philosophy, like many forms of research, is often focussed differently, looking for something resembling truth, whether truth defined as logical consistency or paradigmatic coherence or something else. In The Rise of Realism you discussed Lee Braver's 2007 book, A Thing of This World with Manuel DeLanda, and you both disagreed with the traditional

realist axiom that truth is correspondence with the external world.[5] How would you describe truth in the context of OOO?

GH: I'm interested in reality rather than truth. People who favor the word "truth" are usually the ones who think they already have it, and what they call truth becomes a cudgel to beat up those who disagree. Reality interests me more because it implies that there is something with which we make peripheral contact: something that disrupts our current model of the world without it being entirely clear what is happening. There are multiple ways to do justice to any reality we encounter, whereas a focus on truth implies that there is only one way. Certain portions of mathematics and logic seem to have a very strong claim to truth, but these results are often overexpanded in an effort to formalize the whole of reality in ways that aren't very successful.

SW: You have mentioned that you borrowed the term "ontography" from a fictional character, Parkins, a Professor of Ontography. Parkins practices anthropogeography, and diagrams the relationship between humans and their landscapes, an example of anthropocentric philosophy mapping human-object relations without attending to object-object relations. Noting the diagramming aspect of Parkins' work, it seemed that ontography could also describe any ontology-oriented art. This is similar to what inspired Ian Bogost about the term. For a while you both were doing these poetic ontographs called Latour Litanies, these poetic strings of ostensibly unrelated words, like - to make one up on the spot - box jellyfish, love, gravel, jedi, street lighting, asteroids. The aim, and correct me if I am wrong, was to produce a list where the objects could not be associated with each other, so humans were not presented as central to all relations, and this was an expression of a flat,

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non-anthropocentric ontology. With my long immersion in surrealism, I immediately recognised the careful systematization of these lists. As Freud supposedly said, in a classical painting I always see the unconscious, in a surrealist painting I only see the conscious. So before reading your later work, I associated the word ontography with these poetic practices with a very personal and slight surrealist flavour to them. You don't seem to have used these litanies recently. Has your feeling about them changed?

GH: I am utterly stunned by how stirred up and annoyed some people become by these Latour Litanies. For instance, there are critics who say that we do nothing more than produce random lists of objects, or who assert that "a list of objects is not an argument." Of course not. The Litanies are simply a useful rhetorical technique, and I mean "rhetoric" in the good old classical sense of addressing people's background assumptions, not in the trivial modern sense of devious manipulation. Latour Litanies are useful for reminding the reader of how many different types of non-human entities exist, and that's the purpose they serve whenever they appear in a OOO text.

ARCHITECTS AND PHILOSOPHY

SW: In Twilight of the Idols, Nietzsche famously stated that architecture is the expression of power and that architects are enamoured with power, which appears to have a subservient tone until you see that in the unpublished *Will to Power,* everything is an expression of the "will to power," so architecture is not special in this regard.

GH: I've never been all that interested in the concept of power, other than in high school when I was reading Nietzsche and taking him too literally like everyone else at that age. Maybe that's because the most interesting things happen to me when my mind is passive and absorbing unexpected insights from others. The intellect is not really about mastery, but about finding new drifts or currents or hidden gemstones in the world, and letting them compel you to new insights. Believing that one does not yet have enough power to do anything is too often an alibi for not doing the things already within your grasp.

SW: How do you see anti-realism influencing architecture?

GH: Primarily in the sense that form and function (or program) are usually misread in an anti-realist way, in terms of the aspect they present to human beings. A realist reconception of form and function would have to de-relationize them into "zero form" and "zero function," as I call them.

SW: How do you see infra-realism offering alternatives to anti-realism for architectural theory?

GH: We need an improved sense of form that is neither purely visual, nor purely conceptual, nor purely about the deliberate subversion of function (as in some of Eisenman's houses). But in fairness to architects, philosophers repeatedly make the same misstep. Husserl draws a distinction between intellect and sensation, as though there were really such a big difference between the two. Heidegger does the same with practical handling on one side and explicit looking or theorizing on the other, which again isn't that big a difference. OOO demands a difference between reality itself and any form of human access. Whether architects find significant things to do with this in their work is really up to architects.

SW: You have in the past remarked about architects making puns of philosophical ideas. I'm not averse to the occasional pun, and have even made my own OOO pun in the form of occasionalist tectonics, taking two elements and sandwiching a wholly new formal language between them.[6] Sometimes visual or formal work that is purely illustrative lacks depth and subtlety, but some works of art that are truly remarkable started out as illustrations of ideas but somehow hold far more allusive and elusive qualities. Was your remark pejorative, or is there something more to this?

" A REALIST RECONCEPTION OF FORM AND FUNCTION WOULD HAVE TO DE-RELATIONALIZE THEM INTO "ZERO FORM" AND "ZERO FUNCTION" "

GH: It wasn't meant as pejorative. I was mostly relaying the complaints I'd heard from architects I know, who were bothered for instance by the literal use of folds on buildings in the period where Deleuze (author of *The Fold*) was widely read in the field. But insofar as puns can verge on literalism, that's a problem. I like your occasionalist tectonics idea, and also like Tom Wiscombe's idea of half-inscrutable "objects in a sack" hiding behind a building's outer envelope.[7] But OOO is really about the tension between objects and qualities, and there are some ways of deploying such tension that don't involve anything being hidden in the least.

SW: Yes, Wiscombe's "objects in a sack" was a lightning strike when I first heard it. Probably the most coherent arguments connecting OOO and architecture are found in the writings of Wiscombe, David Ruy, and Mark Foster Gage, architects I find fascinating. Their ideas might seem strange to people outside architecture's current education system, but are very relevant to those inside it.

They all appear to share a fondness for OOO because it provides a rationale for valuing architecture for its qualities rather than its associations. (This is rather like Eisenman's concern for architecture's interiority, for what is exclusively architectural. Eisenman's approach was a kind of de-anthropocentrism, but it was framed as anti-humanism, which is quite different.) Gage also argues that buildings should be judged as buildings, not as diagrams.[8] This is apt for architecture education. I wonder if this arises from the tension between being an effective academic and the art of architecture. When you have a lot of projects to assess, one can feel the need to hurry and it helps if you can understand a project quickly, but individual works of great architecture are captivating and even mystifying, and they refuse our attempts to understand them easily, they require study and reflection, and even personal transformation.

GH: There are a number of other architects who have played around with OOO: Peter Trummer is one here at SCI-Arc, and elsewhere I've had multiple discussions with Ferda Kolatan and Michael Young, among others.[9] In Object-Oriented Ontology: A New Theory of Everything I highlighted Gage and Wiscombe because they represent the two most pronounced and opposite tendencies.[10] As mentioned, Wiscombe favors hidden objects surrounded by palpable surface qualities. Yet Gage isn't about hiddenness at all: he gives us a fiesta-like abundance of qualities

inscribed on the surface. In Weird Realism I argued that H.P. Lovecraft's horror fiction uses both of these techniques, even though the first is the only one people usually mention.[11]

SW: What do you think now of Wiscombe's point in "The Object Turn" about an architecture inspired by OOO having a suspicion of any form of mapping exercises that seem to conjure architecture from the context or from the map itself.[12] For many years, architecture students have been fabricating abstract maps of things and using these as visual prompts for design. A weakness of this method is its meaninglessness, and the insistence to look outside architecture. Yet I am ambivalent in this critique. Leonardo da Vinci recommended artists stare at the infinitely subtle shades and markings of rough, stained walls and allow their imaginations to inventively see figures, scenes and events. Similarly there is a subtly creative act in seeing turtles, buildings and faces in the shifting forms of clouds. These work as psychological exercises to prompt creativity, and even have a little surrealist flair, but they belong to the earlier, passive and automatist side of surrealism rather than to the later, more active side where effects are actively sought. Now that you've worked in an architectural school for a number of years, what observations do you have about architectural design processes and the results they entrain?

GH: Wiscombe did make that point, as did Ruy when he argued against architecture becoming a subsidiary of ecology: as if buildings were nothing more than local outcroppings of the broader environment. I agree completely on this score, since no building can be completely site-specific. Certain choices have to be made about which aspects of the environment to include or exclude. And of course, Rem Koolhaas has pointed out that a building also

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presses back against its environment and changes it in turn.

You ask what I've noticed after teaching at an architecture school for five years. Quite a few things, actually. Architects tend to be very articulate in explaining their ideas, even more so than philosophers, in my opinion. Architects are under more pressure to innovate, and therefore they have their antennae out for new ideas more than philosophers do. On the pedagogical level, what strikes me most is that students have a hard time defending forms in their own terms. When pressed, they will usually give a genetic backstory for how they arrived at the form now before our eyes: they started with some everyday object, put it through four or five transformations, and this was the result. This just goes to show how hard it is to speak allusively or indirectly about something, which is precisely what architectural form demands. The best art and architecture critics need to have the souls of poets, because in this case literalism won't do the job.

SW: One of the things you're known for are the terms overmining and undermining.

GH: It is often assumed that the goal of all cognition is knowledge, and ultimately there are just two kinds of knowledge. If someone asks me what something is, I can (a) tell them what it's made of, or (b) tell them what it does. I call the first of these techniques "undermining" and the second "overmining."

I mentioned earlier that Socrates practices philosophia (love of wisdom) rather than sophia (wisdom). There is no Platonic dialogue in which Socrates ends up with the correct definition of anything. Nothing is ever quite definable. As Aristotle puts it, things are concrete but definitions are made of universals, which means there will always be an imperfect fit between reality on one side and thought or language on the other. Philosophy fundamentally does something other than produce knowledge. and this is even clearer of the arts. There is no way to avoid "mining" in direct propositional speech, since this kind of speech (which I call "literal") involves making true statements about the properties a thing possesses. But philosophy and the arts are not literalist disciplines, and have more to do with producing a gap or fissure between an object and its qualities.

SW: Often overmining and undermining are misunderstood as critiques.

Overmining and undermining are critiques of other ontologies, not of thinking or philosophical work as such.

GH: By no means is OOO anti-knowledge. Knowledge is good and necessary; it simply gives us an incomplete picture of human cognition. To know something is to explain it in terms of something else: its parts, its history, its uses, its effects, its properties, how it looks to us. All of this is great. It allows us to create medicines, build aircraft, analyze social data, and so forth. But we've reached the point where many people assume that if something isn't "science," isn't knowledge, then it's just rubbish. These days we enthusiastically encourage students to pursue STEM subjects, while aesthetic taste is left sadly undeveloped. This means that the students who are open to it end up having to learn it on their own. Granted, that's often the best way to learn things. It's how I learned philosophy, for instance.

SW: Gage has used overmining and undermining as critiques of architectural culture and architectural education, and this leads us to interesting territory. Universities rightly pride themselves on bestowing knowledge, but art and architecture are not forms of knowledge, yet this fact too needs to be taught and understood. How do you think about reconciling this dilemma?

GH: It's probably not something well understood enough yet to be codified in the schools. There is still some intellectual work to be done in grasping the relation between knowledge (which I define as detecting the qualities a thing possesses) and the very different kind of cognition that includes both the aesthetic and the philosophical (defined as grasping or producing a gap between any object and

" OVERMINING AND UNDERMINING ARE CRITIQUES OF OTHER ONTOLOGIES, NOT OF THINKING OR PHILOSOPHICAL WORK AS SUCH. "

its qualities). But philosophy is more often guilty of mistaking itself for a form of knowledge than the arts and architecture are.

SW: Back in 2017, you wrote a reply to Bruno Latour and Albena Yaneva's actor-network theory of architectural design.[13] Have your views on that changed?

GH: No, they have not. It's always stimulating to read an actor-network approach to any topic, and the Latour/Yaneva piece is as interesting as any.[14] But you just can't reduce any object, including an architectural one, to its backstory as a project– which is what they try to do in that article. There they are following Latour's familiar strategy of referring to any object as a black box that can be opened, revealing all of the historical complexity within. The problem is that a black box doesn't just hide its internal components. It also renders many of them irrelevant, while also having new emergent properties that can't be equated with what's inside. Stated in architectural terms, not all aspects of a building's history are relevant to the final building, and a building has features that its history does not. Latour and Yaneva offer a fine vision for an ethnography of architecture, but I doubt there is much that actual architects can do with it. And I say this as someone who yields to no one in my admiration of Latour, who in my view is the most important living philosopher, bar none.

SW: Finally, how do you seen the anti-anthropocentric aspect of OOO engaging with architecture?

GH: We're starting to see more architecture that isn't aimed directly at humans, such as the "Vulkan Beehives" of Snøhetta. But what I'm more interested in is de-anthropocentrizing the heart of architectural discourse: namely, the concepts of form and function. The irony is that while these terms seem to be meant as opposites in architectural history, they are both relational in character: the form of a building is supposed to be its visual look to the observer or user, and its function is supposed to be the purpose it provides for the client. But in a OOO context, the visual look of a thing is simply an expression of a deeper form, and the specific use is simply one possible incarnation of a deeper functional landscape. What OOO looks for can be called "zero-form, zero-function," as discussed in my forthcoming book Architecture and Objects.[15]

ENDNOTES

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8. Mark Foster Gage, "Killing Simplicity: Object-Oriented Philosophy in Architecture," *Log*, 33/2015, 99.

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14. Bruno Latour and Albena Yeneva, "Give me a Gun and I will Make all Buildings Move: An

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15. Graham Harman, *Architecture and Objects* (Minneapolis: University of Minnesota Press, forthcoming 2022).