Log

40° 46' N, 73° 59' W
625 West Fifty-Seventh Street, New York, New York
Demand for housing is high across all five boroughs of New York City, and in Manhattan this is manifest on the skyline and the shore. Bright orange construction mesh along the Hudson River attests to the current boom in real estate. While Bjarke Ingels' 35-story, tetrahedron-shaped rental apartment building grows at the west end of Fifty-Seventh Street, farther east are far more visible new super-luxury condominium towers. Christian de Portzamparc designed a 1,004-foot-tall blue glass tower, where the duplex penthouse just sold for $100.5 million. Rafael Viñoly designed the tallest residential tower in the Western hemisphere, at 1,398 feet, but its penthouse (not yet finished) went for only $95 million. The heights are unprecedented in residential construction, signaling the increasing power of individual wealth in a market typically dominated by corporate skyscrapers. And there are more towers to come. Developers will cash in on the unique string of air rights amassed along Fifty-Seventh Street as long as multimillion-dollar New York condos remain an attractive unregulated asset class for global capital, not only driving up the city's skyline, but also the cost of living.

33

$15.00

Mark Foster Gage

Killing Simplicity: Object–Oriented Philosophy In Architecture

We live in a universe whose age we can't quite compute, surrounded by stars whose distances we don't altogether know, filled with matter we can't identify, operating in conformance with physical laws whose properties we don't truly understand.

> – Bill Bryson, *A Short History of Nearly Everything*

Architects' interest today in the philosophy of *object-oriented ontology* and its umbrella philosophy, *speculative realism*, is growing out of a frustration that architecture is increasingly justified solely by its relations and not by its own particular and autonomous qualities.[1] Somewhere in the minefields of global terrorism, global warming, the Great Recession, Occupy Wall Street, and Lindsay Lohan's fall from grace, architecture traded in its ambition to produce unique and ineffable things for a middle-management career in reacting to vastly oversimplified problems. For a discipline with a vibrant history of utopian and sometimes dystopian ambitions, this tumble into abject relational problem-solving has been painful to witness. A reaction against 20th-century *continental anti-realism*, object-oriented ontology (OOO) calls for neither reactionary materialism nor new formalism and offers no manifesto for political action or critical engagement. "To be an object-oriented philosopher," writes philosopher Graham Harman, "what you need to do is hold that individual entities of various scales are the ultimate stuff of the cosmos."[2] To better understand this philosophy and how OOO is prompting new trajectories for architecture, we need a bit of background.

OOO emerges from a materialist line of thought traceable from Aristotle to Leibniz, yet largely eschewed in post-Enlightenment and, in particular, post-Kantian philosophy. Although it should not be confused as a retreat to *naïve realism*, which simply states that objects exist only as they are perceived by the human senses, OOO is entirely in the

Manuel De Landa inaugurated the shift in architecture from idealism to realism, but David Ruy deserves much credit for shepherding OOO into architectural discourse. His lecture "Returning to (Strange) Objects," first delivered at the Southern California Institute for Architecture on January 30, 2013, is available online as "David Ruy: Returning to (Strange) Objects," YouTube video, 1:29:01, recorded September 19, 2013, posted by "Syracuse Architecture (Syracuse University School of Architecture)," November 21, 2013, http://youtu.be/Gx55JR4U0ZE.

2. Graham Harman, *Bells and Whistles: More Speculative Realism* (Winchester, UK: Zero Books, 2013), 6.

category of philosophical *realism*, that is, the belief that there is a reality outside of the mind, as opposed to philosophical *idealism*, which holds that reality exists primarily as a mental construct. Idealism has dominated both continental and analytic philosophy since Kant and continues to do so today in the work of most contemporary philosophers, including superstars Slavoj Žižek and Alain Badiou. The "Speculative Realism" workshop at Goldsmiths, University of London, in April 2007 signaled a dramatic break with the continental philosophy establishment. The symposium, which featured presentations by Harman, Ray Brassier, Iain Hamilton Grant, and Badiou's protégé, Quentin Meillassoux, not only offered a new direction in philosophy, but also assumed a radically different foundation from that of idealism. Although the participants were united on this particular front, the ideas they presented and have developed since share little beyond this initial leap from idealism to realism. Of the four participants, Harman has been the most active in discussions with architects.

Harman's OOO is built on phenomenology, and in particular the work of Heidegger. In architecture, phenomenology is typically associated with a form of practice that translates the philosophical discourse to justify its concern for *phenomena*. This usually involves bright sunlight, gentle wind, and *the terroir* of local materials. For Harman, however, phenomenology is but a starting point, and as an *idealist philosophy* (phenomena are processed in the mind) it is in many ways oppositional to speculative realism. Harman adopts and significantly modifies selected Heideggerian concepts and, in the end, his position hardly resembles Heidegger's. Thus, it would be a mistake to dismiss OOO as a new form of phenomenology.

Key to the phenomenological genesis of Harman's thinking, and of particular interest to architecture, is Heidegger's tool analysis in *Being and Time*. "Insofar as the tool is a tool," Harman writes, "it is quite invisible. And what makes it invisible is the way that it disappears in favor of some purpose that it serves."[3] Paraphrasing Heidegger, he continues, "We generally notice equipment only when it somehow fails. An earthquake calls my attention to the solid ground on which I rely, just as medical problems alert me to the bodily organs on which I silently depend."[4] Harman uses this aspect of Heidegger's tool analysis to support his central claim for OOO: that objects have hidden qualities and realities, and they *withdraw* from our understanding. For Harman, an object has a vast number of qualities, some knowable, some unknowable; to select any one of them to represent its full reality as an entity would be pointless

3. Graham Harman, *The Quadruple Object* (Winchester, UK: Zero Books, 2011), 38.
4. Ibid.

Heidegger's tool analysis posits that while a tool is functioning, or its function is visible, the mind registers it as *equipment* and, as such, it is rendered invisible to our attention. For example, the keyboard on which I type is equipment insofar as it looks like what it does and is being used for a particular function. As Heidegger might say, the keyboard recedes into the background and is inconspicuous while in use or while ready to be used. As I use the keyboard I do not notice its aesthetic properties or other qualities. However, if the keyboard ceased to function, it would become *visible* to my attention as an object, no longer mentally processed as background equipment. Harman extends Heidegger's observations on tools and broken tools to illustrate the invisibility of the majority of our human experience: "The objects of our explicit consciousness seem to form a thin and volatile film atop a heavy layer of equipment that is usually not seen."[5] The idea that we live our lives on a layer of invisible equipment has significant ramifications for architecture, a discipline that produces the equipment on and in which we exist.

5. Graham Harman, *Towards Speculative Realism: Essays and Lectures* (Winchester, UK: Zero Books, 2010), 109.

INVISIBLE FORM

Louis Sullivan coined the phrase "form ever follows function" in his 1896 essay, "The Tall Office Building Artistically Considered." This well-known reductionist axiom dominated the development of functional modernism and continues to influence the contemporary understanding of architecture by architects and the public alike. But the idea that a building should appear to be the result of accommodating its function has taken many forms in the 119 years since Sullivan's statement. Traditionally, it was used to describe the importance of a building revealing its structural system (the form follows the function of the structure). More recently, it has been used to legitimize the design of a building that makes visible the various daily activities dictated by the program (the form follows the function of the program). Today a building will exhibit its sustainable function with planted green walls or dog-whistle surfacing materials like bamboo. Likewise, a parametrically designed building with multitudes of interconnected components will also evidence its complexity through a formal language of flows and swarms (yet there is no reason a parametrically designed building cannot look like a Tuscan-style suburban house). Sullivan's oft-recited sentiment is a relational statement that insists function is the guiding force in the design of form. This turns form into a functioning object, or in OOO terms, a tool. Using the

Heideggarian idea of the tool as forgotten background equipment, one can argue that architects of the past century have been unwittingly complicit in making architectural form invisible to the consciousness of its users.

Object-oriented philosophy depends on a broad definition of the term *object*. The inclination in architecture is to assume this term refers only to a physical form. But as Harman explains, "An object is any unified entity, whether it has a reality in the world or only in the mind."[6] Objects, then, are seen to exist independently of their relations with other objects, concepts, entities, engagements, procedures, and processes. For architecture, one basic but fruitful translation of OOO is the unbearably literal equation of *object* with *building*. This should be considered only a starting point, not an endpoint, in the exchange between the abstract philosophy of OOO and the material practice of architecture. In architectural terms an *object-building* is understood to mean one that rejects its context, whereas a building conceived as an object in OOO terms simply means that its reality cannot be understood through its external relations – including its relation to context.

Harman refers to attempts to examine objects through their relations as *overmining*, *undermining*, and *duomining*. For Harman, the history of philosophy, from Aristotle to Žižek, is dominated by ideas that overmine and undermine the reality of discrete objects, as opposed to accepting that all objects, ideas, and entities have discrete boundaries and are validated only by their existence, not by their relations. He writes, "They can say that objects are a mere surface effect of some deeper force, so that the object is undermined. Or they can say that objects are a useless superstition in comparison to their more evident qualities or relations, so that the object is 'overmined.'"[7] An example of undermining the reality of an object would be to believe, as Leucippus did in the fifth century BCE, that objects are merely collections of atoms, which are what constitute the true reality of the universe and therefore any object in question. An example of overmining might be to say that an object only becomes real when it is perceived by an observer (idealism), or that it is only a small part of a larger network of forces in which it is enmeshed – as one might say a leaf is really only a part of a tree, or a tree merely part of a forest, or a forest merely part of an ecosystem. In OOO, leaf, tree, forest, and ecosystem are all classified as objects and require no additional explanations. These objects are the stuff of the universe, and while they may be related, their relations are not what define them. Overmining, undermining,

6. Ibid., 63.
7. Harman, *Quadruple Object*, 6.

8. Alison Zingaro, "Make It Right Turns an Abandoned School into Affordable LEED Platinum Housing," *Green Source* (December 13, 2013), http://greensource.construction.com/news/2013/12/131213-make-it-right-turns-an-abandoned-school-into-affordable-leed-platinum-housing.asp.
9. Patrik Schumacher, "Parametricism as Style – Parametricist Manifesto" (2008), PatrikSchumacher.com, accessed Jan. 14, 2015, http://www.patrikschumacher.com/Texts/Parametricism%20as%20Style.htm. For my ongoing debate with Schumacher, see my essay, "Project Mayhem," *Fulcrum* 18 (August 6, 2011); and Patrik Schumacher, "Convergence Versus Fragmentation," *Fulcrum* 19 (October 11, 2011).

and duomining all compromise discrete objects in favor of their relations – whether relations with smaller things, larger more encompassing ideas, or both.

Applying Harman's thinking to architecture, one can conclude that architects are guilty of constantly undermining and overmining the primary products of their trade – buildings. There are countless ways to undermine the practice of architecture and the legitimacy of a building as a single, discrete object. For instance, a 2013 article in *Green Source* opens, "Make It Right, the foundation started by actor Brad Pitt and architect William McDonough to rebuild homes in New Orleans after Hurricane Katrina, has partnered with BNIM Architects to transform a former school in Kansas City, Missouri, into LEED Platinum-certified affordable housing."[8] Innocuous though it may seem, this statement undermines the architectural object by invoking LEED certification before the object (housing) is even named. To know that a building is LEED certified is to know that it was built with certain types of sustainable components and systems and that it presumes to use less energy than those that are not LEED certified. The architectural qualities of the building-as-object, then, are disregarded in favor of its sustainable parts. Cloaked in a cape of friendly sustainability, LEED certification has irreparably changed the public's understanding of architecture. We have trained the population to value LEED certification and to ignore the autonomous architectural qualities of buildings. A building with a LEED gold certification is seen as a great piece of architecture, even though this does not take into account any architectural aspects of a building other than its energy use and its relationship with the environment. The architecture itself is undermined by defining or celebrating its existence through sustainable associations.

Even our most celebrated architects undermine buildings. Rem Koolhaas's 2014 Venice Architecture Biennale, "Fundamentals," did not show any singular works of architecture for their discrete qualities. Instead, Koolhaas exhibited collections of the parts and systems that compose architecture, echoing Leucippus's nearly 2,500-year-old notion. Perhaps the most pronounced example of undermining architecture today is Patrik Schumacher's avid promotion of parametricism: "Modernism was founded on the concept of space. Parametricism differentiates fields. . . . Swarms have also served as paradigmatic analogues for the field-concept. We would like to think of swarms of buildings that drift across the landscape."[9] Schumacher's insistence on an

architecture of interconnected sets of information and differentiated components is not only an extreme example of undermining, but also a historical idea of practice not unlike classicism, based on a grammar of components that respond to inputs and impact the whole. Any architectural movement that redirects legitimacy from the discrete entity toward a grammar of parts undermines architecture. Given that this describes the majority of the history of architecture – from classicism to modernism, postmodernism, deconstructivism, digital formalism, and parametricism – one could argue that OOO has the potential to reconfigure the theoretical foundation on which most architectural movements of the 19th and 20th centuries have been based. It is becoming increasingly obvious in a world of social media and ubiquitous sharing that any cohesive style or movement is unlikely in the future of the architectural profession. While OOO cannot offer these, it can offer a decisively new theoretical perspective from which new strains of diffuse architectural ideas and languages might emerge.

    While architects inflict plenty of damage by undermining the validity of the building-as-object, it is through overmining that the most intellectually destructive work is done. The profession's master narrative asserts that buildings are validated by their participation in larger networks: urban contexts, social constructs, and environmental ecologies. Harman describes this in terms of a more general cultural condition: "Every event in the contemporary world seems to sing the praises of interconnectivity: globalization, convergence, superpowerful communications media and the new cosmopolitanism, along with the nested feedback loops of climate change."[10] That architecture and discrete buildings are connected to the larger world is not in dispute, but whether buildings can be legitimized as architecture by these relations should be. Architects must, of course, think of the environment and make every effort to keep all of our physical and social ecologies democratic, healthy, and productive. But these ambitions are not sufficient to justify the production of a work of architecture.

    Another form of overmining is the rationalization of a discrete building by what is referred to as the "big idea" or "concept," which is more often than not manifest today in the graphic-diagram-as-building scenario. Indeed, the current epidemic of architectural arrows is part and parcel of this trend.[11] Arrows are everywhere in contemporary architecture – pointing down from the sun, wafting out of building sections as heat, illustrating the flow of people, showing how

10. Harman, *Bells and Whistles*, 100.
11. See my essay, "In Defense of Design," *Log* 16 (Spring/Summer 2009): 39–45.

PROBLEM ⇨ IDEA ⇨ ARCHITECTURE
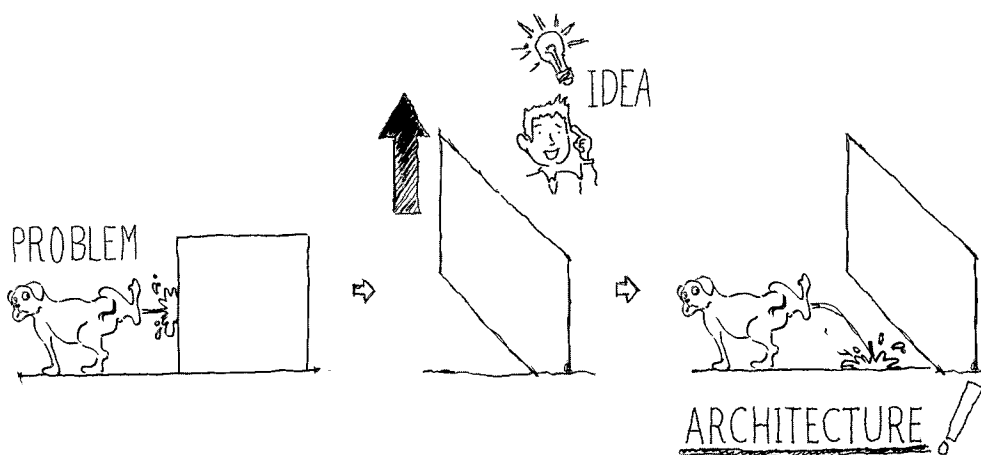
an architect lifted the corner of a building to create an entrance or pushed it east to meet the local zoning envelope. It is difficult to find a project, especially in today's architecture schools, that is not the product of an arrow.

Arrow diagrams have immediately consumable benefits, which is why this strategy currently thrives. Architects need not manage any form of complexity, but only develop a cursory, diagrammable idea that can be easily transformed into a building. If the idea is obviously legible in the final building (which usually looks like the diagram), the public or client is more likely to "get it," and the building is legitimized through its direct reference to the big idea; the diagram is a relational conduit. This tendency is difficult to counter, but to distill a building to a single idea at the expense of limitless other qualities, present or implied, reduces architecture to a caricature of itself.

The most odious form of overmining the building-as-object is the painfully simplistic metaphor. If diagrams are simplifications into graphics, metaphors are similarly reductivist albeit through an alternative mechanism – words. To take a contemporary example, Daniel Libeskind has justified the jagged shape of his Denver Art Museum by saying it reflects the forms of the nearby mountains. He similarly justified the height of the new World Trade Center tower – 1,776 feet tall – with a patriotic nod lost on no one. Perhaps the most cringe-worthy example of metaphorical overmining is Santiago Calatrava's claim that his World Trade Center Transportation Hub is a flying bird that reflects the theme of transportation.

A discrete building is often both overmined, in that it is legitimized by its participation in a singular big idea, *and* undermined, in that the big idea refers to only one aspect of the building – for example, massing to reflect zoning regulations or site orientation to address solar heat gain. This is what
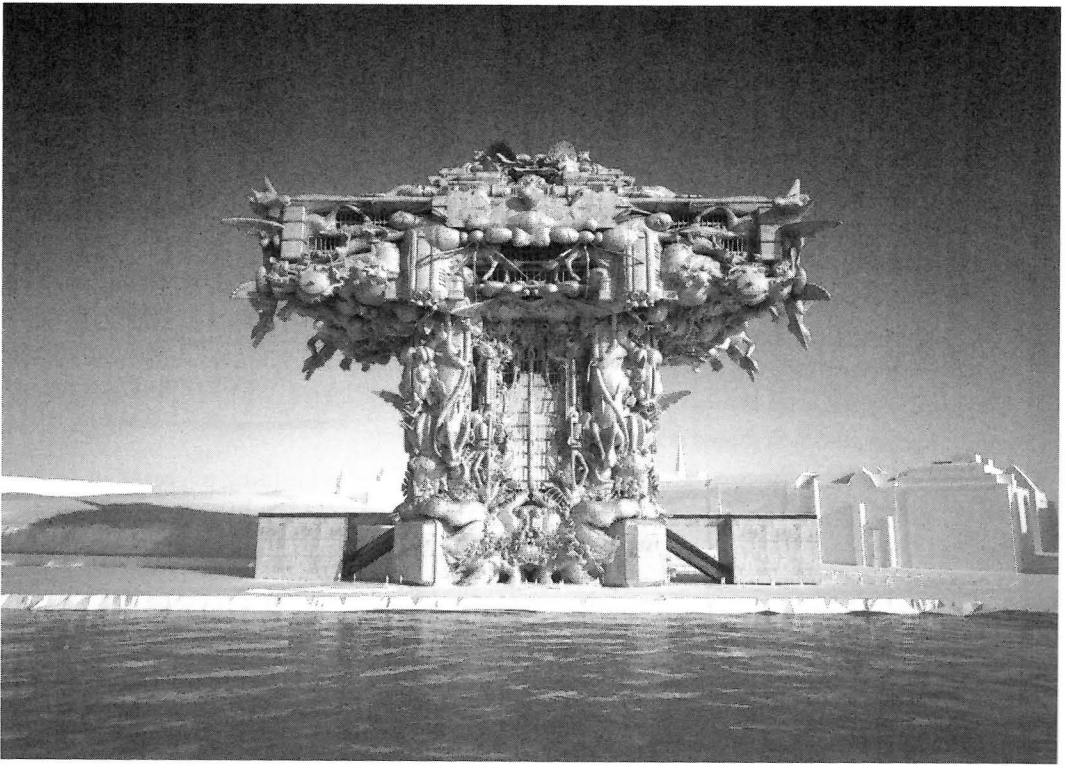
12. Harman, *Quadruple Object*, 47. It is important to keep in mind that Harman's use of the term *object* refers not only to physical entities but to imaginary ones as well.

Harman refers to as duomining – simultaneously undermining and overmining. Duomining, therefore, renders limited aspects of the building the bearers of its entire significance. OOO suggests that buildings, as objects, should be understood to have vast numbers of qualities, properties, and even relations but that their full reality can never be reduced to a single, simplistic observation. Humans may have the ability to experience some qualities of any given object, but, as Harman posits, the majority of its qualities withdraw from our experience. He writes, "The only way to do justice to objects is to consider that their reality is free of all relation, deeper than all reciprocity. The object is a dark crystal sealed in a private vacuum: irreducible to its own pieces and equally irreducible to its outward relations with other things."[12] Through the lens of OOO, we can recognize that a building's reality can never be fully known – or reduced to any simple diagram, metaphor, or big idea – but rather presents a vast and complex depth that requires new forms of acknowledgment and allusion.

Against Simplification

In OOO, real objects are simply not fully knowable. This is not a mystical notion but rather one that emerges from the sheer infinitude of qualities and relations-as-objects that
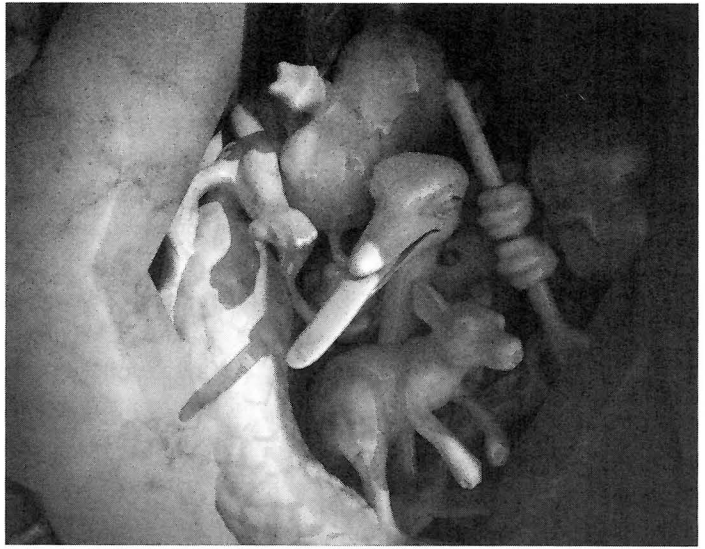
define an object. As such, it is an information-dense proposi-
tion. That one cannot access the full reality of an object, how-
ever, does not mean one is unable to experience it. The true
reality of an object is unknowable, but it does have perceiv-
able qualities that Harman refers to as *sensual*, that is, able to
be sensed. Harman writes, "While there may be an infinity of
objects in the cosmos, they come in only two kinds: the real
object that withdraws from all experience, and the sensual
object that exists *only* in experience."[13] While idealism revels in
the former and phenomenology in the latter, OOO spans the
divide, linking the perceivable with the unknowably complex,
though not through a direct causality. Instead, OOO suggests
that perceivable qualities can, through allusion, guide us into
deeper realities.

   OOO becomes particularly interesting for architecture in
the tension between these two objects, the real and the sen-
sual. If we again turn to our entry-level reading of architec-
ture through OOO, wherein a designed entity is an object,
we realize that it has a real existence that is inaccessible to us
as well as a perceivable existence in its sensual qualities. This
puts architects in the business of designing qualities that wrap
around and allude to the existence of deeper realities lurk-
ing below the perceivable surface, instead of distilling big,
singular ideas into simplistic diagrams or metaphors. This
strange proposition represents a shift away from the theoreti-
cal foundations of modern and contemporary architecture,
which emerged from Enlightenment values of discovery and
knowable absolutes as opposed to sense and inference. OOO
offers an alternate plateau on which to imagine new genres of

13. Ibid., 49.

architectural theory, practice, and production. An architecture not based on super-simplified ideas or relations, as proposed by OOO, is at the very least an antidote to a discipline paralyzed by an apparent obligation to simultaneously address sustainability, politics, economics, social relations, and context. Given the sheer weight of these burdens it is understandable that architecture has developed strategies to check off each category with a simple diagram or metaphor, but this strategy does a disservice to the cultural value of architecture by turning it into a series of consumable sound bites. Under the banner of OOO, architecture has the responsibility to emerge from the careful study of – absolutely nothing. Architecture can be justified only by its existence and not by reductively isolated key relationships.

This is neither a nihilist nor an anti-intellectual position, but a reversal of both. If architecture is to exist in the 21st century, when attention is focused on the fast-paced worlds of technology, fashion, and entertainment, it must not recede into the background as mere functional equipment. Seen through OOO, architecture can exist not as a connector of things, or the result of analysis, but as a liberated player in a sport wherein the rules emerge from the productive tensions between deeply complex realities and their sensorial perception. As Harman writes in his refutation of Husserl, "There is no reason to assume that intellect can make reality directly present in a way that the senses cannot."[14] If architects can imply complex realities through the design of sensual qualities, as opposed to using singular simplified relations like diagrams or metaphors, then there will be new forms of cultural engagement to discover. While the building-as-object need not be defined by relations, an alternate access to perceptions of object-based reality would produce new forms of economic, social, and political engagement; these would, however, be considered additional qualities of an object rather than defining truths.

Productive for understanding the tensions between the real and sensual objects of OOO is Harman's concept of *encrusted qualities*. Encrusted qualities are those that can be perceived. He writes, "Terminologically, we can speak of the 'encrustation' of qualities on the surface of a sensual object. Any sensual object is always encountered in a more detailed form than necessary: this city skyline need not be glimmering in its exact current way in order to be recognized as this very skyline."[15] In architecture, some of these encrusted qualities are critical to inferring the withdrawn reality of a building,

14. Ibid., 28.
15. Ibid., 29.

but a great many are superfluous to that reality. Instead of architecture emerging from the analysis of any particular factor – an analysis of the zoning envelope that governs it, for example – it might instead be considered the result of the architect designing encrusted qualities toward the goal of inference via sense rather than truth via isolated, singular concept. This methodology would not be a retreat to phenomenology, since the (withdrawn) reality is still understood to be external to perception and only alluded to, rather than considered real as it is perceived.

OOO considers the sensual object and the real object on equal terms, giving significance to an object's encrusted qualities as well as to the real object itself. Architects have much to gain in this. Focusing on the vast withdrawn complexities of an architectural project would not only be a welcome antidote to the trope of inventing architectural concepts and diagramming them for easy comprehension, but would also liberate architects' creativity. This would free architecture from its invisible servitude as equipment designed for a functional solution to a limited set of perceived problems, thus allowing the discipline to engage in higher orders of speculation about how we might exist in a future that promises to be continually reconfigured by perpetual technological innovation.

RADICAL VERSUS WEIRD

Seemingly invented for this future is Harman's observation of what he terms *weird realism*. He posits that the radical takes to an extreme something that already exists, whereas the weird is something outside the realm of that which exists. Weird realism emerges from Harman's reading of H.P. Lovecraft: "No other writer is so perplexed by the gap between objects and the power of language to describe them, or between objects and the qualities they possess."[16]

It is understandable that Harman would enlist Lovecraft, whose stories are largely contingent on inferring the existence of the strange, the vague, the unknown, and the unknowable. Lovecraft also frequently enlists architecture and geometry to imply strangeness, which offers interesting moments for architects. In "At the Mountains of Madness," Lovecraft writes of a city with "no architecture known to man or to human imagination, with vast aggregations of night-black masonry embodying monstrous perversions of geometrical laws."[17] In "The Call of Cthulhu" he writes of a character who was "swallowed up by an angle of masonry which shouldn't have been there; an angle which was acute, but behaved as if it were obtuse."[18]

16. Graham Harman, *Weird Realism: Lovecraft and Philosophy* (Winchester, UK: Zero Books, 2012), 3.
17. H.P. Lovecraft, "At the Mountains of Madness," in *Tales* (New York: Library of America, 2005), 508, quoted in Harman, *Weird Realism*, 26.
18. Lovecraft, "The Call of Cthulhu," in *Tales*, 194, quoted in Harman, *Weird Realism*, 76.

Lovecraft uses language to *imply* the existence of an architecture that is curious, strange, and challenges notions of the architectural norm. To try to design such a Cyclopean city or to draw an acute angle that behaves obtusely would be a lost cause, but to imagine architecture that similarly *alludes* to a deeper or alternate view of reality is an appealing opportunity that runs counter to the simplification of big, singular ideas through reductive diagrams. Perhaps instead of accurately representing the shallow, architecture might now be called upon to provide a sketchy, rough outline of something deeper. "When it comes to grasping reality," Harman writes, "illusion and innuendo are the best we can do."[19] After decades of computational calculation, exactitude, and the translation of information and diagrams into mostly banal, literal buildings, perhaps inference through illusion and innuendo offers fertile fields for developing newer, slipperier, and more uncertain forms of architectural practice.

19. Harman, *Weird Realism*, 51.

The hardly mesmerizing state of the built environment today stems from an architectural profession that does not validate its production on its own terms, but invents unnecessary alibis for its output. Architecture is not a crime and architects need no alibi. If architects do not value architecture for its qualities, and the architect for the production of those qualities, we certainly cannot expect anyone else to value architecture. What architecture needs is a philosophical reset of its underlying assumptions – not new shapes or a new style, but a deep and meaningful inquiry into the nature of the profession today, what it can do and what it cannot, what it should do and what it should not, and, most important, what is worth doing and why. While object-oriented ontology cannot provide all the answers, it prompts us to ask new questions that may help ensure the project of architecture does not continue to recede further into the shallow background of the invisible everyday.

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