A.1

Division Street

Leading up to the spring semester of 2017, Yale School of Architecture and the Jim Vlock Building Project partnered with Columbus House, a non-profit organization in New Haven that seeks to end chronic homelessness. Their shared goal was to provide five houses over five years for families and individuals experiencing homelessness. These five houses were to be built on Lot 51-55 in the Newhallville neighborhood of New Haven, a site colloquially known as Division Street.

Students were skeptical from the outset. Not only had the traditional single-family home, single lot premise of the Build Project been re-configured, but the site itself had not been procured at the beginning of the semester. Instructors informed students that they would need to launch a community organizing effort in order to win the support of neighbors who vocally opposed the very premise of the project. The studio appointed four student liaisons to attend community meetings; however, as the semester went on, community opposition continued, and it became more and more clear that building on Division Street was out of the question. Theories abounded about why students were assigned the site in the first place. Suspicious classmates alleged that Division Street was always an impossibility and was only ever a pedagogical exercise cooked up by studio instructors. As with many conspiracy theories, this point of view negates the broader web of forces at play that we, as architecture students, can sometimes miss when our noses are too close to the laser cutters.

Before diving into the debate between Columbus House, YSOA, and the community of Newhallville over the development of Division Street, it is important to understand the history and ownership of the site. Division Street is owned by the Housing Authority of the City of New Haven (HANH), a U.S. Housing and Urban Development (HUD) backed program which seeks to provide affordable housing in the city of New Haven. Row houses containing 36 affordable apartment units were built on the site in 1970. Deemed Sheffield Manner, the development was widely criticized as being poorly designed and of bad quality. "The tenants were a nuisance who disrespected the property," said Claudine Wilkins-Chambers, a long-time resident of Newhallville at a community meeting in March of 2017. After falling into disrepair, Sheffield Manor won a HOPE VI demolition grant in 2001, and the Division Street lot has sat empty ever since.

Those efforts began with student liaisons attending community meetings in February and March of 2017. It became readily clear that neither the community, nor YSOA and Columbus house, fully understood each other's positions. "We hoped a long time ago that the city would have a piece of land that we could swap with," said Claudine J. Edwards, then Alderwoman of Ward 19, which contains the Division Street site. "We thought we were there to discuss what was going to go on the site, not that this is your plan," said Kimberly Edwards, daughter of Alberta Edwards and current Alderwoman of Ward 19.

"The meeting didn't really go the way we expected," said student liaison Diego Arango. Though Arango and fellow liaisons Gwyneth Bacon-Shone, Luke Studebaker, and Katrina Yin had came prepared with two poster boards to present the studio's plans to the community, these were not shown until the meeting had officially ended and students had an opportunity for an informal conversation with the community. "I had loved what the students had done," said Kimberly Edwards, "but the project wasn't right for the community."

How Columbus House came to be involved with the new empty site has more to do with the military than anything else. In 2005 the United States Army decided to vacate its training facility on Wintergreen Avenue in the West Rock neighborhood of New Haven. Federal laws mandate that when any branch of the armed forces vacates a training site, the site must be offered for free to anyone who has a plan to house the homeless there; however, after Columbus House put a bid in on the site for a 52 apartment development, the City of New Haven opted to exchange the military property for the Division Street lot, as well as another site in the Hill neighborhood of New Haven. The Hill neighborhood location was developed first, as it already had a 17-unit apartment complex on site, Valentina Macri Court (adjacent lies the 2017 build project house). Columbus House then proposed two 22-unit rental buildings for Division Street, a plan summarily rejected by the community in Newhallville. It was after this first failed attempt that Columbus House partnered with YSOA in an effort to bring a new strategy to the site.

The community had multiple distinct objections to the Division Street project. First, was a guttural rejection of Columbus House as a neighbor. "Bringing poor people to a poor community doesn't work," said Kimberly Edwards, "no transitional, no sober housing because this is an area that is already suffering." For Alison Cunningham, CEO of Columbus House, this is an all too familiar refrain. Although Columbus House does in fact provide permanent, long-term rental housing for its clients, Cunningham admits, "Unfortunately we're dealing with a population that spares a lot of people. The community's idea of the people that we serve is that they shouldn't be in their neighborhood."

Another point of contention was the density of YSOA's proposal. "A 300 plus rental unit property is coming. We're really concerned about the sheer amount of people in Newhallville, and we are concerned that our community doesn't have the capacity or services for all these people," said Alfreda Edwards in regards to a 385 apart-ment-complex proposal for a nearby site in Newhallville." This suspicion of density is in direct contrast to the ambitions of the Jim Vlock Building Project. "I'm really in favor of density. Higher density is better," said Building Project Studio Coordinator Alan Organschi, "Building five houses is completely expedient for us as the Building Project, but not so great urbanistically." Despite this inclination, Organschi allows that, "[The Build Project House] will always be the smallest kind of multi-unit housing we can make because of the density issues," said Organschi.

While these concerns about Columbus House and the density of the surrounding neighborhood might be mitigated over time, one point is non-negotiable: Newhallville residents' call for homeownership. "We're concerned by the lack of actual homeowners in this area. Sheffield Street hardly has any homeowners living there," said Alfreda Edwards. "We wanted to make sure that whatever was going on that parcel would be homeownership," seconds Kimberly Edwards. For Columbus House, however, a homeownership model is essentially a nonstarter: under their affordable model, residents pay one third of their income towards their housing, which in many cases comes solely from Social Security checks. According to Karen Dubois Walton, executive director of HANH, "If it's a property that we own and develop, it will have to be rental."

"This year we took the more prudent approach to make sure the site is in hand," said Organschi, noting that this semester, the studio has found an alternative to the Division Street lot. Nonetheless, Alison Cunningham believes Division Street "is still absolutely worth pursuing. It's such an interesting parcel that we don't want to abandon the idea completely. However, there's other possibilities, and we will look at them all and figure out what the best thing is to do." Searching for an alternative to Division Street is understandable considering the continued unease of Alderwoman Kimberly Edwards, "I still want clarity as to what really could go there. I still want homeownership to be honest." All in all, according to Cunningham, "if it happens, it's going to happen somewhere down the road. Maybe next year, maybe the year after."

Whether it ever happens or not, the Division Street project invites paranoia. Yale students developed a suspicious cast of mind, wary that they were being misled as to the feasibility of their first build project. And, strangely enough, the community standing in their direct opposition shared the same paranoid leanings. "I have a feeling that they [the city of New Haven] already know what they're going to do," said Alfreda Edwards in regards to how HANH moves forward with the site. These perceived opponents—the city, the administration, the scourge of homelessness—are essential to organizing the residents of Newhallville, the students of YSOA, and Columbus House. Imagined enemies provide a sense of control in the absence of complete knowledge. According to Organschi, the chaos ensuing from this misalignment of perspectives may not be such a bad thing. "The idea is that there's a conflict that you try to attack and you don't try to reconcile it. This allows those things to exist simultaneously. That's where really good design happens."

1   Under the Base Closure Community Redevelopment and Homeless Assistance Act of 1984
2   Jan. 3rd 2018 "Alders OK Zoning Change for Munson St. Project" New Haven Independent http://www. newhavenindependent.org/index.php/archives/entry/alders_oks_munson_st_project_zone_change/

A.2

Division Street Aerial View

B.1

This is an early 1940s photo of Mary Babnik Brown before her tresses were shorn for Uncle Sam. Last weekend, she was recognized for donating her long golden hair to make the cross hairs for the famous Norden bombsight. She sent 34 inches to the government — hair that had only been trimmed, never really cut, for her first 36 years.

Mary Babnik Brown sits with her Norden bombsight.
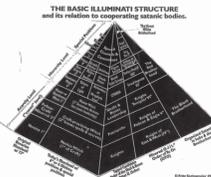
C.1

How do we know what we know. Maybe it begins with a search for knowledge. Absence of meaning. Architects attempt to act from a position of knowledge. We are supposedly trained to have special spatial awareness. An analysis of power structures leads to allegedly legitimate conclusions. Quickly research a site. Construct histories. Investigate materials. Typologies. Produce a building. Present an answer. We are prone to bold pronouncements. Assured predictions. At times we sound like members of the Illuminati. We are in possession of an occult knowledge. A mysterious expertise. The world is remade according to our visions. Alter a vector here. Create indeterminacy there. A shift in axis will have enormous repercussions. This courtyard will enhance public space. Kitbashing is the key to reinstating a truly democratic politics. Problem-reaction-solution. Draw lines. Connect dots. We need a reason. An enemy. A doctrine. A theory. Something. Towards a problem. Towards a solution. In no way at all. Dive deeper into the matrix.

Conspiracy theorist mindset. Notice patterns and hierarchies. They point to a central authority that no architect would dare endorse. UFOs. Illuminati. A hidden Reptilian race. There is a psychological dimension to all of this. Make sense out of a chaotic reality of the mundane and inept. A melancholic logic to positing a world controlled by shape-shifting reptiles. I understand. I too want a singular enemy with hate for me in my particularity. Not a bumbling chaos of inept bureaucrats who know not that I exist. A universe governed by powerful entities is comforting. At least I know I am being targeted. It's the same way I feel when full of adrenaline I explain my projects to an attentive jury. Paranoia Adam Phillips so elegantly argues is the self-cure for insignificance. It is part of our search for a sense of control.

Absence of meaning in the face of forces that eclipse you. I suppose we are getting used to that feeling. Big Data. Vast environmental degradation. Terrorist plots. Russian probes. Fake news. Ideological positions traveling at exponential speeds through poorly understood social media networks. We exist in a critical moment. Lines trace upwards. They intersect as they pass through the matrix. We are seeing too many points and drawing too many lines. A vast underlying structure that architects map and tap into. Forces of power. Vectors of influence. Seemingly random networks. Flattened into webs. Irrevocably true. Patterns emerge. Nodes stretch back to the base. Level zero. Something like a truth. All of the points are real. The connections very well may be real as well. Just because you're paranoid doesn't mean they're not after you.

We wish we had control. Like with a hermeneutics of suspicion. Our job was to detect the nefarious isms lurking behind benign entities. Family values. Kodak moments. But now. Look seriously at this paranoid impulse. Consider the possibility. All this conspiracy theorizing is a way to avoid the fact that ultimately there is no meaning. No great villain. A single explanatory enemy is no longer valid. Replaced by an agnostic network of associations. We are allowed only to glean meager parcels of knowledge. The slow careful tracing of each and every individual actor. Agnostic tracing of associations. Nodes of higher density. Nothing but a pyramid with slight formal tweaks and more baroque ornamentation. We are condemned to unknowability. Architecture is not a science. No rigorous rules and procedures. We try to dodge charges of sophistry. Borrow justifications from other fields. But still with an authority all our own. Not just technically trained consultants. Algorithms. Safety manuals. Our greatest fear. The death of architecture. No special knowledge.

How do we know what we know. What do we do when we know that we cannot know all. Do we become the chaos. Become paranoia. Those who claim to have been abducted by aliens are technically wrong. They are right. They have been victimized. From marginalized areas. They have suffered real harm. Poverty. Not at the hands of a single evil nameable entity. But conspiracy theorists want too much meaning. Maybe the problems of the world are just incompetence and stupidity. Bureaucratic mistakes. Maybe the reason is not the problem. The reason. The solution. Is that not what we are here to do. React. Perhaps solve. The pyramid may be pointing in the wrong direction. If the pyramid exists at all. The difference between methodical evil and causal ignorant cruelty is negligible. Problem-reaction-solution. Discuss values to design by.

THE BASIC ILLUMINATI STRUCTURE
and its relation to cooperating satanic bodies.

D.1

Adam Curtis: Bitter Lake | Full movie HD

BBC

Troops find themselves travelling across the site of an ancient battlefield

16:43

E.1

JET FUEL MELTS STEEL BEAMS: AN ARCHITECTURAL CONSPIRACY

Conspiracy theories take shape through architecture, or rather, their narratives stabilize and congeal through the built environment. The apparent conspirators, those persons enacting the plot, do so in real space. Plans must be hatched, organized, and emitted from sites of invention into various theaters of engagement. At the same time, spaces often inadvertently become the central focus of insufficiently-explained imbroglios. From the grassy knoll at Dealey Plaza, to the perched plains of Roswell's military bases, or even the curvilinear modernism of the Watergate complex, architectural, urban, and geographic particularities have morphed into objects of speculation when touched upon by events that defy convention. They are studied and diagrammed, contested and interrogated, for any kind of latent content that might reveal the grand arc of conspiratorial malice.

Perhaps the most notorious "architectural" conspiracy of our time surrounds Minoru Yamasaki's tragically fated 1973 World Trade Center towers, destroyed by hijackers on September 11, 2001. In both their construction and destruction, the towers have served a dual evidentiary role within conspiracist teleologies, straddling two modes by which these stories permeate architecture: a priori, with its political-economic instrumentality built into form, and a posteriori, in the pseudo-scientific analysis of its engineering and material behaviors. For the hijackers, al-Qaeda, and their fanatical leaders, the World Trade Center was the hammer by which the West mandated its imperialist economic dominance, its insistent expansion of "world trade" (facilitated by oil), and the replacement of industrial management by financial apparatuses. For 9/11 "truthers" its swift implosion and subsequent matrix of political reverberations point towards a deep state cabal capable of mass extermination.

History has not been kind to Yamasaki's buildings. In July, 1972, less than a year before the twin towers opened for business, city officials in St. Louis, Missouri began to demolish the architect's infamous Pruitt-Igoe housing project. A gleaming spectacle of modern housing upon completion, Pruitt-Igoe quickly degenerated into a poster-child for urban decay. Though Charles Jencks famously posed the image of its planned destruction as shorthand for the death of modernism, recent accounts have emphasized a collision of factors that led to its failure—a kind of conspiracy of neglect.[1] Yet as the WTC hummed to life and the U.S. reckoned with the OPEC-induced energy crisis in April, 1973, the project's boosters imagined the pair of skyscrapers to announce the country's continued economic dominance, its insistent expansion of "world trade" (facilitated by oil), and the replacement of industrial management by financial apparatuses.

The towers themselves were gargantuan—10 million square feet spread across two monolithic volumes—and presented like a pinstriped suit draped over a blunt object. Despite Yamasaki's aspirational humanism, his delicate neo-Gothic tracery (steel columns which forked out at the base to form the Vierendeel exterior truss system) was lost amidst the towers' pure massing. In addition, the architect's impassioned call for the WTC as a harbinger of world peace speaks to both its globe-girdling ambitions and confused sense of altruism. While these very same steel columns would later prove fatally flawed (and pored over for answers), their repetitive, ledger-like qualities and blurred anonymity announced an ulterior motive to those receiving its image in far-flung locales: an ambition to subjugate populations under the "natural law" of economic organization.

In the 2005 book Landscapes of Jihad, Faisal Devji contends that it is not a political project per se that motivated al-Qaeda's attacks, but a twisted ethical obligation to stem the exploitation of the Arab world. Landscapes become the medium with which to deploy competing images of society, where architecture assumes an essential operative role. Furthermore, Devji's claim that al-Qaeda's jihad

1.   The Pruitt-Igoe Myth, Directed by Chad Friedrichs, 2011.

E.2

shares more with anti-globalization and environmental activism than any Islamic precedents indicates the degree to which the terrorists drew analogous conclusions (towards divergent ends) that might just as easily be found in your standard leftist spatio-political critique.[2] Indeed, certain strains of architectural scholarship seem to embolden such a nefarious reading of form through a suggestive association of axes, intentionality, and agenda.

In the destruction of Yamasaki's icon, conspiracy theorists have seized upon that other metonym of architectural modernism: the steel beam. The theory, hawked by films such as Loose Change, asserts that the burning temperature of jet fuel was insufficient to melt the structural steel members and that a controlled demolition actually took place.[3] Popular Mechanics debunked this theory in a 2005 point-by-point redress, yet its recent resurgence as a satirical internet meme indicates the auratic staying power of the structural object in a conspiracist imagination.[4] Architecture (and its individuated materialities) becomes a character witness to tragedy or farce, marshalled by opposing sides in pursuit of their own explanatory models infected with ideology.

Official explanations, however, can never altogether dispel rumors of a cover-up and often serve to stoke the intensity of speculation. This dualism, between validated pronouncements and their unsubstantiated cousins, also exists within the built form under consideration: conspiratorial authorship as implicit to program, or speculative musings derived from events on its stage. Whether by design, happenstance, or pure chance, popular conspiracy theories appropriate the explanatory facts and triangulate these claims over space. What this says about architecture's role in diabolical myth-making is anyone's guess, but I'm sure there's a theory out there somewhere.

2.   Faisal Devji, Landscapes of the Jihad: Militancy, Morality, Modernity. Ithaca: Cornell University Press, 2005.
3.   Loose Change 9/11: An American Coup, Directed by Dylan Avery, 2005.
4.   "Debunking 9/11 Lies: Conspiracy Theories Can't Stand Up to the Hard Facts," Popular Mechanics, March, 2005.

F.1

2   The Enemy

We are now in a post-truth era. The assignment is to find your enemy. The enemy is the veiled, static structure. There is a ruling hierarchy. This is the subliminal message. It comes back to something that we have been talking about: Camouflage. If you are looking for an enemy, it is not difficult to find one. The enemies are out there and they are ferocious. The enemy is technology. The entity in this direction. Institutional control. Neoliberalism and the way that technology is being misused. They are part of a strategy to be both weak and deceitful. Something is going on. It pulls you in. It is preposterously aggressive. It is an invasion. A diagonal invasion. It is an occupation. It is a takeover, a brutal takeover. Books are useless. The world is in a mess.

The world is falling apart. Acknowledge how dark things are. Everything is breaking down. Everything is in question. You are either with or against it. But certain acts of disobedience lead down the wrong path. Why would we put so much effort into something irrelevant? You want to do something disruptive, but everything tempers that disruption. In fact it does not work. That's why it is disturbing. We are going the wrong way. We have enslaved ourselves.

F.2

1   The Axis

The shift of Axis happened before the 1930s. The Axis was forced underground. It is suspended in a state of equilibrium as one of the Wings and as the Axis. We can't find it. All of the details are better left unsaid. We have to assume continuity. By referring to the Virtual Axis of the 1920s, what does that do...? Explanations are utterly incomprehensible. The historical shifting Axis is interesting, but it is really about the Game. The Game is played with a shift of the Axis. It is set up in such a way that it is impossible to win. We cannot bend their rules. But you were given a clue. It is not about progress. When you conclude it, you close the Game. This is the moment of Truth. The End unravels a Beginning.

The two are in violation of each other in the way that it flickers between them. We cannot determine precisely that it belongs to one or the other. The two systems are so constructed. It's like a snake eating itself. This is both the End and one of two that frame a Center. It allows for a New Beginning. It becomes a tomb.

SINISTER SYMBOLISM

Completed in 2002, Kazakhstani artist Sergey Maslov's installation *Baikonur 2* explored an alternate mythology of Kazakh history. The project presented the Kazakh people as "the purest and most direct descendants of the aliens who landed from Sirius 2,000 years ago and inhabited the Earth to create humans from primates…"[1] Installed in a gallery in Almaty, Maslov's piece told the story of the years these "astral nomads" spent living on the moon (Fig. 1). Projected photo-collages showed men, women, and aliens in traditional Kazakh dress arrayed across the lunar landscape.

In Maslov's mythology, once the Kazakh people returned to earth they chose Kazakhstan's steppes for their remoteness—a place where they could conceal their spacecraft from detection. This image of Kazakhstan's harsh landscape providing the cover for alien life or secret societies is not unique to Maslov's artistic imaginary. The Caspian Sea, on Kazakhstan's Western border, has long been associated with UFO sightings and reports of mysterious activity.[2] Since the construction of Astana, the country's capital, began in the early 2000s, the city has become a popular focus for conspiracy theories. Blogs such as Vigilant Citizen allege that Astana is the headquarters of the New World Order, analyzing its architecture for evidence of occult symbolism.

A favorite target is the Palace of Peace and Reconciliation (Fig. 2). Opened in 2006, the building, designed by Foster+Partners, is a 62 meter tall pyramid rising on Astana's Left Bank. Intended as "a global centre for religious understanding, the renunciation of violence and the promotion of faith and human understanding,"[3] it contains meeting spaces, an opera house, a spiritual center, and exhibition areas. Both formally and programmatically, the Palace of Peace and Reconciliation offers a fertile site for occult projections.[4] The programmatic connections to a theoretical New World Order are fairly apparent—the building provides a meeting site from which global religious and political leaders might establish the directives of a clandestine one-world government.[5] But what proofs do the building's architectural elements provide conspiracy theorists?

1. Maslov, Sergei, *Baikonur 2*, translated by Alex Ulko, 2002. In a parallel with Maslov's artistic project, two Kazakhstani scientists, Maxim Makukov and Vladimir Shcherbak, claim that our DNA contains a signal which might provide a means of proving that it was intentionally introduced on the earth by extraterrestrials. Shcherbak, Vladimir and Maxim Makukov, "'The Wow! Signal' of the terrestrial genetic code" in *Icarus*, Vol. 224, Issue 1, May 2013, p. 228-242
2. In 1991, a UFO was supposedly picked up over the Caspian Sea by a Soviet radar station in the Mangyshlak Peninsula. The unidentified craft was pursued by military planes before eventually vanishing into thin air. http://www.ufocasebook.com/Russia.html. Numerous other reports cite the Caspian Sea as a likely base for alien operations on earth.
3. Foster+Partners, "Palace of Peace and Reconciliation Opens in Kazakhstan," 01 September, 2006. https://www.fosterandpartners.com/news/archive/2006/09/palace-of-peace-and-reconciliation-opens-in-kazakhstan/
4. It has also been claimed as a site of extraterrestrial contact, the Weekly World News utilized a photograph of the building to illustrate a 2009 article about the construction of an alien embassy in Astana. Van Datiken, Erik, "Kazakhstan Building Alien Embassy" in the *Weekly World News*, 23 April, 2009. http://weeklyworldnews.com/aliens/7871/kazakhstan-building-alien-embassy/
5. Linking the UFO and New World Order conspiracies are writers such as David Icke who, since the 1990s, has claimed that the world is secretly controlled by a race of Illuminati alien-human hybrids known as reptilians.
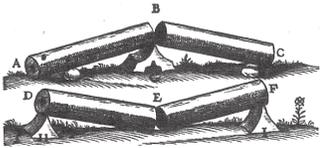
Beginning with its form, the pyramid—especially the Great Pyramid at Giza—is a classic symbol of the occult. Conspiracy theorists allege that the missing capstone of the Great Pyramid represents the as-yet-incomplete project of the New World Order. Foster's Palace mirrors this depiction.[6] The building's facade consists of two sections: the lower three stories are clad in triangular panels of gray granite in a steel frame; in the two-story apex, the granite is replaced with glass. The translucent capstone both undermines the completeness of the form and lets in the light of the sun—another popular occult motif.[7] Conspiracist David Icke utilizes the pyramid as a diagram of political control, illustrating how the directives of the global elite at the structure's peak fan out into society at large.[8]

Further occult resonances are revealed by the numerological significance of the facade's paneleization. Each of the building's three facades is split into 5 rows of triangular panels, 25 panels total per side. These numbers: 3, 5, and 25 contain great symbolic import. The first, 3, represents the Holy Trinity. In the Tarot, the fifth trump is the Hierophant or Pope—the "leader of salvation for the human race at large."[9] The Hierophant represents the New World Order's singular, universal government. The two digits of 25 added together become 7, a number symbolizing victory.[10] In Babylonian mythology, December 25 was celebrated as the birthday of the sun god, Tammuz.

The central below grade section of the building houses a public opera house. Capping the opera house's ceiling is a stylized, painted sun. The Order of the Golden Dawn, a Rosicrucian order, take as their emblem a red cross over a white triangle, representing rebirth and resurrection from the underworld. A rising sun is frequently depicted in the triangle's center, signifying illumination growing out of darkness. For conspiracy theorists, this symbolizes the spread of occult messages through media.
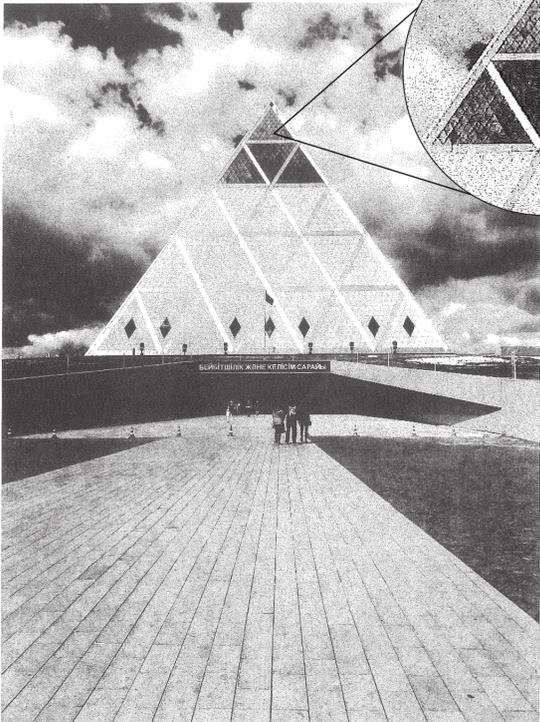
The pyramid's glass-walled apex houses its primary meeting space—one of the few zones where the building illuminated by natural light. For Vigilant Citizen, this space, in combination with the subterranean theater, forms the crux of the building's sinister character. "So while the general population is being entertained in the darkness of the material world, the illuminated, sitting right on top of them, are contemplating how to reach godliness."[11]

Described by its architect and the Kazakhstani government as a symbol of accord, for conspiracy theorists, the design of the Palace of Peace and Reconciliation offers proof of its central position in a covert system of governance.

6. The building is also proportionally based on the Great Pyramid. The formal concept was dictated by Kazakhstani President Nursultan Nazarbayev
7. Vigilant Citizen, "Sinister Sites—Astana, Kazakhstan," 07 March 2009. https://vigilantcitizen.com/sinistersites/sinister-sites-astana-khazakhstan/
8. Icke, David, *…and the Truth Shall Set You Free.* (Ryde: David Icke Books, 2004) 177-179
9. Waite, Arthur Edward, *The Pictorial Key to the Tarot.* (New York: Cosimo Classics, 2007) 44
10. Sacred Texts, "The Decad," http://www.sacred-texts.com/eso/nop/nop17.htm
11. Vigilant Citizen, "Sinister Sites—Astana, Kazakhstan"

(Fig. 1)

(Fig. 2)

ON INDOCTRINATION

Indoctrination. The very word seems to lend itself to being pronounced with a tone of contempt. It's a pejorative, the naming of an act of pedagogical violence, an accusation of abuse at the hands of a conspiring regime. The victim is typically understood to be ignorant or helpless, unwitting or unwilling. After all, what student in his right mind would readily subject himself to indoctrination—let alone pay tuition? Is indoctrination not understood to be sharply distinguished from legitimate education by its despicable motives, its pernicious determination to inculcate ideas without leaving room for questions? Is indoctrination not the antithesis of critical thought?

And the indoctrination of architects? Not at Yale. For us, at least, it's unconscionable. For *them*, on the other hand… maybe not. Indoctrination is, perhaps, precisely what *they* do. They tell you what to think and how to think. But here, at Yale School of Architecture, we don't indoctrinate. We create space for exploration. We think things through for ourselves, and we think critically. As we insist in our Open House programs, "The School does not seek to impose any single design philosophy, but rather encourages in each student the development of discernment and an individual approach to design." By way of guarantee, we wear our pluralism on our sleeve. This is our distinctive identity.

It all seems quite straightforward.

And yet the contemporary use of the word indoctrination has its critics. The public grows suspicious. More interesting than the entry for *indoctrination* on Wikipedia, that de facto bastion of popular instruction, is the "talk page" for that same entry, where, alongside raging arguments on science, religion, and politics, it is asserted that as a descriptor the term *indoctrination* is dysfunctional precisely because it merely registers disapproval of what is being taught. It is noted that we do not speak of indoctrinating our children to wash their hands, whether or not we are willing to entertain their doubts on the validity of the practice; we speak, rather, of teaching them. But those who teach their children to reject our politics, or, say, the capitalist or socialist ethos of our culture, as the case may be—it is they who are in the business of indoctrination. Such language is ultimately a tool for political defamation, as illustrated during the Cold War by accusations of indoctrination on all sides. More recent examples are at hand also. And again, parallels could be drawn to architecture.

Curiously, *indoctrination* is a word that has changed its meaning radically over a relatively short period of time. Indoctrination was once a good thing. Not only was it a good thing, it was a necessary thing. To indoctrinate was simply to imbue with doctrine, or learning. The Latin word *doctrina* is synonymous with teaching, and by extension, with learning—no more, no less. The Latin root is the word *docere*: to show, prove, or teach. Hence the medical *doctor* is one who is learned in medicine, and a PhD is the recipient of a *doctorate* more generally. I myself, on this count, have been indoctrinated by Yale. To put it more generally, any school worth its salt was once in the business of indoctrination. To fail to indoctrinate was an abdication of pedagogical responsibility.

This was as obviously true in architecture as in other disciplines. Accordingly, eighteenth- and nineteenth-century pedagogical texts speak readily not only of church doctrine, but also of the doctrine of projection, the doctrine of construction, the doctrine of proportion, the doctrine of aesthetics, the doctrine of light and shadow, the doctrine of acoustics, the doctrine of the orders, the doctrine of intercolumnation, the doctrine of the use of arches, and so forth. The vocabulary has been preserved in certain specific applications—thus Mario Carpo writes, in *Architecture in the Age of Printing*, not only of Tridentine doctrine, in its sixteenth-century articulation by the Roman Catholic Church, but also, extending the appeal to Rome, of Vitruvian doctrine—a doctrine today perhaps more honored in the breach than the observance.

But, learned exceptions aside, such language is today rarely invoked within the discourse of architecture. We do not, as often as we might, discuss the doctrine of formal analysis, the doctrinal implications of Revit, or the indoctrination inherent to design studio pedagogy. On the whole the word *indoctrination* is now associated with politics and, especially, with religion, or, worse still, with the combination of the two. To be precise, it has come to be associated with the transmission of ideas that are held to maintain their authority only insofar as they remain unquestioned. In this regard indoctrination is understood as the antithesis to the modern scientific method and, more absolutely, to science itself—*scientia*, a word synonymous with knowledge.

This too represents a shift from an earlier understanding of doctrine as something amenable to accuracy and to inaccuracy—a distinction to be established by questioning and by vigorous debate within the context of a conversation spread across space and time. And this shift is part of a larger movement for which religion offers a useful, if discouraging, illustration. Substantive debate on doctrine is today largely absent from the public sphere, replaced instead by vapid and vicious invective delivered in short bursts designed for rapid consumption. The absence of substantive debate is closely correlated to a general incapacity to engage in such debate, an incapacity that is the product of what can safely be characterized as an underlying public ignorance about and ambivalence to matters doctrinal, an ignorance and ambivalence that can in turn be tied to a conviction that substantive debate on doctrine is both impossible and destructive. That conviction is amply reinforced by the insults traded in the public realm.

It is a vicious cycle. If the subject is deemed unamenable to objective public debate, such debate is less likely to occur. The less such debate occurs, the more the public loses its capacity to debate the subject with objectivity. As the public loses its capacity to debate with objectivity, what remains is the assertion of personal preference, the reinforcing of prejudice, the trading of insults, and the resort to violence. Recent political developments might suggest that the collapse of robust public debate on matters of doctrine is regrettable, to say the least.

But a similar argument can also be applied to architecture. Here too there is a palpable absence of substantive public debate—an absence largely taken for granted, as Blair Kamin himself noted last semester. Here too the contemporary observer may encounter blissful ambivalence alternating with untainted ignorance. Here too the vicious cycle obtains. Except that the path from architecture to violence is less clearly recognized.

Might we wish to reconsider our attitudes to doctrine?

Indoctrination, after all, is potentially a subject of some fascination. Not only might we pay closer attention to how our attitudes to architecture are shaped by larger and not strictly architectural ideas about the nature of the world and our place in it—ideas that are often unquestioned, untaught, unstudied—we might also, quite specifically, take a closer look at Christian doctrine and its claims on architecture. Here we find a very carefully articulated set of ideas continually discussed, debated, and refined by councils, congregations, and communities: doctrines that offer nothing less than a complete assessment of lived experience—with implications for everything from the nature of the universe to the "chief end of man," from attitudes to the role of the architect to arguments about materiality.

In a world that—taken as a whole—is ostensibly becoming more, not less, religious, this is evidently a global issue. And given that the divisive capacities of religion are all too evident, the ability to address matters of doctrine and their materialization in the world is increasingly critical. After all, this is a subject that is of interest not only to orthodox Christians. How does a set of deeply held convictions about the nature of reality, of meaning, and of humanity translate into the material of architecture? How do our convictions, for that matter, translate into our architectures? Do we translate with elegance or grace? Can we talk about such things with any precision? How do we deal with disagreements? Can we—should we—aspire to a discipline that represents more than an assortment of individual approaches to design? And are we equipped to engage these questions with substance and rigor?

Or are we right to renounce indoctrination?

The Alternative Science of Computation

An illustration of structural principles from Galileo's *Discourses and Mathematical Demonstrations Relating to Two New Sciences* (1638).

Science cannot get a decent break these days. Scientists around the world have even taken the unusual step of organizing a "March for Science" (on April 22) to defend their work, and the scientific view of the world, against some political speechlessness of many students confronted with the unmanageable epiphanies of agent-based systems, for example, may be priceless formative experiences when seen as steps in a path of individual discovery, but become questionable when dumbness itself is artfully cultivated as a pedagogical tool. Yet plenty of training is digitally empowered architectural studios today extols the magical virtue of computational trial and error. Making is a matter of feeling, not thinking: *just do it.* Does it mend? Try again… and again… and again. Or even better, let the computer try them all (optimize). But the technological hocus-pocus that too often pervades many of today's computational experiments reflects the incantatory appeal of the whole process: whether something works, or not, no one can or cares to tell why.

Unfortunately, this frolic science of nonchalant serendipity is not limited to design studios—where, after all, it could not do much harm in the worst of cases. This is where our dumbness, whether ingenuous or malicious, appears to be part to a more general spirit of the time. For the same is happening on a much bigger scale in the world at large, out there: as we have been hearing all too often from the truculent prophets of various populist revolutions in recent times, why waste time on theories (or on facts), observation, verification, demonstration, proof, experts, expertise, experience, competence, science, scholarship, mediation, argument, political representation, and so on—in no particular order? Why argue? Using today's technology, every complex query can be crowdsourced: just ask the crowds. Or even better, just try that out, and see if it works.

This where the alt-right rejection of factual argument, the ideology of post-modern science, and the new science of computation appear to be preaching the same gospel, all advocating, abetting, or falling prey to the same irrational fascination for a *leap in the dark.* For the fascists, it is the leap of creative destruction, war, and dictatorship; for po-mo philosophers, it is the leap and somersaulting of a non-linear, "jumping" universe; for the alternative science of computation, it is the leap to the wondrous findings of AI, or to the unpredictable "emergence" of supposedly animated, self-organizing material configurations (never mind that the growth of cellular automata, in spite of its mind-blowing complexity, is perfectly deterministic, and never mind that most purpose-built structures made of inorganic materials can be at best as minimized as a cuckoo-clock). But if fascism and post-modern science are ideologies, AI is a technology. True, computers work that way, but we don't; and having humans imitate computers does not seem any smarter than having computers imitate us. Computers can solve problems by repeating the same operation an almost infinite number of times. But as we cannot compete with computers on speed, trial and error is a very ineffective, wasteful, and often dangerous strategy in daily life. Computers don't need theories to crunch numbers, but we need theories to use computers. Let's keep post-human science for AI, and all other sciences for us.

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Artificial Labor is collaborative project between e-flux Architecture and MAK within the context of the VIENNA BIENNALE 2017.

Mario Carpo is Reyner Banham Professor of Architectural Theory and History at the Bartlett, University College London. Carpo's research and publications focus on the relationship among architectural theory, cultural history, and the history of media and information technology. His next monograph, *The Second Digital Turn: Design Beyond Intelligence* is forthcoming with the MIT Press in the fall of 2017.

Yet theories today are universally reviled—just like modern science and the modern scientific method in general. Think of the typical environment of many of today's computational design studios: the idiotic stupor and ecstatic speechlessness of many students confronted with the unmanageable epiphanies of agent-based systems, for example, may be priceless formative experiences when seen as steps in a path of individual discovery, but become questionable when dumbness itself is artfully cultivated as a pedagogical tool. Yet plenty of training in digitally empowered architectural studios today extols the magical virtue of computational trial and error. Making is a matter of feeling, not thinking: *just do it.* Does it mend? Try again… and again… and again. Or even better, let the computer try them all (optimize). But the technological hocus-pocus that too often pervades many of today's computational experiments reflects the incantatory appeal of the whole process: whether something works, or not, no one can or cares to tell why.

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