

The "world of conventional signs" from which we glibly borrow the axioms of semiotics—to slow down one's observational time, we instead think through how to materialize our emotional response? (Also, please think of the poor turtles.) How do we connect with these spaces that we know in our bodies through feeling, and then re-present those feelings in alternative lights and outside of time?

To be clear, I am not suggesting a prescriptive way of seeing and sensing. Instead, this is about trusting instinct and peering further into our known spatial reference frames. We might consider it an analog to David Lynch's "checking stick," a somewhat absurdist tool for verifying our primal connections to the world.

For specific, instead of considering the palimpsest of the built environment and documenting it, I'll scrutinize specific information that may live outside of the space and time of the perceived moment. How was this built? What was the intent? Who were the workers? Re-mixing the answers to these questions provides a way for me to slow down, invert, and find an alternate awareness. The end product is a way to bring forth a sense of an underlying truth or feeling that, prior to this exercise, I did not have the lexicon to yet describe.

One way I try to pick up on this is through *experimental archaeology*, an iterative process that relies on versatility, intuition, and improvisation for extracting and remapping quantitative and qualitative information from spatial phenomena. This feeling of the data from its intended use creates an elasticity within the rendered space, which is often unrecognizable. This preserves a feeling of the original moment. In a final step, I try to distill them into a physical or material process—a small sculpture or print—but those are just archaic vehicles for communication. All of this processing is documented and released to the viewer for their deliberate and careful review, a form of communication with the world rather than a tool to build a world. There is so much to extract from the experiences that surround us, more than enough to construct your own approach to tuning your reference frame. Where is your antenna?

MACHINES ARE BRAVER THAN ART

—Donald Barthelme

For this installment of *Clare Fentress's recurring column, the editors asked her to review a review of a building using neither the building's name nor leaning on "the world of conventional signs."*

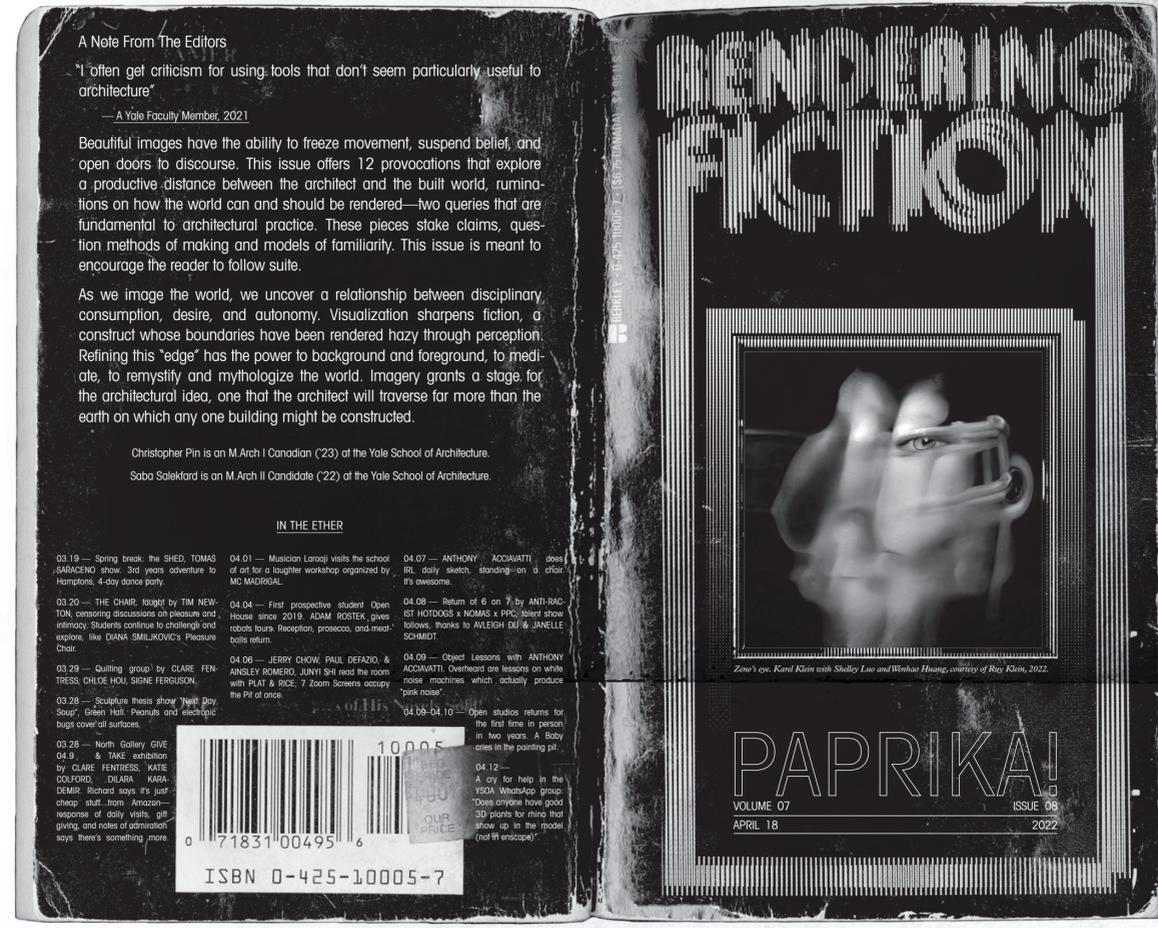
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CLARE FENTRESS

GUIDSPACE

Clare Fentress is an architect and writer. She is currently working on a book about the history of the pocket watch.



A Note From The Editors

I often get criticism for using tools that don't seem particularly useful to architecture.

—A Yale Faculty Member, 2021

Beautiful images have the ability to freeze movement, suspend belief, and open doors to discourse. This issue offers 12 provocations that explore a productive distance between the architect and the built world, ruminations on how the world can and should be rendered—two queries that are fundamental to architectural practice. These pieces stake claims, question methods of making and models of familiarity. This issue is meant to encourage the reader to follow suite.

As we image the world, we uncover a relationship between disciplinary consumption, desire, and autonomy. Visualization sharpens fiction, a construct whose boundaries have been rendered hazy through perception. Refining this "edge" has the power to background and foreground, to mediate, to remystify and mythologize the world. Imagery grants a stage for the architectural idea, one that the architect will traverse far more than the earth on which any one building might be constructed.

Christopher Pin is an M.Arch I Candidate (23) at the Yale School of Architecture. Sabaa Salekford is an M.Arch II Candidate (22) at the Yale School of Architecture.

IN THE ETHER

- 03.19 — Spring break in the SHED, TOMAS RAMIREZ show 3rd years adventure to Hampton, 4-day dance party.
- 03.20 — THE CHAIR, hosted by TIM NEWTON, ceasing discussions on photos and intimacy. Students continue to challenge and explore. Like DIANA SMILJKOVIC's Pleasure Chair.
- 03.23 — Quilling group by CLARE FENTRESS, CHLOE HOUL SIGNE FERROUSON.
- 03.28 — Sculpture thesis show "Wall Play" Soap, Green Ink, Pearls and electric bags cover all surfaces.
- 03.28 — North Gallery, GIVE 04.9 & TAKE exhibition by CLARE FENTRESS, KATIE COLFORD, DELARA KARADIMIR. Richard gave us just cheap stuff from Amazon—response of daily visits, gift giving, and notes of admiration says there's something more.
- 04.01 — Musician Laraji visits the school of art for a laughter workshop organized by MO MADRIGAL.
- 04.04 — First prospective student Open House since 2019. ADAM ROSEK gives robots tours. Reception, proscenium, and model balls return.
- 04.06 — JERRY CHOW, PAUL DEFAZIO, & ANSLEY ROMERO, JUNJI SHI read the room with PUT & RICE. 7 Zoom Screens occupy the Pit at once.
- 04.09 — Object Lessons with ANTHONY ACCAVATTI. Overheard one lesson on white noise machines which actually produce "pink noise".
- 04.10 — Open studio returns for the first time in person! In two years, A Baby cries in the painting pit.
- 04.12 — A cry for help in the Y2KA Whitestop group. "Does anyone have good 3D printers for thing that show up in the model (not W endocopy)?"

ANTENNAS FOR A FLÂNEUR

DIANA KARWAS

IN THE MID TO LATE 1980s, a friend had obtained a vintage Peugeot bicycle for me under somewhat suspicious circumstances. It had sew-ups, metal toe-clips, and dropped handlebars—quite risky for a recent Midwest transplant in largely pre-bike lane New York. But despite the dangers of riding in the city—from cars, bicycle thieves, or even garden-variety street harassers—it provided me a type of freedom that the bus, subway, and even walking didn't.

At some point, I'd purchased a matte white helmet with a few other features that, from a distance, could have been mistaken for a radome or, less charitably, the Great Gazoo. Wearing this, I was gliding down an avenue in the East Village when a stop light turned red. I pulled up to the curb and waited. A silver-haired woman with her Pomeranian on a leash turned to me, paused, and deliberately asked, "Where is your antenna?"

This wasn't the first time a stranger in New York had spoken to me, but it was the first that conjured thoughts of the flâneur (or, really, flâneuse). Identified by Baudelaire and Walter Benjamin, the flâneur is someone who has the time and money to carelessly wander the city and observe its goings-on—to present a perspective and story from their particular point of view. I was always captivated by this symbol of the dilettantish flâneur walking a turtle on a leash through the arcades of pre-Haussmann Paris.

Observation and disassociation through movement has long figured into my own work, and my intent here is to explore, not what a modern flâneuse might see, but what she might actually do. Rather than passively observing and consuming the sanitized urban design and architecture presented to us, I find myself wanting to actively instantiate



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bush and the pocket watch from, is the world of semiotics—that world of signs, including those in language, and especially those words that are the names of things. This is largely what our AI does not know, and its ignorance in this regard is fantastic! Signs are isomorphic and come to resemble those things they mean. They work best when they're uncomplicated. Rhea Meyers puts it this way: "Below a given threshold of accuracy, many-minds will identifiably share a concept. Above a given level of accuracy, none will." So if one were to train an AI on StyleGAN concurrently on the pocket watch, the azalea bush, the thief, and his chastity belt, if it were to be familiar with the world of conventional signs, it would not be certain of its process. It would instantly recognize that an azalea bush is not a chastity belt nor a thief, and that each means very different things. At this point, it should discontinue its training. Instead, it complicates things. In its attempt to know, it misconstrues and makes ambiguous. It produces effects in excess of meaning.

In her short story, "She Unnames Them," Ursula K. Le Guin's protagonist mirrors our AI in her candid and forthright desire to re-enchant her world. Remarkably, she does so to accomplish this simply by un naming. At the start of the story, we find her asking all the world's animals if they would like to "give back" their names. And, with few exceptions, they do so with "perfect indifference." As the now nameless animals disperse and depart "in vast clouds and swarms of ephemeral syllables," she becomes aware of new insights into them, and new sensations shared between them—sensations that tumble categories, making the hunter indistinguishable from the hunted, and desire inseparable from fear. What she has done is to make the world more aesthetically. By removing the names of things, she is able to perceive the world newly unmediated by cumbersome signifiers. She cannot anymore describe the world with common nouns and instead must use gerunds: stinging, humming, flitting, blurring. The story ends with her walking away "between the dark-branched, tall dancers motionless against the winter shining." The trees and moon, now unnamed, are perceived as pure aesthetic sensations; as qualities, those internal, subjective components of perception.

The philosopher Henri Bergson, too, advocated the casting off of signs in pursuit of the "absolute." He referred to the method required to grasp the absolute as intuition.¹² Bergson's notion of intuition stood in opposition to intellect, or analysis, which he argued accesses only that which is already known. Only the ideas, or the concepts of things, are accessible by way of the intellect through analysis. One can never know the thing itself this way. Donald Barthelme admits that one might obtain those things from his tableaux and "arrange them all under glass for study!" But this, as a consequence, makes his writer a journalist, and the invention that arises from *not-knowing* is made unattainable. It is intuition that is essential if one desires knowledge of the thing itself. The method of intuition is perhaps much like that of Ursula K. Le Guin's method of un naming. Both gain knowledge of the world through the direct perception of aesthetic sensation—through qualia. For Bergson, entering into an object by way of intuition necessarily requires duration, or lived time. Again, verbs are "gerund-ed" into nouns, into the things themselves. Moon enchantingly becomes winter shining. Chastity belt is now pristine girding. This is how our AI copes with the concerns of *not-knowing*. Just as Donald Barthelme begins with those now familiar items: bush, thief, watch, and belt, we present the same collection of things to our AI. And just as the writer finds himself, after each stab of his pen, *not-knowing*, so does our AI. Our AI cannot represent the world through mimicry because it does not know the names of things. It cannot comprehend the collection presented to it by way of a priori knowledge of those things. Instead, it presents its efforts as uncanny blends of palpable imagery loosed from any meaning or signification, what Surrealists agreeably called "authentic photographs of thought." It rewrites the world into new fictions with each new collection presented to it. And it remakes the world as utter optic sensations—pure aesthetics, known through intuition, fashioned without names, embracing that which is not-known.

RENDERING MEMORY

JEROME TRON

TO DRAW BY HAND is to think with the body. Drawings are expressive acts unique to the individuals who create them. By the architectural profession developed drawing methods that enabled these individual acts to conform to a system of architectural drawing conventions by which building design is communicated. Drawing in this context is referred to as hand drafting. Digital design tools have lifted the tyrannies and inefficiencies of hand drafting from the architectural profession, and even from the act of design itself; hand drawings are now free to return to their expressive origins.

Free from the laws of mathematics, the hand is released to explore the geometry of spatial memory, perception, and experience in ways that do not have to align with the Cartesian dependencies of the digital realm. This freedom gives the drawing and the delineator the ability to explore new ways of stitching ideas with realities. Combining the muscle memory of the physical act of drawing with memories of events, times, and places can give rise to new design processes that are not amalgamations of generalized machine-captured datasets. Drawing is an act of thinking. Hand drawing has a new potential to be fundamentally different from the typical hand drafting that has dominated architecture for centuries. Architectural ideas are not bound by conventions. Conventions are merely systems of description. In a hand drawn process, a multiplicity of readings emerge on a page as the body seeks to align the muscle memory of mark making with the translation of three-dimensional forms. This process is never perfect. Architectural conventions are typically used to impose mathematical precision where bodily imperfections persist in the drawing. Digital tools are amazingly helpful for this process, as modeling programs natively align to the current paradigm of architectural conventions. However, design ideas rarely adhere to conventions. Ideas are bent memories, mixed realities, and broken conventions—all of which are natively present in drawings created by hand.

Drawing is a free and expressive act and the drawing process is dependent on the human body and its faculties. Human memory, and its counterpart, perception, do not operate according to the logic of Cartesian-based or digital thinking. Even though our bodies operate in a three-dimensional world that can be described by coordinate systems, the initial visual information provided by the optic nerve is two-dimensional. These flat images are translated by the brain into a three-dimensional understanding based upon prior experience, i.e., memory.¹ Because human perception renders flat images as a three-dimensional environment via the seeing process, the two-dimensional imagery in a drawing, and especially during the drawing process, can be rich, multifaceted, and complex. The world of exploration is much broader when using hand drawings to design because Cartesian logic becomes a tool and not a requirement. Without computational constraints, the designer's creativity can guide ideation, layering, and exploration of mathematical impossibilities that will inspire spatial innovations. Without three-dimensional certainty, drawings have the potential to express overlapping simultaneity of rich spatial forms and qualities.

Digital reconstructions of hand media often carry a one-to-one translation where apparently formal concepts in a drawing are directly translated to formal resolution in a digital environment. This approach unnecessarily reduces the agency of hand media to a typically formal understanding of architectural design. However, formal considerations, materiality, program, environment, collapsed scalar conditions, and broken conventions can easily coexist within a single drawing. With confidence in the ability of digital documentation to record and translate these formal concepts and qualities, hand drawings can be used to challenge design preconceptions and digital capabilities.

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1. Donald Barthelme, "Not-Knowing," in *Not Knowing: The Essays and Interviews of Donald Barthelme*, Ed. Kim Herzinger. (New York: Random House, 1997).
2. *Ibid.*, 12.
3. *Ibid.*, 21.
4. *Ibid.*, 21.
5. Steven Connor, "Etiopistemology: On Knowing without a Knower," lecture, Internationales Kolleg für Kulturtechnikforschung und Medienphilosophie (IKKM), Weimar, May 23, 2018.
6. William H. Gass, "The Book as Container of Consciousness," in *Finding a Form*. (Ithaca: Cornell University Press, 1997).
7. Donald Barthelme, "Not-Knowing," in *Not Knowing: The Essays and Interviews of Donald Barthelme*, Ed. Kim Herzinger. (New York: Random House, 1997), 11.
8. Rhea Meyers, "Aesthetic Semiotics," May 9, 2004. <https://robmyers.org/2004/05/09/aesthetic-semiotics/>
9. Ursula K. Le Guin, "She Unnames Them," *The New Yorker* (January 21, 1985): 27.
10. *Ibid.*, 27.
11. *Ibid.*, 27.
12. Henri Bergson, *An Introduction to Metaphysics*, (New York: G.P. Putnam's Sons, 1912).

WATCHING PAINT DRY

T.K. JUSTIN NG

AGAINST THE EFFORTLESS CLICK of a screenshot and the pulsing clarity of real-time rendering, drawing by hand and watching paint dry appears indulgent and demands frequent justification. Under the current mantra of quick production and even quicker consumption, defenders of hand drawing have largely resorted to the aphorism that sketching is the most direct, if not the quickest, translation of observations or thoughts onto paper. While these claims may be true, if we are to abandon the pursuit of speed—operating deliberately slow, indirect, and imprecise—we may find that the act of representation itself can yield more creative methodologies.

To illustrate this, allow me to elaborate on my use of large-scale paintings as a form of architectural research in my studies of dim sum restaurants across the Pacific.

Long before pulling pen to paper, my search for a subject matter begins on Google Maps. Patrons' photos and reviews help compile a shortlist of dim sum restaurants to visit. Fueled by the thrill of unfamiliarity, observations from the first visit prove uniquely acute and prime for documentation. New iPhones are equipped with LiDAR scanners capable of 3D scanning interior spaces, a technology that requires the phone's owner to point obnoxiously over every nook and cranny. I prefer to keep my surveys covert and unobtrusive. Before entering the dining hall, I clutch my phone to my shoulder and start recording stealthily. It only takes several laps around the dining room to produce a video walk-through that locates key circulatory routes and general interior layout. Once I sit down at a table, I count the floor tiles and sketch an annotated plan—all while savoring morsels of dim sum.

These on-site recordings sit idly in my phone and notebook while I begin months of archival research on each restaurant. As memories of my visit fade, the readings buttress first hand experiences. By the time I build a digital three-dimensional model, historical time and knowledge has complicated an otherwise simple process. Referencing blurry memories, choppy video footage, rough sketches, historic photos and writings, the modeling process becomes a tug-of-war between divergent perspectives and hazy recollections. The resulting model reflects this: a three-dimensional Hockney collage. Multiple memories, histories, and viewpoints create a disjointed and incomplete space that embodies a sense of plurality. I am now tasked with, not a forceful homogeneity, but a delicate seaming. In my large-format paintings, this pursuit involves two techniques: axonometry, and the cut line.

From cubes drawn by children to furniture diagrams in IKEA manuals, axonometry's apparent legibility and technicality belie its capacity for illusion. Parallel projection collapses visual depth, allowing far apart objects to line up and appear as though they are connected. While Piranesi's imaginary prisons hide impossible stairs to produce a coherent perspectival image, axonometry allows the video game Monument Valley to flaunt impossible staircases front and center without arousing the skeptic. Axonometry sets up a conjoining framework for bringing together a fractured space.

The cut line takes many forms. It can be a border delimiting the painting's edge, a plane clipping through a three-dimensional model, a silhouette staging the composition... In each case, the cut line selectively removes information to make sense of the image. The cut line is not a *poché*, which emphasizes the thing-ness of what is blacked out. The cut line produces voids by leaving the paper exposed, resulting in a blankness that operates similarly to Damisch's 'cloud'—as an alternative to linear perspective.¹ Yet rather than the ephemeral and blurred edges of the 'cloud', the cut line—a line after all—delineates. Adhering to axonometry, the cut line's rigidity reinforces the projection's connective capacity.

Employing this representational trickery, the disjointed three-dimensional model produces a cogent two-dimensional linework. The digital drawing is then transferred onto watercolor paper. It is the one step I have chosen to expedite. The Zand machine's robotic arm drawing at a stunning rate of up to six meters per second, imposes a distance between myself and the image that later allows me to return to this work anew.

With fresh eyes, I begin painting. Watercolor's sensitivity to moisture transforms the process into a dance where I follow the materials' tempo. In rhythm with the moisture of the brush, the thickness of the paper and the humidity of the air, I reference the original video footage to reinvigorate each brush stroke. The linework takes away the stress of painting accurately and the time spent watching paint dry becomes a special time for reflection.

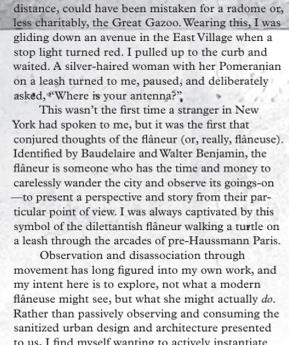
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Jerome Tron, *Graphite on Paper*, 2022.

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T.K. Justin Ng, *Kam Wai Dim Sum in Vancouver*.

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Digital reconstructions of hand media often carry a one-to-one translation where apparently formal concepts in a drawing are directly translated to formal resolution in a digital environment. This approach unnecessarily reduces the agency of hand media to a typically formal understanding of architectural design. However, formal considerations, materiality, program, environment, collapsed scalar conditions, and broken conventions can easily coexist within a single drawing. With confidence in the ability of digital documentation to record and translate these formal concepts and qualities, hand drawings can be used to challenge design preconceptions and digital capabilities.

Eric R. Kandel, "Reconstruction of the World We See: Vision is Information Processing," in *The Age of Insight: The Quest to Understand the Unconscious in Art, Mind, and Brain, from Vienna 1900 to the Present*, (New York: Random House Publishing Group, 2012).

WATCHING PAINT DRY

T.K. JUSTIN NG

AGAINST THE EFFORTLESS CLICK of a screenshot and the pulsing clarity of real-time rendering, drawing by hand and watching paint dry appears indulgent and demands frequent justification. Under the current mantra of quick production and even quicker consumption, defenders of hand drawing have largely resorted to the aphorism that sketching is the most direct, if not the quickest, translation of observations or thoughts onto paper. While these claims may be true, if we are to abandon the pursuit of speed—operating deliberately slow, indirect, and imprecise—we may find that the act of representation itself can yield more creative methodologies.

To illustrate this, allow me to elaborate on my use of large-scale paintings as a form of architectural research in my studies of dim sum restaurants across the Pacific.

Long before pulling pen to paper, my search for a subject matter begins on Google Maps. Patrons' photos and reviews help compile a shortlist of dim sum restaurants to visit. Fueled by the thrill of unfamiliarity, observations from the first visit prove uniquely acute and prime for documentation. New iPhones are equipped with LiDAR scanners capable of 3D scanning interior spaces, a technology that requires the phone's owner to point obnoxiously over every nook and cranny. I prefer to keep my surveys covert and unobtrusive. Before entering the dining hall, I clutch my phone to my shoulder and start recording stealthily. It only takes several laps around the dining room to produce a video walk-through that locates key circulatory routes and general interior layout. Once I sit down at a table, I count the floor tiles and sketch an annotated plan—all while savoring morsels of dim sum.

These on-site recordings sit idly in my phone and notebook while I begin months of archival research on each restaurant. As memories of my visit fade, the readings buttress first hand experiences. By the time I build a digital three-dimensional model, historical time and knowledge has complicated an otherwise simple process. Referencing blurry memories, choppy video footage, rough sketches, historic photos and writings, the modeling process becomes a tug-of-war between divergent perspectives and hazy recollections. The resulting model reflects this: a three-dimensional Hockney collage. Multiple memories, histories, and viewpoints create a disjointed and incomplete space that embodies a sense of plurality. I am now tasked with, not a forceful homogeneity, but a delicate seaming. In my large-format paintings, this pursuit involves two techniques: axonometry, and the cut line.

From cubes drawn by children to furniture diagrams in IKEA manuals, axonometry's apparent legibility and technicality belie its capacity for illusion. Parallel projection collapses visual depth, allowing far apart objects to line up and appear as though they are connected. While Piranesi's imaginary prisons hide impossible stairs to produce a coherent perspectival image, axonometry allows the video game Monument Valley to flaunt impossible staircases front and center without arousing the skeptic. Axonometry sets up a conjoining framework for bringing together a fractured space.

The cut line takes many forms. It can be a border delimiting the painting's edge, a plane clipping through a three-dimensional model, a silhouette staging the composition... In each case, the cut line selectively removes information to make sense of the image. The cut line is not a *poché*, which emphasizes the thing-ness of what is blacked out. The cut line produces voids by leaving the paper exposed, resulting in a blankness that operates similarly to Damisch's 'cloud'—as an alternative to linear perspective.¹ Yet rather than the ephemeral and blurred edges of the 'cloud', the cut line—a line after all—delineates. Adhering to axonometry, the cut line's rigidity reinforces the projection's connective capacity.

Employing this representational trickery, the disjointed three-dimensional model produces a cogent two-dimensional linework. The digital drawing is then transferred onto watercolor paper. It is the one step I have chosen to expedite. The Zand machine's robotic arm drawing at a stunning rate of up to six meters per second, imposes a distance between myself and the image that later allows me to return to this work anew.

With fresh eyes, I begin painting. Watercolor's sensitivity to moisture transforms the process into a dance where I follow the materials' tempo. In rhythm with the moisture of the brush, the thickness of the paper and the humidity of the air, I reference the original video footage to reinvigorate each brush stroke. The linework takes away the stress of painting accurately and the time spent watching paint dry becomes a special time for reflection.

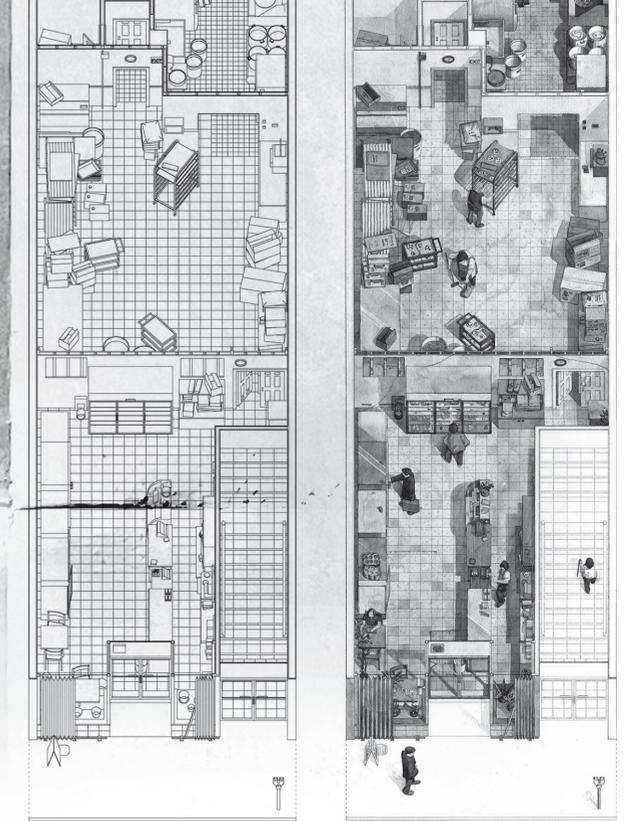
From the choice of subject matter to the final stroke, each painting's creation is deliberately circuitous. The slow and phased process accumulates information over time and produces a palimpsest of spatial knowledge. Each step locks in a different aspect of the space and subsequent layers negotiate with what is already on the page to produce a cogent, but not always congruent, rendition of a place. The resulting painting showcases a spatial imaginary that is more than a cognitive reproduction of a space itself. Each painting, imbued with intellectual and emotional musings, represents my intentional slow quest to understand a space.

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T.K. Justin Ng, *Kam Wai Dim Sum in Vancouver*.

GOLD DUST

INTERVIEW WITH LIAM YOUNG, CONDUCTED BY SABA SALEKFARD & CHRISTOPHER PIN

SS: How and why does your storytelling begin with world building? You've mentioned spatial forms of storytelling, and I was wondering if you could talk about the way that's different from, for example, the way filmmaking is approached, which starts with scripts or character arcs.

LY: All architecture is a form of fiction making. Sometimes those stories get framed through the structures of the physical building and sometimes they become the landscapes of video games, or the 24 FPS of an unfolding sequence of space in a film. So I still think of my fiction practice as an architectural practice. What that looks like in the context of the entertainment industry or in the context of film is what we call practices of world building. You'll develop the environment, the world, the setting, the space. We start narrative at the beginning point, as opposed to a traditional film that might begin with a script or a character. To construct our stories we develop a world first, populate that world with inhabitants, and then role play a whole bunch of scenarios. This produced a whole bunch of interesting characters that emerge within that story as a way to describe what that world is doing. This is really a spatial and architectural process of getting to a narrative as opposed to endless drafts of scripts. So the beginning point of our fictions lies within the narrative context that we are most interested in. How does that narrative context, as an alternative world, help us to understand the world that we are in, in new ways? Is it a projected future? Is it a counterfactual present? Does it become a process of imagining the world as it is, but just dialing the volume up on one specific thing? We then construct a world as a way of critiquing and thinking about the current world that we occupy. That narrative context is really a vessel for a series of architectural and urban ideas about who we are and the cities that we occupy. The notion then becomes the way in which we disseminate those architectural ideas to the broadest audience possible. Ultimately, I gravitated towards this process of world building and storytelling because I thought the ideas that we talked about as architects are really important, and I was endlessly frustrated by the way that we are continually satisfied by putting those ideas within the most extraordinarily niche mediums. Architecture books might sit in a few rarefied bookshops, or on a few hundred student desks. Lectures at a school like Yale are given to a bunch of other architects, and architecture students. World building is the way in which I can crystallize a set of architectural and urban ideas in a fictional space, but I can use the mediums of fiction to disseminate those ideas to audiences that would sit outside of the disciplinary audiences that we typically talk to. If we value what we do, it is our responsibility to find forms through which a broader public can engage with that. So, it's an architectural project that we're working on, and fiction becomes the conduit through which we launch those projects into the world in such a way that they might find traction.

CP: Our fetishization over niche mediums is tough to square with the importance of these ideas. Do you then see your work as dealing with a different aesthetic toolkit entirely? The techniques in your toolkit are much more aesthetically grounded than a more traditional built architecture, which occupies our lived experience through sheer existence.

LY: We train for five or seven years in order to understand and develop a literacy with the language of drawings, like plans, sections, diagrams. They're an extraordinarily coded language that people without that training don't really have access to. It's an extraordinary privilege to be able to understand the drawing in those terms. If we continue to code within those mediums, the critical ideas about our world that affect everyone else in it stay in that disciplinary language of the drawing. This is desperately problematic and inaccessible, and it continues the same systems of privilege. We're interested in the way all of us have a literacy in stories: we laugh and cry in front of the tv, or in a dark movie theater; we fall asleep in the pages of a novel; we read stories when we're young. It's really how our culture has shared and disseminated ideas, and we co-opt those mediums of fiction, or the mediums of popular culture, and encode within them trojan horses that hold architectural and urban ideas.

CP: To do this, you have to rely on specific registers of realism. There's a whole host of techniques you use, be it analog in the scripts that you read, the way that you use live performance, with your voice, to create a spectacle, or the quick cuts between geological footage and animated clips. The necessity for you to continue to play with this skill set is different from most architects, who use the built world as a crutch. How do you develop this craft?

LY: We're trying to explore ways that we can connect to complex ideas. With our science fiction films we will often lean into tropes, as a sort of a shared language through which we typically represent the future. A lot of times the architectural discipline or the art world, in a traditional sense, use "accessible" as a kind of derogatory term. That's another extraordinary position of privilege. So, we use the visual language of Hollywood because it becomes a shorthand through which we understand futurism. We know we're looking at a science fiction speculation because it looks a certain way. The software and tools that we use produce a certain type of image, and for us that's valuable because that accessibility means that we are potentially engaging people that wouldn't otherwise be part of the discourse. I do the same with language. A big part of what I do in my live cinema performances is that I narrate the work through a very literary lens. I look a lot at some of the romantic poets, or the Beat movement, and I would bring to a condition like the planetary logistics network, a language historically associated with dailies or wandering clouds. I'm interested in the way that Ken Kesey wrote *One Flew Over the Cuckoo's Nest*, where he wasn't traveling across America in an open top car, but instead was riding on board a massive container ship or wandering through a rare earth mineral mine. You can bring people into those spaces using language that's typically not associated with them. For the most part the dominant media narratives will try to render infrastructure invisible, whereas my aesthetic practice tries to drag those conceptually peripheral territories into mainstream focus. People can start to relate to them in new ways. Ultimately, there is no periphery. There is no outside, where we dig up stuff and then refine it and turn it into the goods that we all own. We exist in this planetary scale urban context and either landscape is conditioned by that urban context already, or it produces that urban context. Everything is part of this one discontinuous planetary mega-structure and our practices of fiction are trying to render that legible and as an important part of our lives, because ultimately it is.

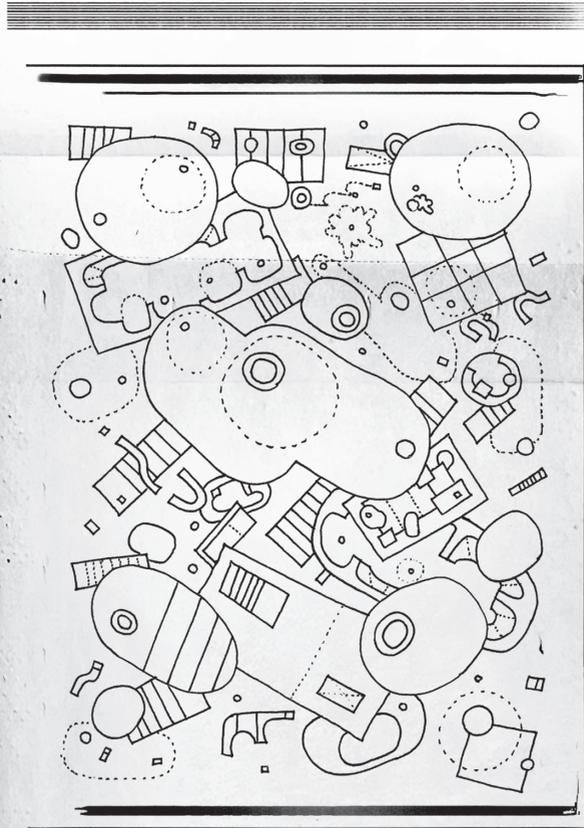
SS: Is there something about specific clients or projects that you choose to take on that gives you more leverage in creating counter narratives, and more creative agency?

LY: All architecture is a form of fiction making. Sometimes those stories get framed through the structures of the physical building and sometimes they become the landscapes of video games, or the 24 FPS of an unfolding sequence of space in a film. So I still think of my fiction practice as an architectural practice. What that looks like in the context of the entertainment industry or in the context of film is what we call practices of world building. You'll develop the environment, the world, the setting, the space. We start narrative at the beginning point, as opposed to a traditional film that might begin with a script or a character. To construct our stories we develop a world first, populate that world with inhabitants, and then role play a whole bunch of scenarios. This produced a whole bunch of interesting characters that emerge within that story as a way to describe what that world is doing. This is really a spatial and architectural process of getting to a narrative as opposed to endless drafts of scripts. So the beginning point of our fictions lies within the narrative context that we are most interested in. How does that narrative context, as an alternative world, help us to understand the world that we are in, in new ways? Is it a projected future? Is it a counterfactual present? Does it become a process of imagining the world as it is, but just dialing the volume up on one specific thing? We then construct a world as a way of critiquing and thinking about the current world that we occupy. That narrative context is really a vessel for a series of architectural and urban ideas about who we are and the cities that we occupy. The notion then becomes the way in which we disseminate those architectural ideas to the broadest audience possible. Ultimately, I gravitated towards this process of world building and storytelling because I thought the ideas that we talked about as architects are really important, and I was endlessly frustrated by the way that we are continually satisfied by putting those ideas within the most extraordinarily niche mediums. Architecture books might sit in a few rarefied bookshops, or on a few hundred student desks. Lectures at a school like Yale are given to a bunch of other architects, and architecture students. World building is the way in which I can crystallize a set of architectural and urban ideas in a fictional space, but I can use the mediums of fiction to disseminate those ideas to audiences that would sit outside of the disciplinary audiences that we typically talk to. If we value what we do, it is our responsibility to find forms through which a broader public can engage with that. So, it's an architectural project that we're working on, and fiction becomes the conduit through which we launch those projects into the world in such a way that they might find traction.

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FIGURES OVER FIGURES OVER FIGURES

JIMENEZ LAI



LY: A way to explore both of those questions is to talk about the way that a project emerges. Whether it's a distant sci-fi speculation or a documentary project, all our work begins with licking our finger and putting it up into the breeze and seeing which way the wind is blowing. We're trying to capture the zeitgeist. What is part of the contemporary discourse, the frustration, or the hope of the present moment? What part of that might we be able to contribute to in some form? Our fictional work begins with a deep engagement of the present, what we call *signal scanning*, where we look out and try to identify the current trends, the weak signals of possible futures that are out there. Then we'll get on a plane and we'll go and investigate. For the most part, it means a practice of really aggressive listening, trying to reverse the tradition of architects going to a place, hanging out for two days, thinking they can solve the problems of that place by going back to the studio and making a building. It becomes just a continuation of the colonial project and isn't helpful in any sense. We will go out to a context, and try to engage and listen to the people that have been devoting their lives to that place, documenting and capturing those stories with our own platforms. So, a lot of our work will begin with documentary engagement. An extension of that process involves understanding the future as part of contemporary discourse; we're being sold futures every moment of every day. Those futures come with a whole lot of self interest, crafted by people that have a vested interest in enacting those particular futures, because, generally, they can profit from them in some form. Constructing counter narratives is really about exploring and narrating and visualizing alternative futures, so that we can see it's not all set in motion; that there are alternatives which are possible, other worlds which may be enacted if we choose to do so. By potentially laying out this whole landscape of possibilities in front of us, we can start to be more informed and active participants in instigating the futures that we want to be a part of, as opposed to passively strolling into the futures that we are being sold. I use the analogy that the landscape ahead of us is this dark and shadowy territory, and that each one of those stories becomes a torch light that illuminates one particular path, or part of that landscape in front of us. The more torches we shine, the more of that landscape become illuminated and the easier it is to navigate from one side to the other. A singular future is not productive because it doesn't actually illuminate any of that landscape at all; we need to think about both the cautionary tales and the aspirational utopias as a means to figure out how we get there.

THE MYTH OF SMOOTHNESS

TIMOTHY WONG

SMOOTHNESS OBSCURES. The rendered images we make illuminate from our high definition screens—their smoothness drawing us in while we forget about its digital constructs. In the recent visualization competition *Render of the Year 2021*, hosted by *Arch Out Loud*, the brief describes their aim to "[seek] compelling images that tell stories of architecture, interiors, cities, and worlds that could be." Underlined for emphasis, "that could be" uncovers our discipline's predilection towards the render, a representation technique aimed at immersing and bestowing suspension of disbelief and wonder. Yet underlying this mode of seamless visualization are constructed biases distinguishing what is deemed worthy to be seen or not, between signal and noise. As the media critic Wendy Hui Kyong Chun argues, software structure and our practices of fiction are trying to render that legible and as an important part of our lives, because ultimately it is.

SS: Is there something about specific clients or projects that you choose to take on that gives you more leverage in creating counter narratives, and more creative agency?

LY: All architecture is a form of fiction making. Sometimes those stories get framed through the structures of the physical building and sometimes they become the landscapes of video games, or the 24 FPS of an unfolding sequence of space in a film. So I still think of my fiction practice as an architectural practice. What that looks like in the context of the entertainment industry or in the context of film is what we call practices of world building. You'll develop the environment, the world, the setting, the space. We start narrative at the beginning point, as opposed to a traditional film that might begin with a script or a character. To construct our stories we develop a world first, populate that world with inhabitants, and then role play a whole bunch of scenarios. This produced a whole bunch of interesting characters that emerge within that story as a way to describe what that world is doing. This is really a spatial and architectural process of getting to a narrative as opposed to endless drafts of scripts. So the beginning point of our fictions lies within the narrative context that we are most interested in. How does that narrative context, as an alternative world, help us to understand the world that we are in, in new ways? Is it a projected future? Is it a counterfactual present? Does it become a process of imagining the world as it is, but just dialing the volume up on one specific thing? We then construct a world as a way of critiquing and thinking about the current world that we occupy. That narrative context is really a vessel for a series of architectural and urban ideas about who we are and the cities that we occupy. The notion then becomes the way in which we disseminate those architectural ideas to the broadest audience possible. Ultimately, I gravitated towards this process of world building and storytelling because I thought the ideas that we talked about as architects are really important, and I was endlessly frustrated by the way that we are continually satisfied by putting those ideas within the most extraordinarily niche mediums. Architecture books might sit in a few rarefied bookshops, or on a few hundred student desks. Lectures at a school like Yale are given to a bunch of other architects, and architecture students. World building is the way in which I can crystallize a set of architectural and urban ideas in a fictional space, but I can use the mediums of fiction to disseminate those ideas to audiences that would sit outside of the disciplinary audiences that we typically talk to. If we value what we do, it is our responsibility to find forms through which a broader public can engage with that. So, it's an architectural project that we're working on, and fiction becomes the conduit through which we launch those projects into the world in such a way that they might find traction.

PROPHESYING AS PROFESSION

JULIANA YANG & ANOUSHKA MARIWALA

Doing — In this analog for creative work, we are sitting at Penelope's loom, drawing a thread of the past through a thread of the future. The work at hand is this laborious, repeating, careful elaboration, whose end—both the product and its telos—is revealed to be inextricable from its making.

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Doing — The woven structure of textile allows it to be soft without breaking, to envelop various bodies comfortably, with ease. By not being strict, weaving (a textile, a story, a drawing) is making space for resonance in a way that overdetermined, didactic transmission cannot. Despite the co-option of narrative fictions for advertising (weaponizing the power of resonance for profit), there remain some provisional, lyrical ways of working in this mode which learn from, rather than package, warp and weft.

Believing — A shroud is not the product of outspoken expression, but one of careful fabrication. Only Penelope knows that which she is (un)weaving, and in her perpetual doing we must do the work of deciphering.

reading using making epic textile drawing

in good faith is to believe in the work and its possibilities, and all the space for misreadings between. These are all sister practices, embodied histories that are contingent on fixedness (at the loom, in the past, on the page) and perpetual motion (we must keep turning, weaving). Myth is dyadic, and of ours to make our own. The architect knows this—her hand lives in the fictitious drawing and its trace, in loose threads to pick at and undersides to be examined. Myth is she, rendered material.

Meaning — Penelope was a weaver long before weaving was her cunning defense, and will continue to be as long as we need something to wear. In rethinking our relation to contemporary modes of working, we may find histories and futures, entwined, in a practice as mundane as weaving. Its meaning is held just out of grasp, but then, in all our fiction, it is our reaching that is important.



Rendered object after several iterations.

THE CONTEMPORARY PAPER PROJECT

MICHELLE SCHNEIDER

THE ARCHITECTURE "PAPER PROJECT" is a speculative one. Without built intentions, it often poses questions and makes provocations about architecture and the ways in which people exist within it. Paper Projects are determined by the architect, both in its brief and intentions, and allow boundless realities where new ideas can be introduced at their most extreme: a creative process deserving of the freedom that sketching and other analog techniques can ignite. These fictional projects exist as the platform for imagination, an infinite space held for architectural dreaming, where the unbuilt's best. Architecture as a discipline proposes novel boundaries meant to inform and construct our reality, aspiring to different worlds and subjectivities.

The digital tools and representational methods of today have challenged the modern-day Paper Project. Whereas before, Paper Projects were brought into reality and permanents by their physical existence on paper, its new site is easily misplaced in this contemporary world, existing in the virtual, ephemeral realm. At stake here is the potential loss of revolutionary ideas; digital space holds a sense of urgency, interrupting "the simmer" of architectural ideas, the manual effort offering introspective speed bumps by sheer nature of technique.

The Paper Project is the vessel that holds the idea; like art, it can be displayed, archived, cherished, housed. You can see it, touch it, smell it, exist with it. These physical, immersive environments, they could instead restore the obscured processes of the digital medium. While noise begins to unravel the myth of smoothness, we need to be careful about fetishizing noise as a decorative element. Instead, we ought to utilize it to recraft the rendered image as an assemblage of interfaces, algorithms, formats, screens, computers, disciplinary conventions, myths, and more. As the architect and critic Elle Abrons argues, we should "[overcome] this designed invisibility, opening the door to software's back-of-house...shining a light on the particularities, biases, and propensities of our everyday interfaces."⁹ We must not be merely the users of the digital, instead, a conscious actor of the rendered image.

1. Arch Out Loud, "Render of the Year - Home," *Render of the Year*, accessed April 10, 2022, <https://www.renderoftheyear.com/>.

2. Wendy Hui Kyong Chun, "On Software, or the Persistence of Visual Knowledge," *Grey Room*, no. 18 (January 1, 2005): 26-51, <https://doi.org/10.1162/15263810432029741>.

3. Pliny, *Natural History*, *Volume IX: Books 32-35* (Cambridge: Harvard University Press, 1952), 309-311.

4. David Gerwils, "On Paint and the Paint Surface," *The Cambridge Quarterly* (March 1, 2003), 49-66, <https://doi.org/10.1093/cqmq/32.1.49>.

5. Hito Steyerl, "Proxy Politics: Signal and Noise," in *Art in the Age of Planetary Civil War* (London: Verso, 2017), 31.

6. Michel Serres, *The Parasitic*, trans. Lawrence R. Scheier (Baltimore: The Johns Hopkins University Press, 1982), 14.

7. Ibid., 13.

8. Marshall McLuhan, *Understanding Media: The Extensions of Man* (Cambridge: The MIT Press, 1994), 22-23.

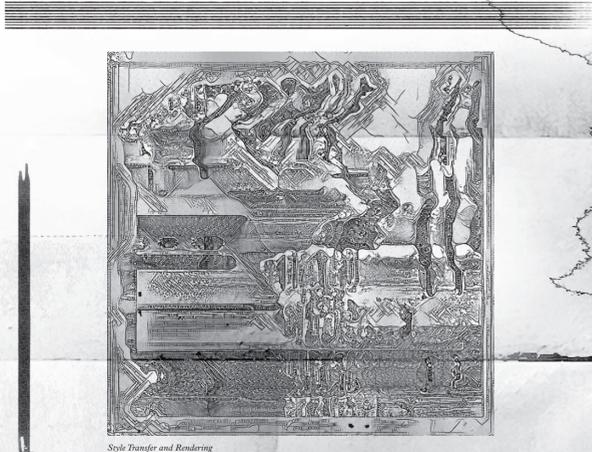
9. Elle Abrons, "Foreword" to *Digital Fabrications: Designer Stories for a Software-Based Planet*, by Galo Carrizares (Novato: Applied Research + Design Publishing, 2019), 8.

This sketch shows the image of a building above, and below it, everything else: the sensory qualities, the personal architectural experience, the *see touch smell...* qualities not necessarily built, but drawn in the imaginative space afforded between the limits of paper and human interpretation. Digital design does not evoke spatial imagination the same way that drawing can. The loss of paper as a medium and the move to digitization removes physical manifestation at the representational stage, and thus when viewed digitally, falls flat experientially.

What is the substrate to tie the contemporary Paper Project back to reality? Architecture's recent reflex towards hyper-realistic representation is a reaction to the loss of paper's physicality. Uncanny realism has begun to stand in for this lack of physical existence. The imaginary potential conferred by the Paper Project is now denied in favor of a plateau of sameness, foreclosing the interpretative room necessary to progress. It's in that inarticulate space where interpretive value lives and architecture thrives.

RENDERING SERLIO: A PEDAGOGY OF VISUALIZATION USING NEURAL NETWORKS

GABRIEL ESQUIVEL, SHANE BUGNI



THE DISCOURSES ON LANGUAGE AND DRAWING established by the classical architectural treatise find new disciplinary relevance in current advancements and discussions concerning machine learning. *The Serlio Code*, a body of research that examines the illustrated expositions of Sebastiano Serlio through the lens of artificial intelligence, provides one such example. The intention of the project is not simply to synthesize new images that recreate Serlio's illustrations, but rather modulate their qualities and investigate their 2D to 3D translation beyond traditional rules of representation and orthographic projection. Architectural intelligence encoded in representation describes the ethos of an artistic endeavor, imposes severity and logic, and prepares forces and materials to create the architectural object. This project outlines a digital culture that integrates canonical architectural intelligence into a contemporary practice, producing a new form of agency and a new mode of dialogue between a designer and a particular precedent.

Image-based neural networks synthesize artificial images that are indistinguishable from authentic images. However, GANs can also operate diagrammatically by creating an exchange between continuous analogical modulation and codification of discrete digital units. Analog information (image input) and digital information (noise) are both synthesized by the discriminator and then fed back into the system as new inputs. This process creates a continuous feedback loop, transferring code into an analog pictorial flow of the image in each successive training cycle. In other words, the GAN renders a fictitious modulation of the analog and the digital through pictorial flux.

Our representational tools continue to redefine our agency within the discipline, and this necessitates a reappraisal of the canon—like Serlio's treatise—through a hyper-digital lens. How can the democratization of technology and digital innovation bring new opportunities for agency when we consider projects that use these neural networks, while visually impressive, often lack viable applications for the discipline? Creative adoption of neural networks does not only redefine the terms under which we make images, but also opens new aesthetic and social discourse. Therefore, it is necessary to augment existing strategies of it through the layering or reapplication of these neural networks.

We must start to question the way these tools begin to shape our visualization pedagogy. While representation starts with a subjective structure presupposed to be isomorphic or identical to that of the objects differentiated under unity, Deleuze generates the structure of the object out of pure difference itself. This implies both the a-subjective, differential ground of representation and the virtual, dynamic tendencies that inevitably transform it. If these tools begin to shape our visualization pedagogy, while representation starts with a subjective structure presupposed to be isomorphic or identical to that of the objects differentiated under unity, Deleuze generates the structure of the object out of pure difference itself. This implies both the a-subjective, differential ground of representation and the virtual, dynamic tendencies that inevitably transform it. 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