

DRAWINGATTENTION



The digital culture
of contemporary
architectural drawings

Curated by

Jeremy Ficca, Carnegie Mellon University

Amy Kulper, Rhode Island School of Design

Grace La, Harvard University Graduate School of Design

“Architects are bound to treat as real that which exists only in an imagined future, and to specify the ways in which the foreseen things can be made to exist. In doing so they must predict the future nature of an artifact and that it will work as expected. In other words, the drawing process is a cosmopoiesis that can help to invent better futures and make potential worlds.”

Marco Frascari, From Models to Drawings (2007)

“The best way to appreciate the merits and consequences of being digital is to reflect on the difference between bits and atoms.”

Nicholas Negroponte, Being Digital (1996)

“Anything that can be bits will be. Any process that can be disintermediated will be. That is old news. What is new about vaporization is its unexpected consequences that move far beyond media.”

Nicholas Negroponte, Vaporized (2015)

“Paul Klee once said, “I take the line for a walk.” Drawing is a universal, formal language. It’s the hieroglyphs of communication. For me, drawing is like talking – it can formulate an idea, explain a thing or a possibility. It’s important for me to translate my thinking process into an image, and drawing often pursues its own course while the brain just follows for a while, then suddenly you hit on an idea, and it sprouts from the pen. You can call it a creative shortcut.”

Madelon Vriesendorp, Augmentations (2016)

“Thus, the architectural drawing as end work can function in any of three ways: as an innovative design tool, as the articulation of a new directions, or as a creation of consummate artistic merit. Put simply, a perfect act of architecture achieves all three at once.”

Jeffrey Kipnis, Perfect Acts of Architecture (2001)

“Designers—a category of imaginative world-makers that includes but is not limited to architects—make drawings and representations, the goal of which is to wish or instruct a new thing into existence. They draw *toward* the world. Drawings establish a relationship to the world. Just like language they can whisper and shout, contradict their authors, make promises, describe, denote, and instruct.”

Susan C. Piedmont Palladino, How Drawings Work (2019)

“My own suspicion of the enormous generative part played by architectural drawing stems from a brief period of teaching in an art college. Bringing with me the conviction that architecture and the visual arts were too closely allied, I was soon struck by what seemed at the time the particular disadvantage under which architects labour, never working directly with the object of their thought, always working at it through some intervening medium, almost always the drawing, while painters and sculptors, who might spend time on preliminary sketches and maquettes, all ended up working on the thing itself which, naturally, absorbed most of their attention and effort.”

Robin Evans, Translations from Drawing to Building (1997)

DRAWING**ATTENTION**

“... whether executed manually or digitally, in two dimensions or three, architectural drawings reveal aspects of the built world that normally escape attention.”

David Leatherbarrow, Showing What Otherwise Hides Itself (1998)

“What is the verb of ‘architecture’? That depends on who you ask. A professional architect will tell you that architects design. Architects design buildings. They might have a hand in building them, but first and foremost, they design them. Yet the verb of digital structure for programmers and information architect designers is ‘architecting’: designing a system, working holistically from parts to wholes, operating from above, setting in place foundations from below. From the perspective of digital designers and programmers, what architects do is analogous to what designers and programmers do in their most complicated and intricate work. The way designers and programmers use the term speaks to the idea of what an architect does, to the complexity of their work, and to the expertise that architects claim. In essence, they architect architectures.”

Molly Wright Steenson, Architectural Intelligence (2017)

“What is digital architecture? Is it legitimate to apply the term to any design made with the assistance of the computer, or should it be reserved to productions that put to real use the capacity of the machine to be more than a drawing tool?”

Antoine Picon, Digital Culture in Architecture (2010)

“To a large extent it has turned out that the usefulness of computer drawings is precisely their structured nature, and that this structured nature is precisely the difficulty in making them ... The drawing itself has properties quite independent of the properties of the object it is describing.”

George Stiny, Talking about Seeing and Doing (2008)

“Unlike documents in print, digital notations can change anytime, and every reader of a digital file can, technically, write on it or rewrite on it at will: in the digital domain every consumer can be a producer.”

Mario Carpo, The Second Digital Turn (2017)

“Evidently it is not enough to regard the surface as a taken-for-granted backdrop for the lines that are inscribed upon it. For just as the history of writing belongs within the history of notation, and the history of notation within the history of the line, so there can be no history of the line that is not also about the changing relations between lines and surfaces.”

Tim Ingold, The Life of Lines (2011)

“The idea of a ‘creative architecture,’ of an experimental architectural aesthetic that privileges the drawing as an expressive tool, emerged less than a century ago. Aside from the utopian drawings of the eighteenth century – the visionary expressions of Boullée or Ledoux and the unlikely prisons of Piranesi – drawing found its true expressive value when space was liberated and it could become a free domain, an open field. The various movements of the modern avant-garde sought to make the drawing an instrument both critical and creative.”

Laura Allen and Luke Caspar Pearson, Drawing Futures (2016)

The digital culture of contemporary architectural drawings

Curated by

Jeremy Ficca, Amy Kulper, Grace La

The architectural drawing is multivalent. It can be as gestural and incomplete as a sketch, or as well wrought and detailed as a rendering. It can express building tectonics and construction logics in one context, aesthetic qualities in another. It can be a vehicle for exploration, or an instrument of execution. Nowhere is the multivalence of the architectural drawing more pronounced than in the contemporary context of digital culture. In a moment in which Photoshop layers supplant layers of trace and pixels duel with graphite, the roles of the architectural drawing are simultaneously contested, questioned, and clarified. Drawing Attention dwells in the current paradox of the architectural drawing. The exhibition gathers contemporary architectural drawings from a range of international practices and the academy. The assembled drawings are diverse in their content, but even more varied in their engagement of digital techniques and methodologies. Drawing Attention examines the roles of architectural drawings in this moment of radical disciplinary and cultural change. The drawings assembled in this exhibition provide a compelling snapshot of global architectural drawing practices and the plethora of analog, digital, and hybrid representational methods they employ.

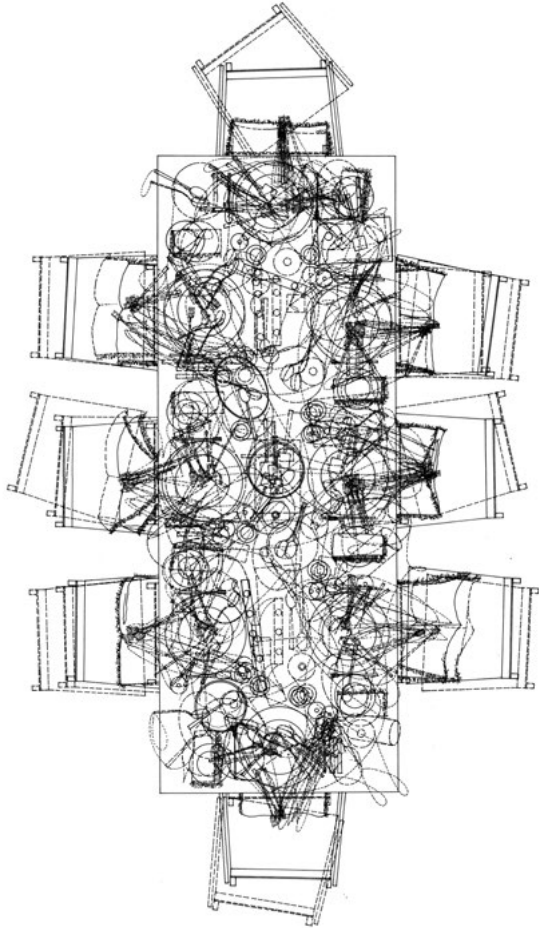
DRAWING ATTENTION RAISES THESE QUESTIONS, ISSUES, AND PROVOCATIONS:

- Has the pull of digital image culture strengthened or depleted the efficacy of the architectural drawing?
- If the conceit of the 'postdigital' resides in its recognition that contemporary culture is always already digital, liberating discourse and practice from the strictures of analog/digital dualism, how does this effect the operations and audiences of the architectural drawing?
- What territories and possibilities does digital culture open up for the architectural drawing, and how have the roles of analog drawing transformed as a result?
- Digital culture posits a productive tension for architectural drawing between the agency of drawing and the agency of the image. How is this manifested in the drawings in this exhibition?

DRAWING TABLES

Alvin Boyarsky, Chairman of the Architectural Association in London between 1971 and 1990, compared the education of an architect to a "well-laid table," and by extension, this collection of architectural drawings constitutes a well-laid table of representational possibility in contemporary digital culture. Bracketed between two well-laid tables – Sarah Wigglesworth's *The Disorder of the Dining Table* (1997) and James Michael Tate's *Inhabiting Abstraction #2* (2019) – this collection articulates the diverse attitudes and operations of the architectural drawing today. Between Wigglesworth's evocation of the ephemeral – traces of

the chaotic and exuberant unfolding of a meal over time – to Tate's allusion to the messy productivity of the design studio, the potential of the architectural drawing to address a range of issues and operations, and to evoke a limitless design imaginary is apparent. If Boyarsky's well-laid table encouraged students of architecture to sample from a varied menu of theoretical design investigations, then this exhibition sets the table with five themes under which contemporary architectural drawings operate: drawing omniscience; drawing environments; drawing as instrument; drawing as world-making; and drawing limits.



Sarah Wigglesworth

The Disorder of the Dining Table [Image 2: The Meal]
1997

“Faced with a blank sheet of paper and a couple of buildings to design, where do you start? Any novelist will tell you: write about what you know. What we know is that living and working from the same building means our two lives (work and home) are never easily distinguished, but rather are irrevocably intertwined. An architect’s response to this might be: separate the two physically; clarify zones; keep activities distinct; apply order. The person who lives and works there knows this is impossible. The Dining Table shows why.”

**Sarah Wigglesworth
and Jeremy Till**



James Michael Tate

Inhabiting Abstraction #2 2019

“The artifact demonstrates the powerful ways in which a representational act can capture and work on our cultural imaginary, allowing us to understand the project through the politics of how we’ve been working through it.”

James Michael Tate

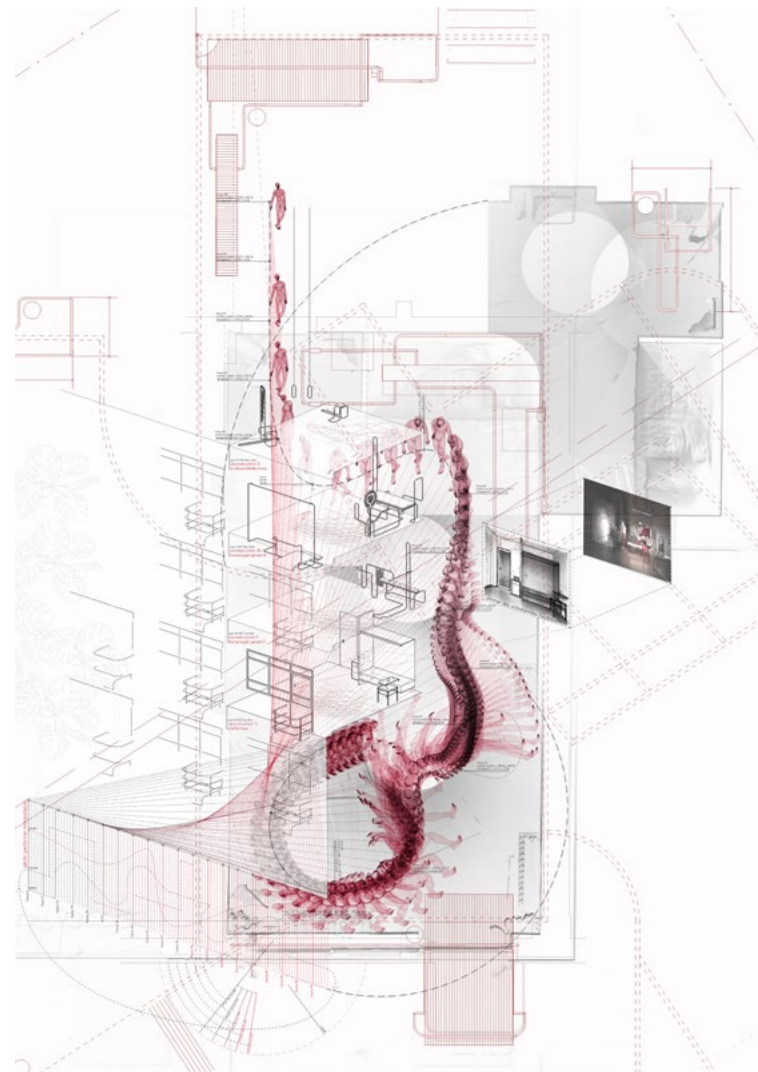
DRAWING OMNISCIENCE:

TOPDOWN CURATORCOLLECTION OBLIQUEIMMANENT

The drawings in this category – plans, diagrams, axonometrics, and oblique projections - all share an omniscient point of view, allowing the architect to assume a perspective unavailable to direct experience. Historically, this vantage point is critical to the organizational, typological, and curatorial work of the architect. Since the release of Google Earth version 1.0 in 2001, digital culture has rendered omniscience an ordinary and ubiquitous condition of our everyday lives. Satiating an appetite for omniscience that was stoked by the dissemination of the 'Blue Marble' photograph of 1972 that documented the planet's surface from the vantage point of the Apollo 17 spacecraft, Google Earth successfully democratized global aerial surveillance, culturally indoctrinating the possibility of thinking at a planetary scale. The discipline of architecture is currently witnessing a resurgence of these drawing types. The exhibition is drawing attention to a moment in which the pervasive and thoroughly enculturated long zoom of Google Earth triggers an architectural response to this invitation to view the world, and our place in it, from a planetary perspective, or from the top down.

"The agency of this drawn space reaches beyond description, prediction or instruction – it becomes an instrument of speculative forensics, generating from its contradictions different versions of the reconstruction."

Thomas Pearce



Thomas Pearce

The Re-Invention of Jakob K. 2019

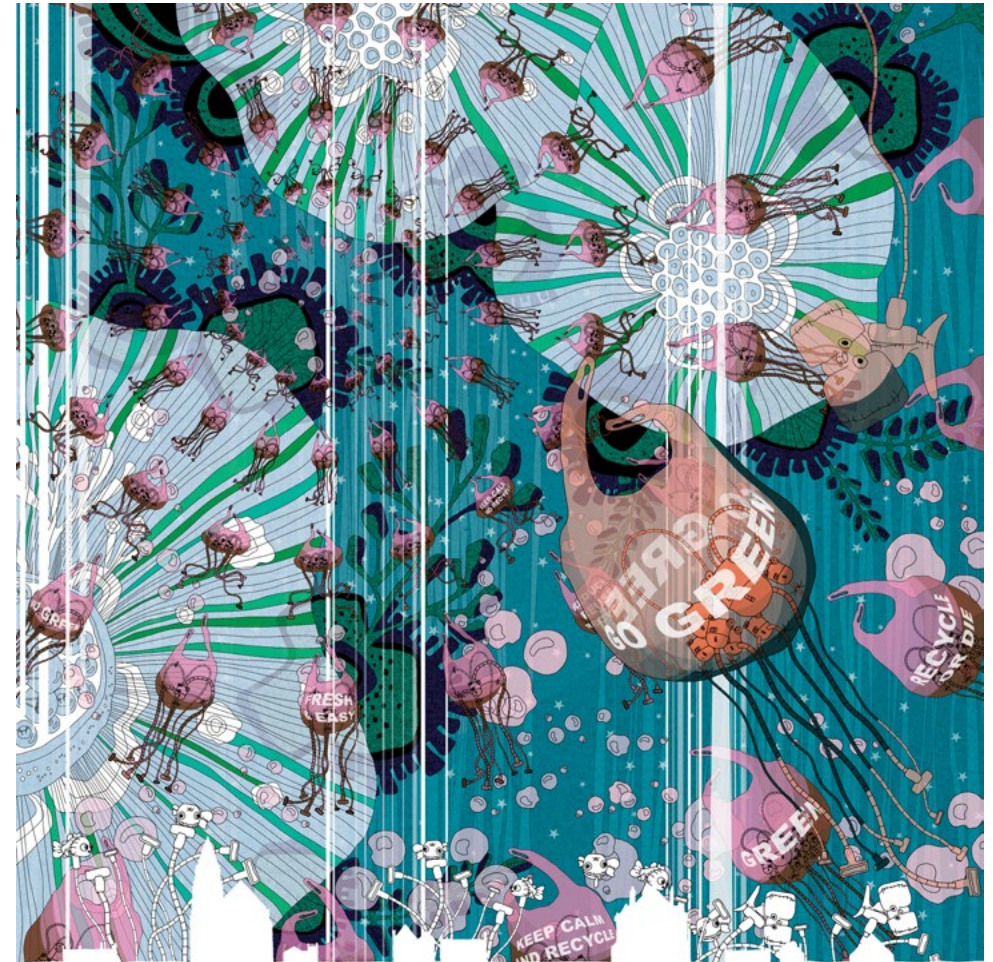
DRAWING ENVIRONMENTS:

AQUEOUS TERRESTRIAL RESOURCE WASTE ARTIFICIAL NATURES

Since the Kyoto Protocol of 1992, cultural attention has focused on the ecological crisis of climate change and the need for global solutions. Environmental conversations unanimously acknowledge that local solutions to global issues such as sea-level rise and air quality are wholly ineffective. As a result, architectural engagements are becoming increasingly environmental in their treatment of buildings and sites as systems with the capacity for broader impact. Architectural projects approach the environment from a diverse range of perspectives, and these drawings are at times allegorical, at others technical, occasionally logistical, and often speculative. Such projects position architecture at the crossroads of global resource exchanges and question the impact of demolition and preservation on existing waste streams. When drawing environments, architects are drawing attention to our responsibility as a discipline and profession to lead and effect the discourse and practices surrounding global climate change.

"Here, the persuasive childlike drawing, embedded with wit rather than statistical abstraction of scientific data, is more likely to capture the public's awareness and can help deliver change."

CJ Lim



Studio 8 Architects
Ocean Cleaning, 2019 (ongoing)

DRAWING AS INSTRUMENT:

PROCESS ITERATION

2D/3D

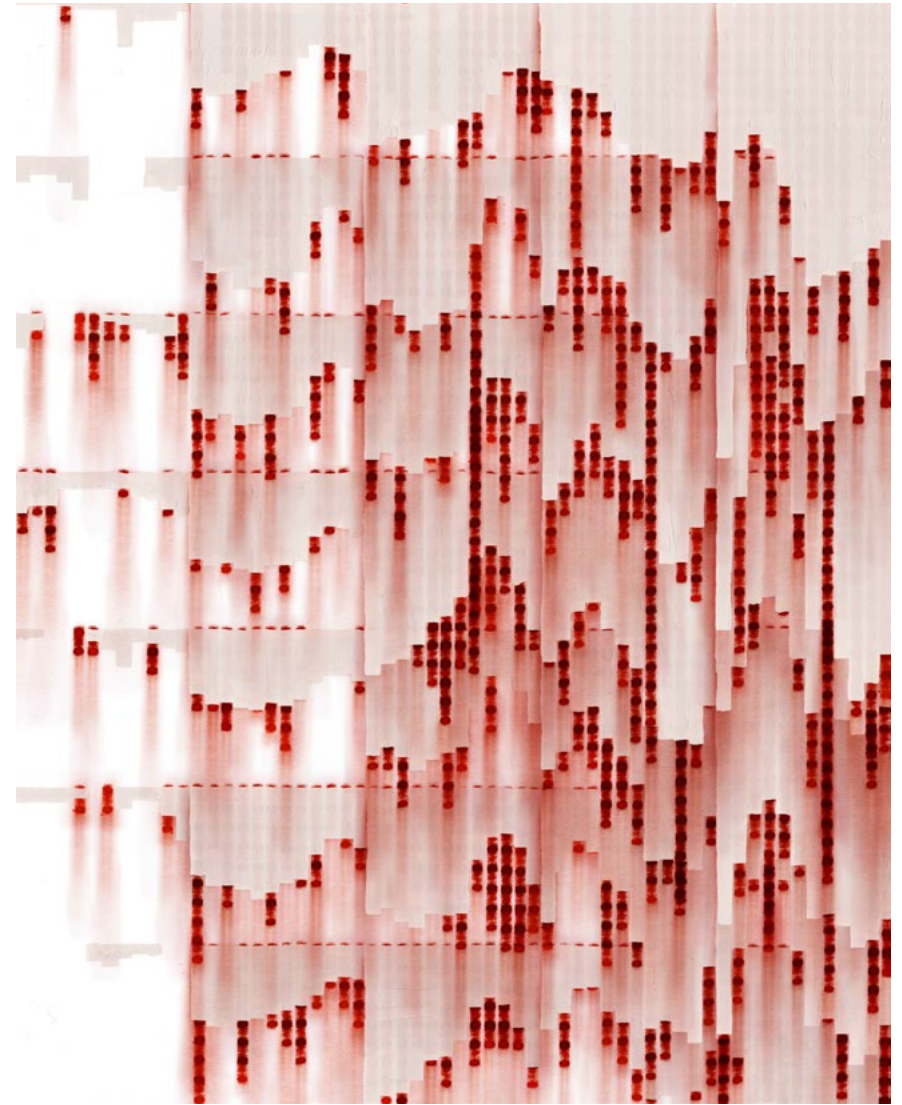
DATA GLITCHES

ABSTRACTION GEOMETRY

The digital turn in architecture, a period that architectural historian Mario Carpo frames between 1992 and 2012, was characterized by a disciplinary preoccupation with process. This process fetish allowed architects and architectural educators to incorporate digital techniques and methods into their workflows, rehearsing and committing to memory and practice the how, which at some point in time became the what of their discourse. During this period, analog and digital drawing in architecture posited a dichotomy in which architects either embraced the digital turn with enthusiasm, or continued the practice of analog drawing. In the contemporary moment, sometimes described as the post-digital, the question is no longer whether to construct a drawing by hand or digitally, it is more of a both-and operation. Many of the works in this exhibition are drawing attention to the capacity of the architectural representation in this post-digital moment to function as an instrument rather than as the didactic documentation of a process.

“The drawing puts forward a model of design as nothing more than a managerial process, one in which objects are produced through the uneven allocation of agency across vast geographies of production.”

Curtis Roth

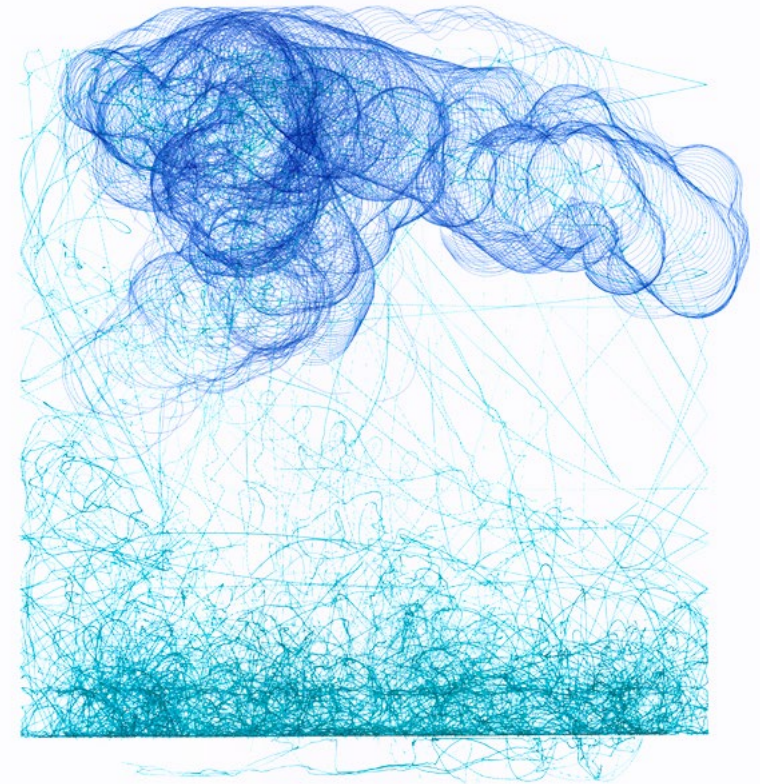


Curtis Roth
Drawing 03.03, 2019

DRAWING AS WORLD-MAKING:

WEATHER ATMOSPHERE TEMPORAL CHANGE MICROCOSM SECTION

Like fiction, architectural drawings possess narrative world-making capacities, whether they are creating weather, activating temporal change, or engaging the building as a microcosm of a larger cultural condition, typically through the orthographic convention of the section. Historically, the Enlightenment witnessed the inextricable entanglement of world-making and technology, and this lineage is preserved in contemporary digital culture. Currently, the advent of digital fabrication enabled by 3D printers, laser cutters, and CNC milling technologies has fueled a cultural confidence in the nascent creative possibilities of world-making. As architects increasingly engage in the ephemera of air, weather, seasonality, and temporality, creating buildings that are microcosms of participation with these systems, the works in this exhibition are drawing attention to the role of the architect in imagining possible futures as worlds of their own making.



“With no intent whatsoever to seek a truthful allegiance to the realities of weather, atmosphere, fluid, gravity, or particles, this drawing is nonetheless tethered to nature through authored conditional impositions.”

Carl Lostritto

Carl Lostritto
Storm, 2019

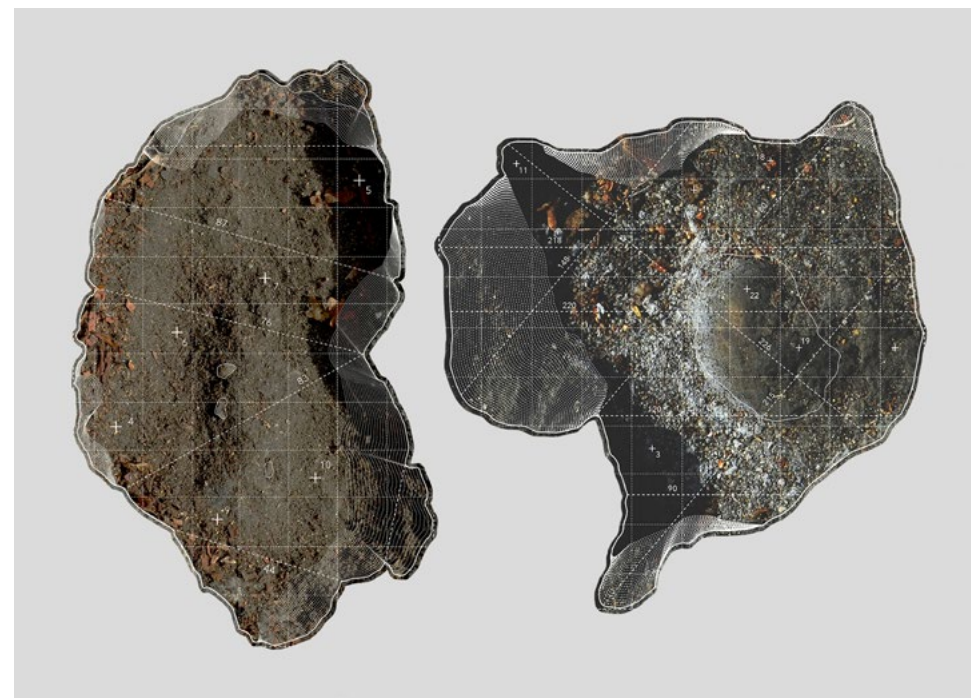
DRAWINGLIMITS:

SCALESHIFT DIGITALIDENTITIES DATASUBJECTS BOTTOMUP

Most architects would agree that a critical ingredient in the execution of meaningful design are constraints. Constraints of budget, scale, materials, time, perspective, often lead to innovation and invention. With the widespread profusion of social media – LinkedIn in 2003, MySpace in 2003, Facebook in 2004, Twitter in 2006, Tumblr in 2007, and Google+ in 2011 – the cultural opportunities for creating new identities and experiencing new perspectives are virtually limitless. In 1981, the first edition of *Entourage: A Tracing File for Architecture and Interior Design Drawing* was published, offering designers pre-packaged ‘subjects’ (a panoply of scale figures) to populate their drawings. Today, websites like Skalgubbar and 3D Warehouse exponentially expand the category of digital subjects available for sampling by architects. With the advent of commercial internet service providers in the late 1980’s and early 1990’s, the scale of global communication appeared infinite. In this context of the fluid construction of digital subjectivities and the near infinite scale of communicative possibility, the works in this exhibition are drawing attention to architecture’s role in activating scalar ambiguities and constructing subjects – a feat architects have historically enacted by deploying or creating their own ‘entourage.’

“Mapping out two micro-topographies, the drawing produces an absurd degree of precision and resolution. Yet, through the isolation of the sidewalk holes from their original contexts, the drawing also creates an ambiguous reading of scale and materiality, as viewers might not be able to discern whether they are looking at microscopic depressions or craters of monumental proportion.”

Zachary Tate Porter



Zachary Tate Porter
*Topographic Survey of two Sidewalk
Holes in Downtown Los Angeles, 2016*

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Cover Image Credit:

Adam Dayem actual/office *Shimmer House* 2019

Exhibition Notes:

Several drawings of this exhibit were originally shown as part of the exhibition entitled, “Drawing for the Design Imaginary” held at the Carnegie Museum of Art and Carnegie Mellon University, on the occasion of the Association of Collegiate Schools of Architecture (ACSA) 2019 national conference, *Black Box: Architecture’s Core in the Post Digital Era*. Jeremy Ficca, Amy Kulper, and Grace La served as co-chairs and curators for the conference and exhibit, which received the largest number of submissions to the ACSA within the last decade. Inspired by the breadth of drawing and theorizing emergent themes, this new exhibition gathers seventy-five drawings from emerging and established architects from around the globe. *Drawing Attention* is generously supported by Roca London Gallery.

Events:

Further events will be listed on the Roca London Gallery website as they are confirmed.

Credits:

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School of Design

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Graduate School of Design

Exhibition Design

Cellar Door Creative

Exhibition Fabrication

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