
PRAXIS
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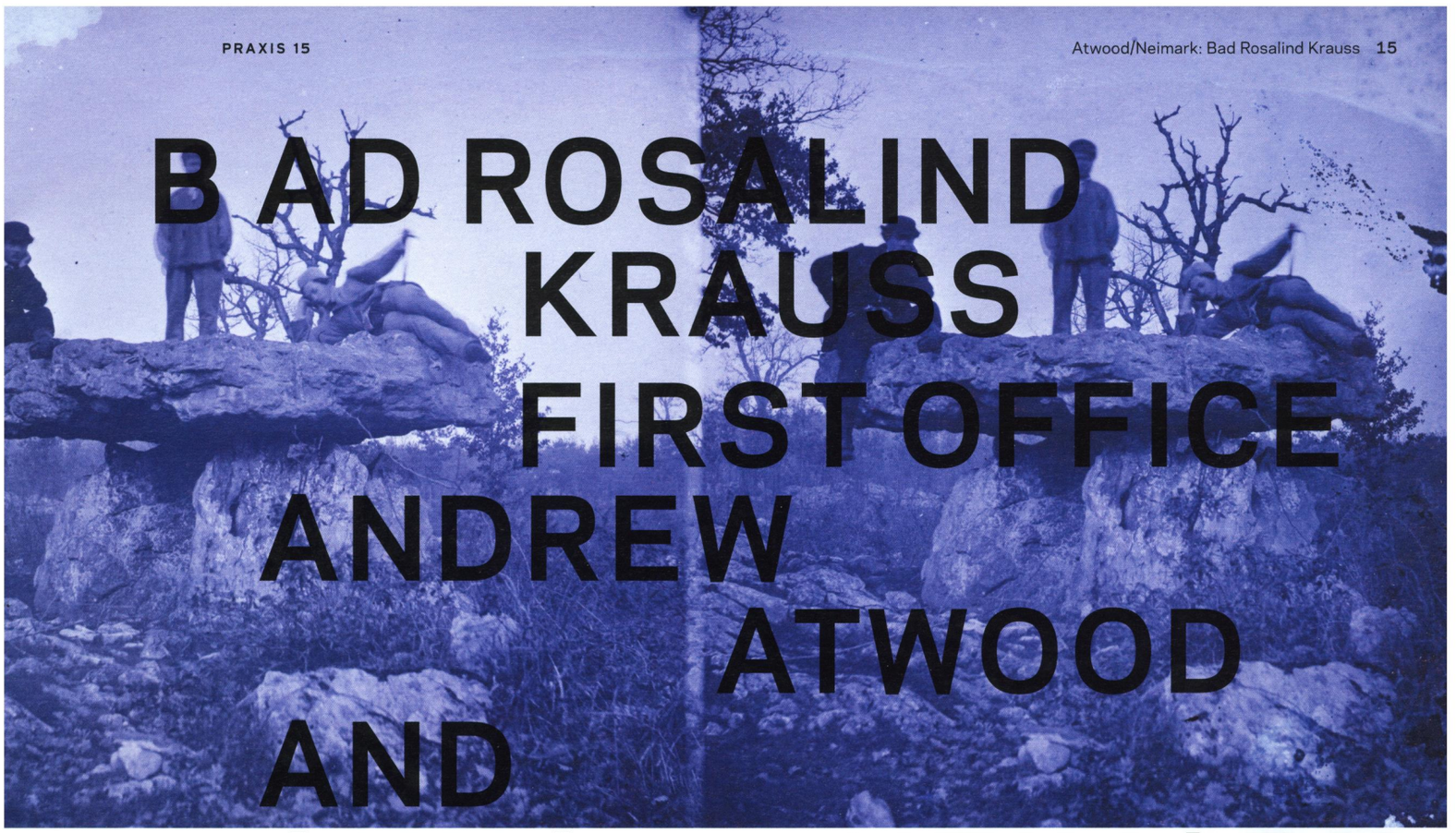


BAD ROSALIND KRAUSS

FIRST OFFICE
ANDREW ATWOOD
AND
ANNA NEIMARK

RUDE FORMS Formal analysis can give architecture conceptual transparency through mathematical precision, and thus, a claim to truth. During most of the twentieth century, modernists rooted their work in classical precedent with this formula. Consider for a moment some stuff that cannot readily be explained in this way: Stonehenge, leopard spots, a mountain in the Himalayas. These things seemingly have nothing in common until you begin to draw them. Laid out against a grid or a set of coordinates, they come in and out of focus. They tend to misbehave as they are subjected to the interpretive frameworks of formal analysis; they only ever occupy geometrical rules informally. They cannot reduce to any clear diagram, massing, or algorithm. They align at times, but, more typically, they deviate from norms. Their imperfections—high tolerance, low resolution, dull finish—are rather difficult to pin down. To us, these case studies reveal the potential for constructing a set of internally inconsistent things. To do so, we follow a technique we call "informal analysis," adding thick coats of paint, butted corners, and shimmed details whenever necessary to bridge the gaps. Perhaps you'll say that paint, butts, and shims, alongside gaps, point toward bad craft in architecture. Yet we have grown fond of this sort of badness, and hope to expand on its appeal here through the work done on some rude stone monuments from the Neolithic period called dolmens.[1] These prehistoric structures, made of rude rather than hewn stones, gave us the idea to call our informally assembled analytical models: *Rude Forms.*

Dolmens date from around 4000–3000 BCE. We don't know much about them despite many efforts to uncover a logic for their being, their utility, or social role. What we do know—or we imagine we know—comes from simply looking at the stone remains and interpreting them. It is difficult to call them

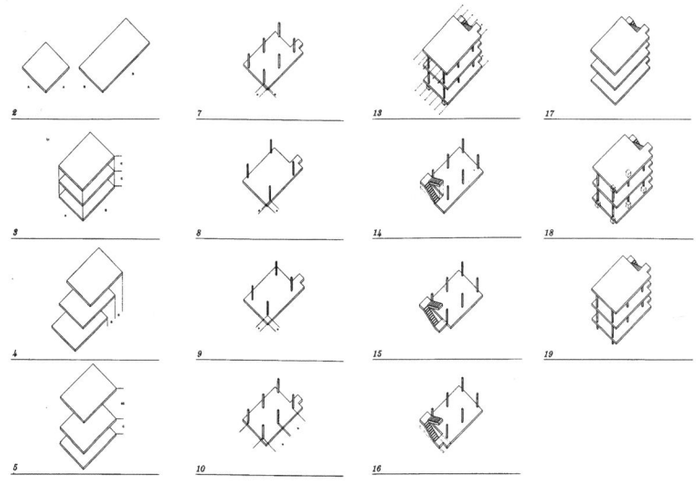
1 James Fergusson popularized the term "rude stone monuments" with the title of his book, *Rude Stone Monuments in All Countries: Their Age and Uses*, (London: John Murray, 1872). Rude stones, which were not cut or finished smoothly, are opposed to hewn stones, which are polished. Fergusson described rude stone monuments as belonging to several categories including *menhirs*, or freestanding erect stones, *circles*, such as the most famous Stonehenge, and *dolmens*, compositions of stones that formed a chamber. These prehistoric formations can be dated to roughly 5,000-3,000 BCE and were possibly rude by default. Tools from the Stone Age did not allow for a hewn stone. The debate between the use of hewn and unhewn stone ensued in documented historic time. When Jews were fleeing Egypt, God directed Moses: "You need make me only an altar of earth… But if you make for me an altar of stone, do not build it of hewn stones; for if you use a chisel upon it you profane it." Exodus: 20.25, *The Harper Collins Study Bible* (London: Harper Collins, 1993), 177.

buildings because their monumental parts do not produce distinctly habitable interiors; the inner rooms appear too small to be occupied in any way we know how to live. If they are not clear to architecture, perhaps they could be understood through anthropology, archaeology, or astronomy. It is not surprising that there are various interpretations for dolmens since they preexist any kind of disciplinary norms. They are not only architecture, not just art, not merely tools, not purely landscape. We don't quite know what they are. One thing is certain: dolmens produce hesitation in our ability to read them with any degree of certainty. Despite all the ambiguity, dolmens are dolmens and you know one when you see one.

We like to think that a dolmen can be to us now what the Maison Dom-ino was to Peter Eisenman in the 1970s. In his hands, Corb's perspective sketch became a projected model of self-referential form. When Eisenman deduced a syntax from its parts, his essay—"Aspects of Modernism"—became a teaching tool for the analytical techniques of naming and drawing. In many ways, dolmens are similar to the Dom-ino. A dolmen's form can be described through a set of structural bays, composed of several upright stones that take the place of columns to hold up a colossal capstone, a one-story ruin of a post-and-beam construction system. Again, similar to the Dom-ino, the bay here is directional, or, to be more precise, longitudinal. Furthermore, it is capped by one single plate—the capstone—which extends beyond the columnar edge, not unlike the slab of the Dom-ino. Although the bottom is not raised on footings—it is, quite literally, the ground—it nonetheless implies a sense of the interior within a weak perimeter, with the entry usually located at the short end. One essential difference from the Dom-ino is that a dolmen is not authored; it is not of our time, nor does an original drawing of any such construction exist. And unlike the Dom-ino, which serves as a prototype for a variety of buildings, a dolmen is not yet a model for further architectural pursuits. Rather, there are many specimens, all different and unique, making it difficult to claim any one dolmen as an ideal from which to measure the rest. We would even stop short of calling it a precedent; it merely precedes.

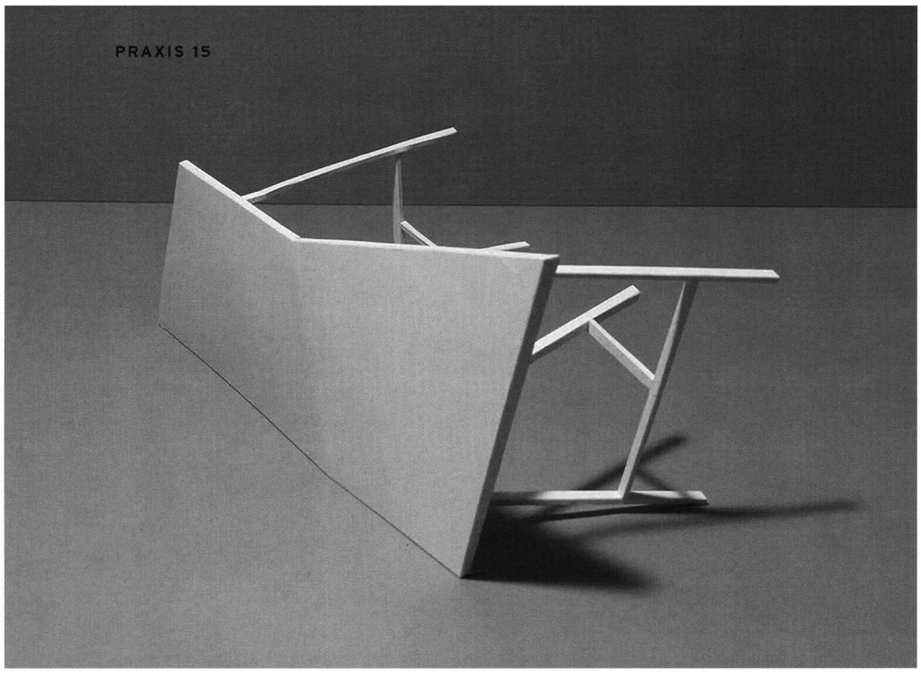
Nonetheless, dolmens offer the possibility for rude parts to construct a sort-of-syntax, which could, in turn, pose new directions for architectural pedagogy. Of course, the Dom-ino could produce anxiety. But it is quite a relief to come across a dolmen. It is less neat as an argument for formal precision and less clean as an axonometric of analytical logic. A dolmen's resolution is low, not high. Its joints are butted, not mitered. Its gaps are shimmed, not sculpted. Its stones are left rude, not hewn. Its ordinary formation alludes to architecture with forgotten narratives, eroded tectonics, and muddled grammar; it seems to be in conversation with no one in particular, and so it is agreeable to everyone. The stones, albeit directional, are just stones: not carved, not polished, not detailed. They stay in place by friction and gravity, leaning on one other for support. Perhaps unexpectedly, their rude forms seem to comfort us now—all of us, children included.

below: Peter Eisenman, Formal Analysis of Le Corbusier's Maison Dom-ino, from "Aspects of Modernism: Maison Dom-ino and the Self-Referenctial Sign."



With these thoughts in mind, we proposed new dolmens for New York, Los Angeles, and Virginia to bring attention to a moment that is not our own in an attempt to close the gap between modern and prehistoric time. Whether the megaliths enter our contemporary consciousness or we lose our sense of timeliness, moving closer to the Stone Age is not all that important. Rather, it is important to feel a release from the present, to feel comfortable and at home now and then.

POSSIBLE TA BLE

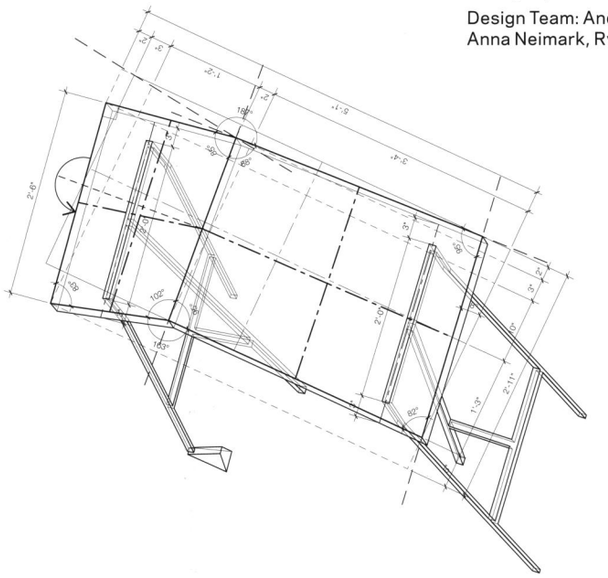


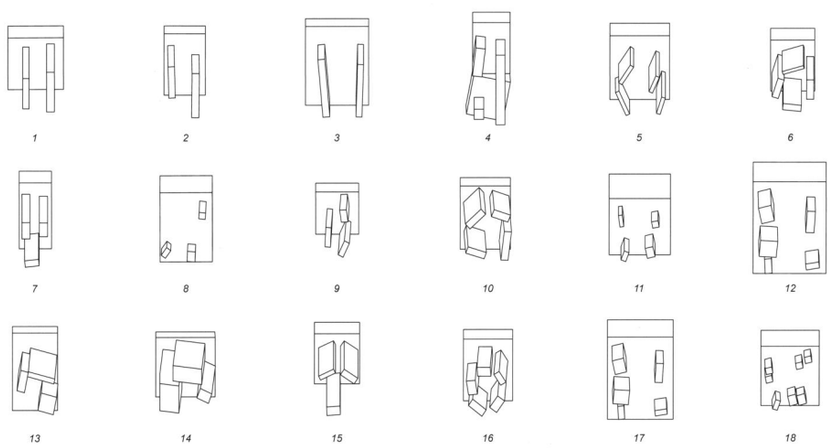
Possible Mediums Exhibition:
Taubman College, University of Michigan, Ann Arbor, MI, January 2014

Design Team: Andrew Atwood, Anna Neimark, Ryan Roark

First an interjection from the editors: We saw the Possible Table as a possible precursor to the later Dolmen project series; the table embraces uncertainty, ambiguity and instability. Questioning conventions of contemporary representation and the relationship between model and image, the Possible Table (2014) considers the term rendering not as the outcome of computer graphics but as an application of physical media (typically charcoal, pencil, ink or watercolor) to transform a two-dimensional drawing into an image that creates the dimensional figure.

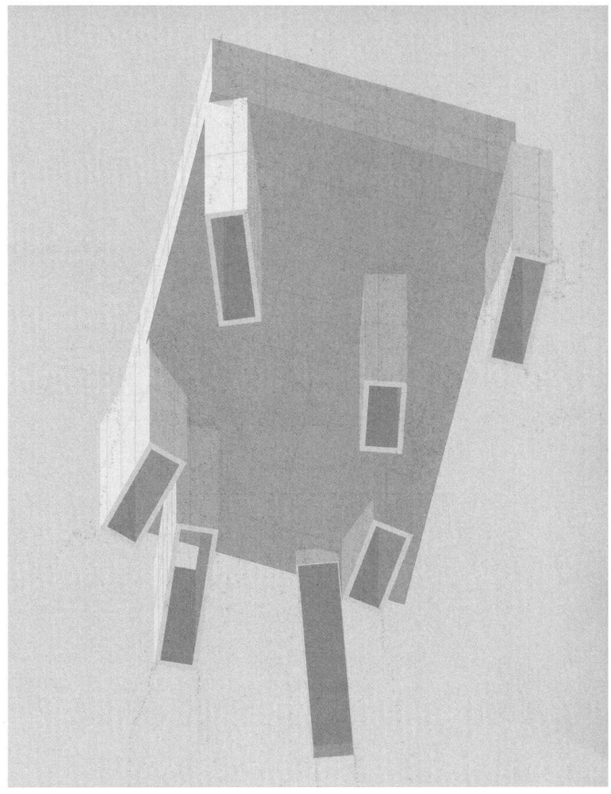
First Office constructed the table (as a three-dimensional object) from a drawing of a rendering of an image of a normative table projected onto a model of the table.





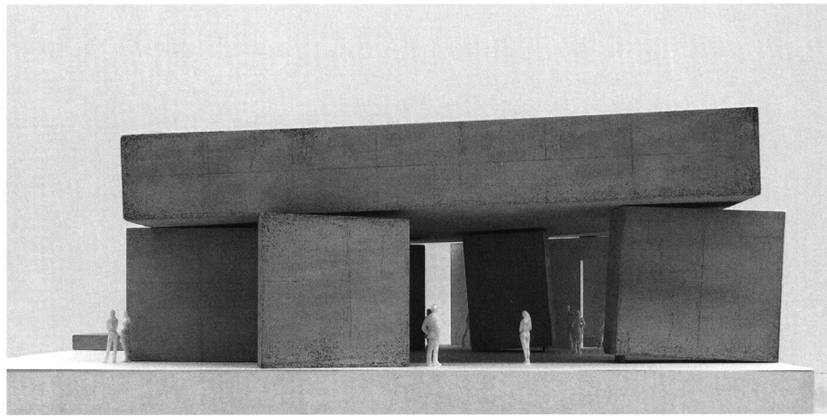
left: Dolmens Ordered by Leg Count: 1 Gochang County Dolmen, North Jeolla, South Korea; 2 Gal Massa Dolmen, Sri Lanka; 3 Dolmen du Djebel Gorra, Tunisia; 4 Domen Pentre Ifan, Wales, Pembrokeshire; 5 Dolmen at Kidston Lake, Canada; 6 Kilclooney Dolmen, Ireland, Donegal; 7 Dolmen dels Tres Peus, Spain; 8 Dolmen della Chianca, Bisceglie, Italy; 9 Dolmen Puig de Caneres, Cataluna, Spain; 10 Dolmen de Vaour, France; 11 Dolmen de Bagnol, Limousin, France; 12 Dolmen Bachwen, Gwynedd, Wales; 13 Dolmen of Sindh, Pakistan; 14 Dolmen at Gwangju, South Korea; 15 Chokahatu Dolmen, India; 16 Dolmen de la Piedra Gentil, Guatemala; 17 Dolmen de Menga, Spain; 18 Brownhill Dolmen in North Salem, New York, USA.

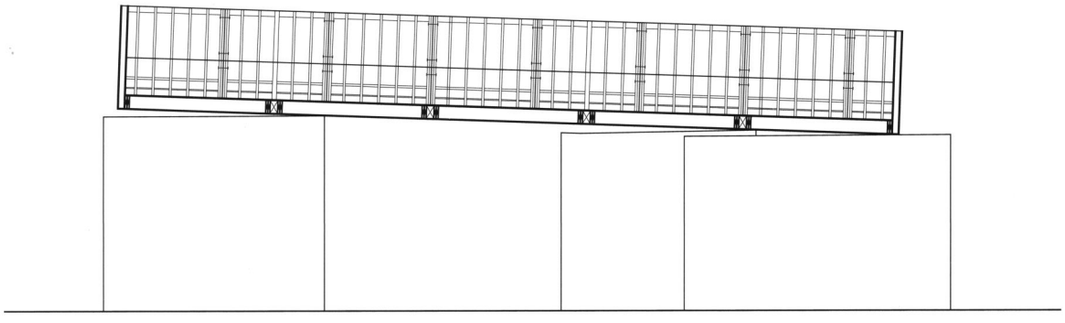
NEW YO RK DOLMEN

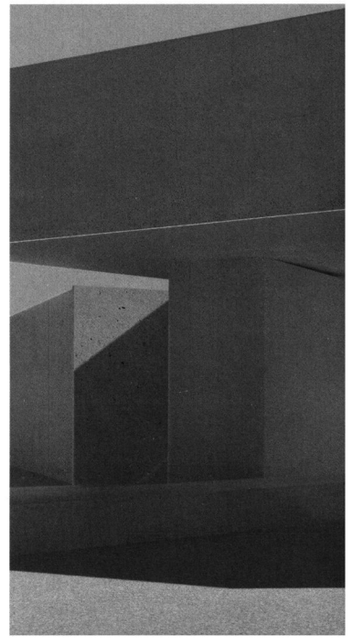


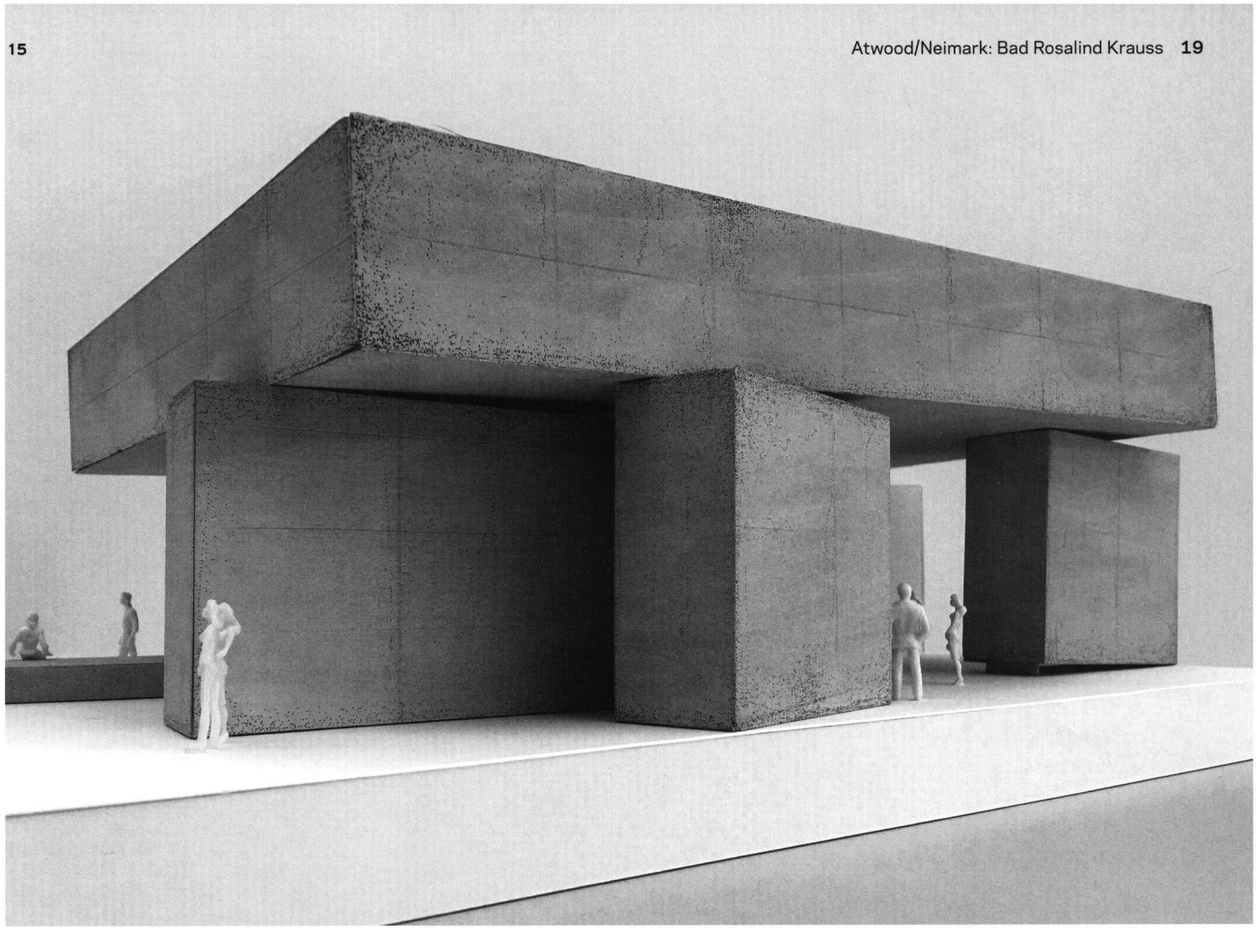
The New York Dolmen is the first one we designed and the only one we did not build. It is large, too big to be contained by MOMA PS1's courtyard. It hovers uncomfortably above the yard's walls in the site. We use the word "hover" even though it obviously does not fly. Actually, the dolmen's capstone just misses the wall by a few inches so that its weight is distributed to the legs. Maybe this helps maintain the appearance of its anachronism, as if it's from *outer time*—if that's even a thing. Its primitive monumental parts are out of scale with our bodies and outside of our passions.

But it also hovers because all the elements seem to be unstable, teetering toward collapse. The edges of every box are rendered dark with a cloud of nails that eats away at the sharp corners. Perhaps the tilting forms held together by rusticating details are best observed from below where the boxes lean informally one against the other. The capstone itself is set at a two percent slope to the ground and tilts toward the museum's entry. This out of normal rotation causes all sorts of problems: each of the regular boxes below must now rotate in plan to align two points of contact with the capping box. The connections feel tentative, as the surrounding gaps look sloppy. In the model, (at least) one of the legs rotates in section to accommodate the tilt of the capstone. A large shim is "slid" underneath it—that'll hold the whole thing up, *inshallah*!







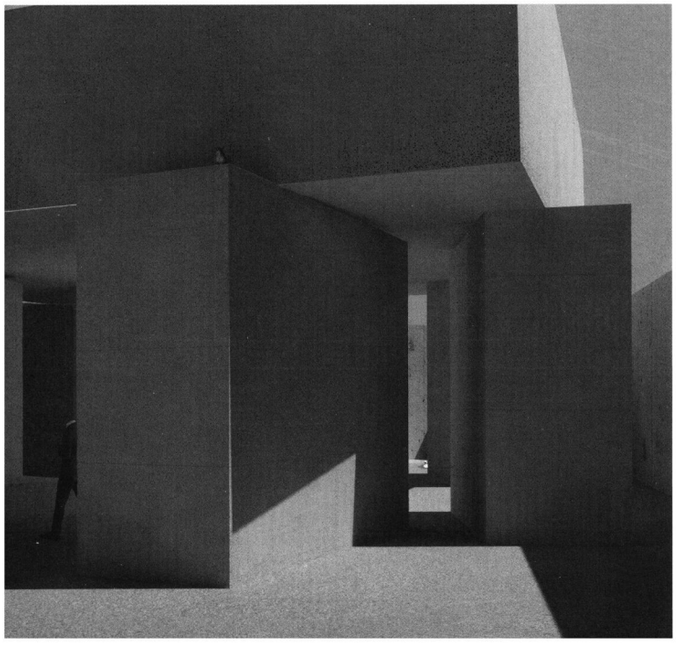


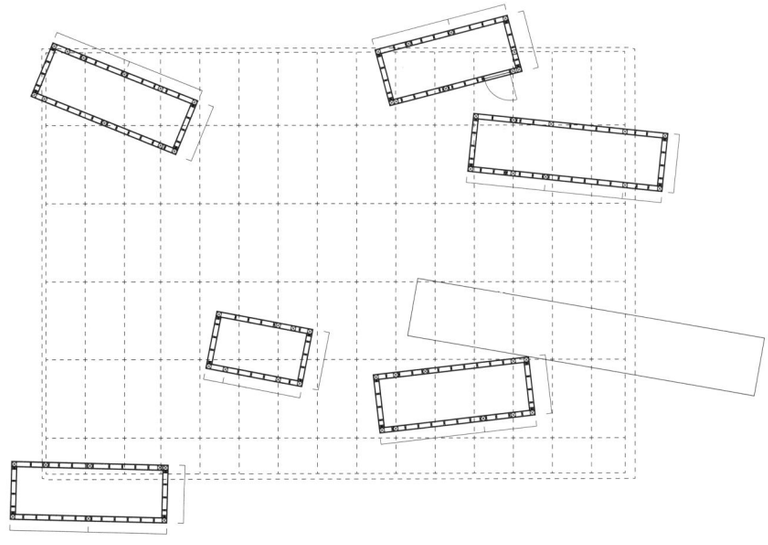
Competition Finalist: MoMA PS1 Young Architects Program, Long Island City, NY, January 2016, not built

Design Team: Anna Neimark, Andrew Atwood, Julian Daly, Deborah Garcia, Connor Gravelle, Brooke Hair, Daniel Hapton, Jeff Marsh, Lily Nourmansouri, Edwin Obrien, Alison Rust, Kyla Schaefer, Alex Spatzier, Tidus Ta

Engineer: Matthew Melnyk, Nous

Fabricator: Andrew Baccon and Erik Tietz, Machinemade





facing page, top: Worms-eye view rendered grey-on-grey reveals the legs' thinness.

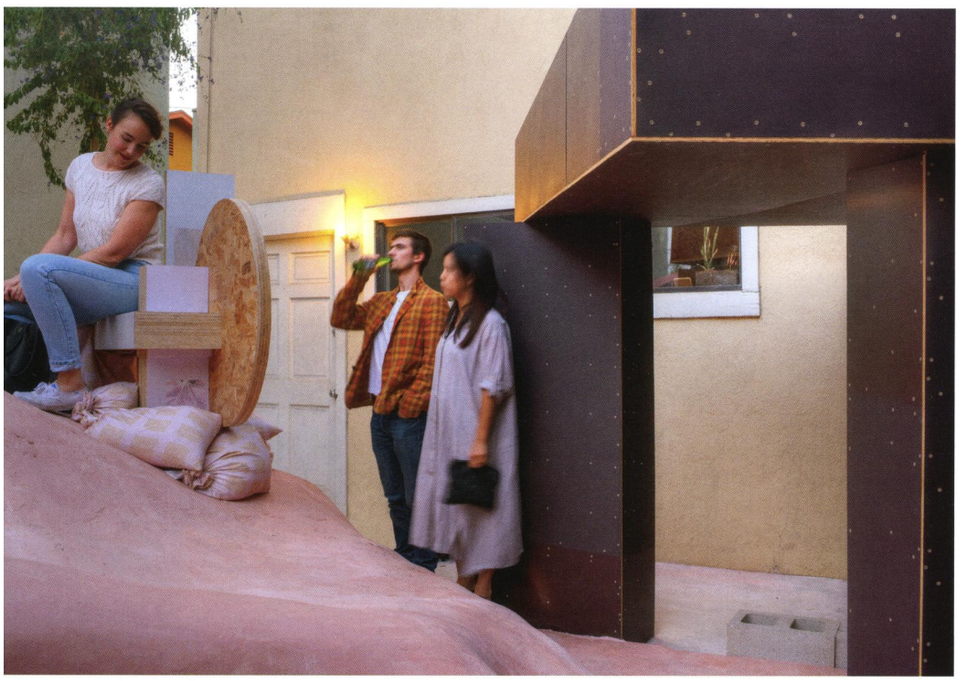
facing page, middle: The model is rendered in two primary brands of the same glow in the dark paint creating the illusion of depth and color change from day to night.

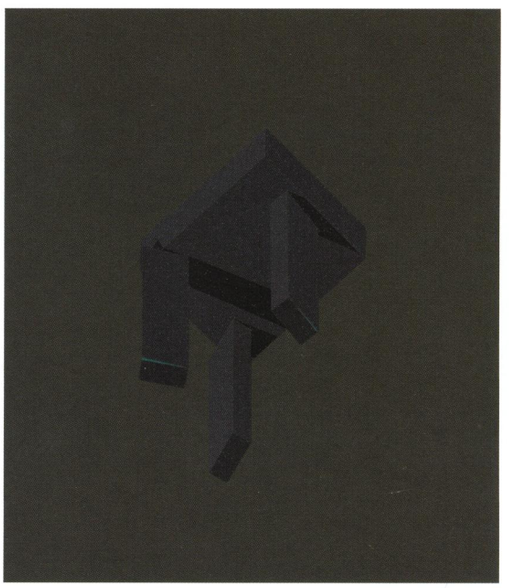
facing page, bottom left: Longitudinal section, showing the tenuous connection of the capstone with the legs.

top right: Oblique view of model. The capstone captures water and intentionally "leaks" in response to the program requirement for a water feature.

above: Plan showing configuration of legs and structure of capstone above (dashed).

left: Computer rendering.





top: LA Dolmen completed and installed in First Office's temporary studio at 2426 SET. The finish uses two paints (Black Bean and Black Bean Soup) on plywood and screw patterns created with differing screw drive types to give a texture and to tease out relationships between the seams and the panels.

above: Full-scale mock-up re-installed as part of the group show *The Kid Gets out of the Picture* (2016), curated by Andrew Holder and Benjamin Freyinger at Materials and Applications. First approach is from the "front" view where the project appears solid.

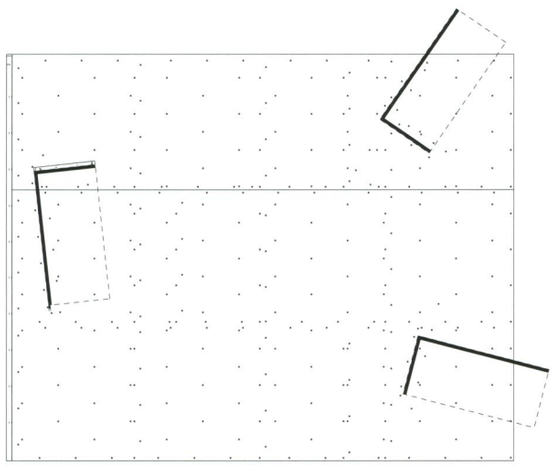
right: The project is conceived as a physical manifestation of a computer rendering, hiding any surfaces not frontal to the projection plane.

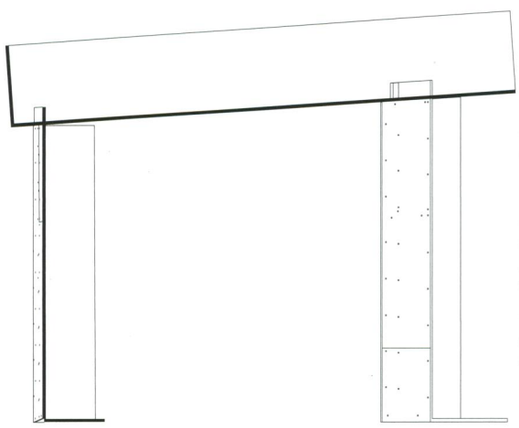
facing page, top: Plan indicating the configuration of the open, L-shaped legs.

facing page, middle: Project as installed from the "back" side evidences the thinness of its construction.

facing page, bottom: The section reveals the pattern of screws as both structure and ornament.

LOS ANGELES DOLMEN





Group Show: The Kid Gets Out of the Picture at Materials & Applications, Los Angeles, CA, October 2016–February 2017

Curator: Andrew Holder and Benjamin Freyinger, the LADG

Design Team: Andrew Atwood, Anna Neimark, Aubrey Bauer, Brooke Hair, Alex Spatzier

Compared to the NY Dolmen, the Los Angeles Dolmen is rather modest. Tucked in the back of a courtyard, its view is limited to the front corner—the privileged elevation. In rendering one axonometric projection of the LA Dolmen, we eliminate any surface—or finish—not frontal to the projection plane. The resulting physical model built from this rendered drawing is only half of the Dolmen's original form. Open at the top, the capstone also lacks a back wall, and the three remaining legs are constructed with three surfaces only: two vertical faces capped at the bottom by a flat foot. Each of the boxes is reduced to just one of its corners, making it less a stack of boxes and more a stack of surfaces. Every element is composed of a front and a back face: an unstable house of cards relying on the heavy capstone to keep everything in its place. And when viewed from behind—from beyond the rendered frame—the LA Dolmen exposes its raw plywood back at every corner.

A rendering is meant to produce depth—a three-dimensional effect—or something we can fall into visually and attach to emotionally. But the picture always reminds us that it has limits; its flatness and dimensions are firm. While architectural renderings tend to solicit subjective associations, their manufacture—projection of shade and shadow, construction of the frame, manipulation of the scene in relation to the drawing plane—is an objective, methodological process. The specific formats of the rendering environment cause direct and palpable effects, internal to that process. In paying close attention to how a picture gets built, we consider the physical materials that render a surface: paint, seams, and screw heads. This short list of elements corresponds to the dolmen's assembly. Paint assigns the color brown to the front of the LA Dolmen. The seams provide it with clearly demarcated parts as they trace juxtapositions of two pieces of plywood, or two layers of paint. A field of screw heads, and their different drives visually roughen a smooth surface when seen from a distance. While up close, the individual parts demarcate an edge or a seam. The specific combination of paint sheen, material seam, and screw head both constructs and renders this dolmen simultaneously. The two paints, "Black Bean" and "Black Bean Soup," reflect light slightly differently in the photographs. In this way, this dolmen's finish takes on the qualities of a rendering, making the physical and digital worlds inextricably linked. After all, the word "render" is a sort-of finish, and in the British case, it signifies the application of stucco to the exterior wall surface. We now extend this application to include other fabrication techniques, as we call these materially burdened surfaces "built renders."

VIR GIN IA DOLMEN

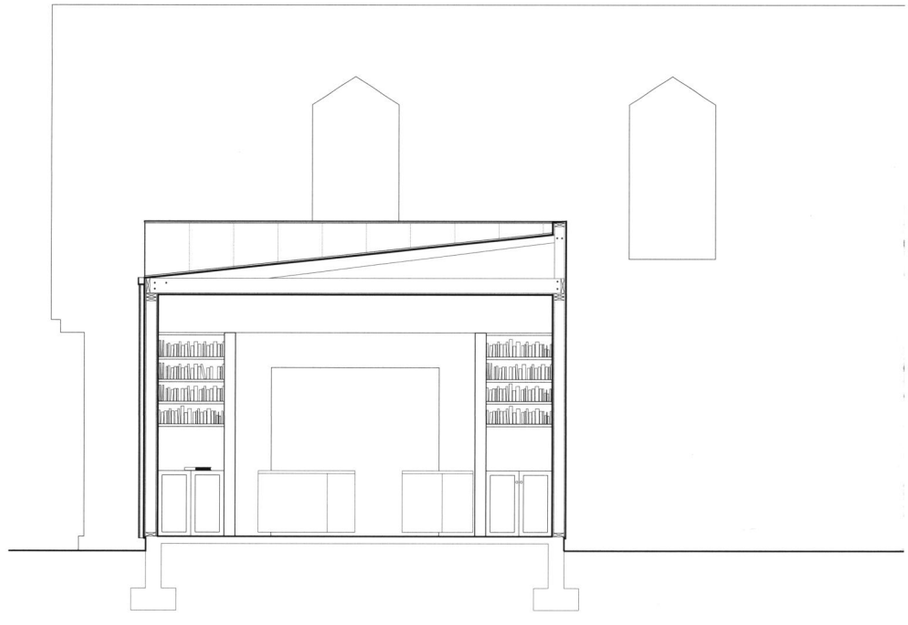
Please don't think the building of a rendering is solely a representational problem, or that it exists outside of straightforward building construction. On the contrary, material rendering occurs everywhere. In fact, in this practice of specifying everything to a contractor, everyone already builds images. We are dedicated to the description of renderings through construction materials. While there is no medium that is specific to our pursuit, we try to find specificity through different media. After all, the Specifications—commonly referred to as the "spec book"—is a form of representation, albeit, not primarily visual.

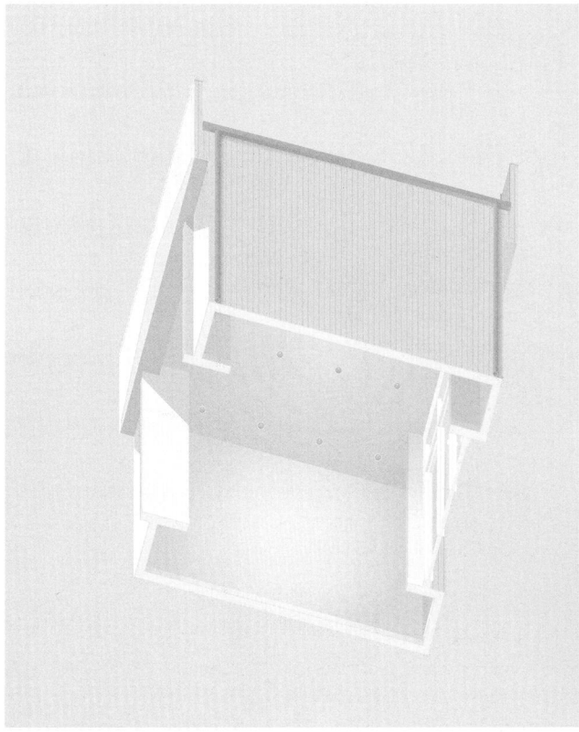
The Virginia Dolmen is an art studio connected to the main house by a corridor. It builds on the informal work developed in its dolmen predecessors. It falls on boxy legs—reminiscent of the NY Dolmen—and it's capped by a tilted box, a roof that is missing a face on one side, like the LA Dolmen. This dolmen, however, was built as a sealed interior and as a result there are some stark differences. The VA Dolmen requires attention to be paid evenly to all of its sides and not solely to the pictured front, as it is consistently too three-dimensional to behave like an image. It requires standard building parts, such as wood framing and waterproof roofing, construction materials that make it too heavy to "hover" like a model. One could say that the VA Dolmen is visibly less critical of its modes of representation, even though it absorbs many lessons from its more abstract predecessors. After all, this dolmen has paint, screws, and seams like the others.

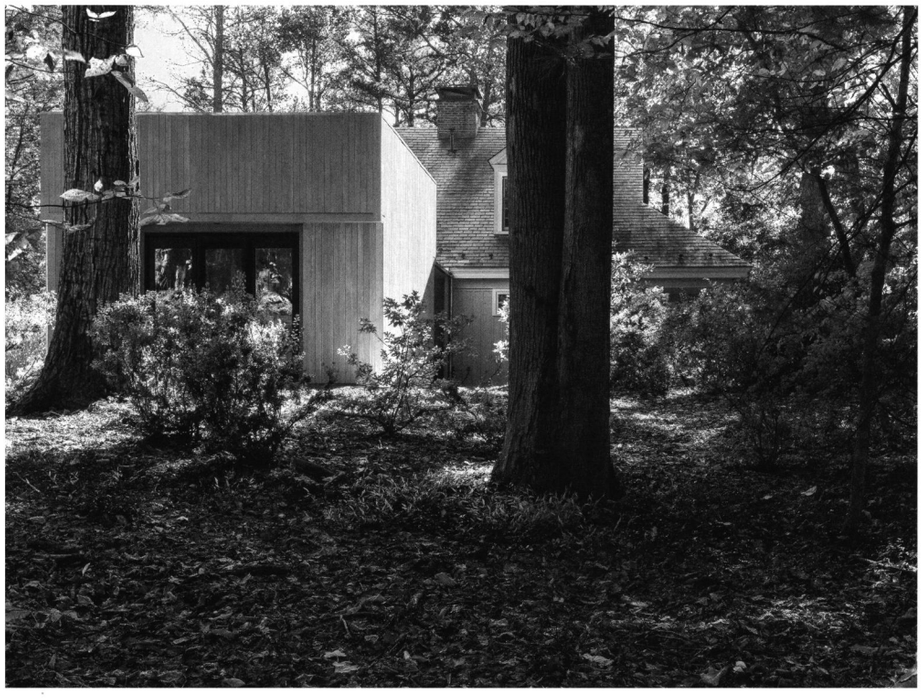
Through drawing, we took great care in describing to the contractor the ways in which we wanted the finishes to be applied in the course of the project. But we also took pleasure learning the wonders of ZIP System Tape, a flashing product that was not present in earlier work, partly because it was entirely unfamiliar to us working in drought-ridden Southern California. It was in these types of real things—in the details that are almost never seen and rarely modeled—that we found a prolongation of the conceptual trappings of our models and the superficial limits of our images. We worked fastidiously on copper flashing details, which are especially significant where the copper roof of the connecting corridor intersects the slate roof of the existing house. We developed a love for regulating water flow and took time to describe the alignments among the standing seam metal roof, the copper box gutters, and the downspouts to the client (in phone calls and emails) and then to the contractor (in the spec book and general notes).

Yet, despite our best efforts, mistakes did occur. On one site visit, we noticed an additional line in the contraction joints of the concrete floor slab. In construction documents, we were careful to describe a set of lines that would make up these marks in the floor, and so we were puzzled by this extra joint in the slab that ran right through the middle of the dolmen. As we argued with the contractor about this joint, which we were sure would ruin the whole project by reinforcing a moment of symmetry that we were desperate to avoid, the contractor grabbed his set of construction documents and pointed to a line in the plan that was now cut as a joint in the floor. Our mistake was a classic First Office story: our drawing obsession returned from the repressed. The plan he showed us was simply titled, "Concrete Expansion Joints Plan." Only a few lines denoted the exterior shape of the slab, several more included dimensions for placing the joints. But there, in the center of the plan, was an additional line! To us it was clear that it looked like a centerline, demarcated with the conventional long dash, short dash line-type. We had forgotten to note it as "Centerline of Slab."

"It's like bad Rosalind Krauss," we said, then we moved on to talking about downspouts.



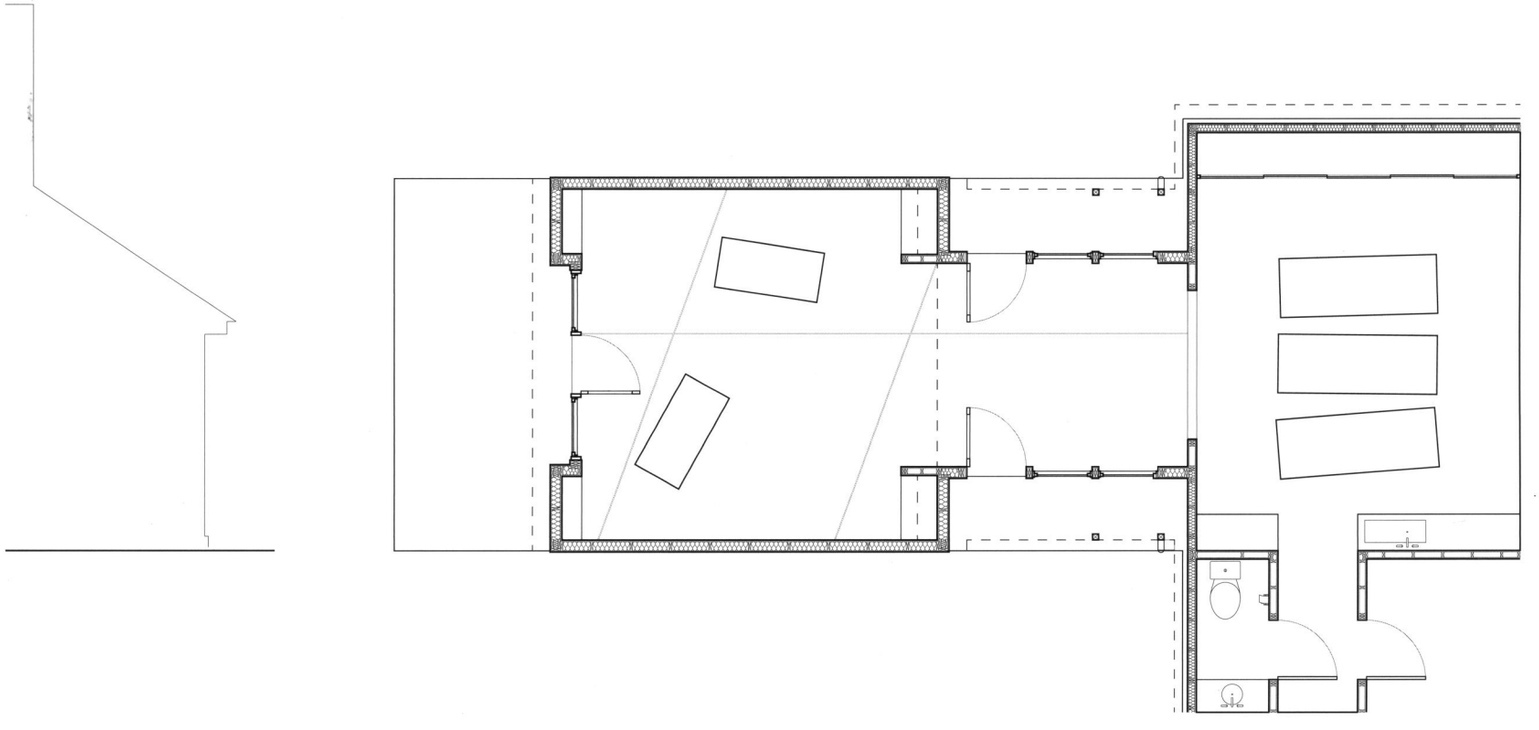




top: The white on white axonometric rendering shares a similar intention of hollow legs and capstone for the studio addition.

left: Studio addition as seen from the wooded site. Painted cedar cladding is attached with a precisely drawn pattern of fasteners.

bottom: Plan and cross section



Art Studio: Charlottesville, VA, April 2017

Design Team: Aubrey Bauer, Brooke Hair

Engineer: DMWPV

Contractor: Scott Abbot

left: The sloped copper roof can be seen from the north (or rear) side. The thin, tall parapet conceals it from the forest and entry facade.

below: South (entry) view of the attenuated passageway between the house and studio addition.

facing page, top: Interior.

facing page, bottom: Like the LA Dolmen, from the oblique, the forms give the illusion of a solid.

VIR GIN IA DOLMEN