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*New Massings for New Masses* was presented in the Keller Gallery from May 15—July 22, 2014.



*New Massings for New Masses*  
opened on May 15, 2014.

NEW MASSINGS FOR NEW MASSES:  
33 APHORISMS ON COLLECTIVITY AFTER ORTHOGRAPHY  
BY MILLIØNS

1. There once was an architectural dream called *Housing*, which demanded from any architect who dared wander into its dream-shadow a complete rejection of existing culture. Housing was, during its early and most radical period, the first legitimate architectural counterculture. It was also a possible path towards career suicide.

2. Housing is no longer possible. All of the historical conditions that made Housing a viable and sensible architectural concept have been swept away and replaced by something else. Socialism and Progressive Liberalism have given way to Reflexive Neoliberalism; the State has been swallowed by the Market; communication has been replaced by information; sociality has dissolved into interactivity; metropolitan anonymity has been erased by mediated “privacy” (rendering senseless any conceptual or practical divisions between the so-called “public and private realms”); The scalar city has been supplanted by ascalar urbanism; historical time by real time; the visible by the invisible; etc. This much we know.

3. More consequentially, for our purposes: the architectural spirit of experimentation that motivated Housing has ceased to exist *because the technical-representational surface from which it emerged — the orthographic architectural drawing — has forever disappeared, and cannot be brought back.*

4. We labor over surfaces. We expend our energy pushing things across surfaces, and those surfaces constitute for us a kind of technical substrate for how we think about our objects and their relation to our world. What we call “thinking” is always-already technical, and our intuition is inseparable from the possibilities and limitations afforded by specific technical regimes.

5. For a very long time (it is hard to say exactly how long, but it doesn’t matter for our purposes) architectural surfaces were orthographic. Seen from an anthropological view, orthography is a geometric gesturing that arranges marks into “legible” lines and texts. Orthographic reasoning imposed itself on a prehistorical world of magical images—pictograms—and produced linear surface-frameworks for the

emergence and endless refinement of concepts. Orthography also brought the notion of literacy into the world, because within any orthographic system one must learn to read its meanings by way of rules and conventions. During the Age of Orthography, the process referred to as “architectural drawing” brought fundamentally new objects and objectives into the world.

6. Just like writing, architectural orthography was a hand-mechanical, rule-bound system of geometric marks that made possible certain historical ways of thinking. History and orthography are inseparable not merely because texts and lines allowed for the recording and archiving of events, but more profoundly because the capacity for orthographic recording and archiving gave birth to an entire sensibility in which ideas and dreams about the future were bound to a graphic description of the past (*γράφω*: -graphia: scratch, carve, draw, write). Orthography constantly subjected the present to the past, exposing it to lost ways of living and thinking. It also presented the present with an open choice between continuity or revolution.

7. If we reflect back on architecture’s orthographic past, we can see that it constituted a silent form of historical communication within and between drawings themselves. Which is to say: although there is a kind of historical sense conveyed in the texts of architectural history—an important one—it is a sensibility that nonetheless remains thoroughly discursive. Architectural orthography, on the other hand, contained within the technics of its own projections an historical sensibility that, because it was almost extra- or sub-discursive, unfolded on an altogether different register (viz., within the technical substrate of architectural intuition).

8. (For example: It is well known that Le Corbusier was obsessed with Ginzburg’s Narkomfin, tracing and re-tracing its plans while developing the Unité. This reciprocity, which was played out, over and over across an orthographic surface, eventually brought an entirely new kind of architectural object into being—one with a richly developed sense of the intimate and silent connections between that object and the ways of life it was meant to provide a platform for.)

9. The surface of architectural thought-experimentation has recently and radically changed. We once imagined architectural possibilities by pushing ink and graphite across mechanical surfaces. We called that process “orthographic drawing.” We now push buttons and keys on electronic surfaces to produce “models.” These models do not contain drawings, but rather simulations of all possible drawings, because “cutting” through an electro-topological model—“making 2D”— bears no relation to the task of hand-mechanically drawing an orthographic plan. The pushing of buttons is neither better nor worse than orthographic drawing, but despite all visual similarities the two are separated by a techno-epistemic chasm that cannot be crossed.

10. The technical substrate of orthographic reasoning has now disappeared and cannot be brought back as anything other than historical reenactment. Post-orthographic models contain a running analysis of all possible future object-scenarios; not just formal possibilities, but increasingly also tectonic specifications, construction and maintenance costs, energy consumption metrics, etc. The “real time analysis of all possible future states” is a very different imaginative framework than the orthographic imagination, which always wanted to use the past to make sense of the future.

11. Unlike Historical Time, which is concerned to always relate present and future to the past, Real Time relates an electrical analysis of the present to all possible futures at once (or at least as many as can be counted and computed). Orthographic time is historical; it enmeshed architectural reasoning in a technics of historical precedent. Real time is statistical; it enmeshes architectural reasoning in the technics of data. We see this difference very clearly in the kinds of evidence that are now used to legitimize architectural forms. If previously the logic of historical precedent was used to legitimize architectural objects, architectural culture now uses the imagery and language of Real Time to justify its activities: performance, efficiency, fidelity, etc.

12. Geometry is no longer geometry because it is no longer orthographic; it has been supplanted by an electro-topological technics that simulates orthographic geometry

on its outermost surface, which we call “the interface.” At present, that surface is coalescing around a narrow set of concerns — “managerial” concerns — that confine the act of architectural experimentation to a remarkably narrow spectrum. Management is effective, but managerial logic is not a sufficient platform for imagining the possible relations between architecture and lived life. (Under present conditions that logic technically excludes those lived relations.)

13. Today the dream of Housing has disappeared, and architects are dreaming new dreams. Let us provisionally use the phrase Real Estate to describe everything that happens in our new dreams. Neither experimental nor culturally provocative, Real Estate is, by design, the conceptual-architectural inverse of Housing: reactive, risk-averse, profitable, uninventive, and in total conformity with the dominant ways of life that promote it. Real Estate comforts those ways of life, sustains them, and ultimately seeks to subtly realize new economies and efficiencies within their habits and predilections. It is also now, for architects, an uncontroversial path towards financial stability and success.

14. Can we say that Housing was orthographic dreaming, and that Real Estate is parametric dreaming?

15. Housing was an orthographic dream, dreamt in Historical Time by architects, on mechanical surfaces; a way of drawing-imagining new lives, living in new forms; a way of projecting possible experimental experiences by way of orthographic projection. On drawn out surfaces, entirely new architectural forms were conjured, worked over, conceived and reconceived.

16. Real Estate is parametric dreaming, feverishly dreamt in Real Time by developers and bureaucrats and bankers. These dreams unfold within the electrical fluidity between financial spreadsheets and architectural interfaces. That fluidity has quietly, algorithmically substituted itself for architectural experimentation. Real Estate objects look like Housing, but are best understood as extruded spreadsheets. By way of parametric reasoning, the logic of Real Estate produces simulations of orthographic dreams (usually for permitting and construction purposes), which look very much like drawings, but are actually infinitely and instantly recon-



figurable sets of relational information: property lines, thermal boundaries, “saleable areas,” material specifications, etc.

17. Real Estate is post-orthographic. Real Estate is electro-simulated Housing. Real Estate is infrastructural and managerial, not architectural. It organizes, utilizes and regulates entire populations by attending to abstract statistical categories that, by way of specific techniques, are rapidly made real (realized).

18. It would be senseless to say that orthography was better or worse than “parametricism.” Both are elaborate, agentless historical conditions, entirely beyond good and evil. Both exceed all simple-minded categories: technical, political, aesthetic, cultural.

19. “Architectural parametrics” are a subcategory of (and are long preceded by) an expansive category of modern managerial experimentation, in which material life and the concept information are technically superimposed upon one another so as to appear identical. Orthography opened a massive representational gap; the Real Time technics of (telematic) parametricism concentrates its efforts on closing that gap. In this sense, parametrics thinks of itself as post- or non-representational; its primary aim is to realize a non-representational world as a way of improving its own predictive capacity.

20. Today, whenever we encounter the word “housing,” we should know that it is pointing towards and covering over an entire mode of extra-architectural, parametric technical existence that is neither new nor well understood. Architects and urbanists have just recently begun to use that technical framework, but know nothing about it. Previously novel techniques concerning circulation, stacking, distribution, superimposition, and difference-within-repetition (which is to say, an entire catalog of ortho-typological reasoning originally intended to challenge then-dominant conceptions of living) are now little more than a kind of flexible econometric template that parametrically unites niche market valuations, faux-architectural forms, and ways of life.

21. What was once an intense disciplinary project of precedent-based experimentation towards typological

inventiveness has been replaced by efficiently repeatable real estate models. Orthographic repetition and spatial aggregation were laborious and timely operations; step-wise deviations from repetitious organizations were even more difficult and painstaking undertakings. The managerial logic of Real Estate thinks that efficient repetition is Housing.

22. At this point, the exercise of electro-simulating Housing has become so automated and boring that most schools of architecture have dropped it from their core instructional curriculum.

23. (Can we say that the “copy” and “array” buttons constitute a fundamental and decisive rupture in architectural reasoning? One in which a whole series of incredibly inventive orthographic ideas about difference and repetition were instantly neutered, and subsumed within a very rigid algorithmic logic? We can point to the effects of this button, and others like it, when architecture today tries to produce what it calls housing.)

24. Under the new pressures of Real Time, our working surfaces are, at present, coalescing around a narrow set of managerial” concerns that canalize and smooth-over architectural experimentation in favor of prediction and control. Management is *efficient and effective*, but we should wonder whether those twinned principles constitute a sufficient platform for imagining the possible resonances between architecture and lived life.

25. Lost in the yawning academic gap between affective fabrications and territorial ambitions, the lonely architectural object has lost all appeal. No one believes any longer in the idea that architecture might be enough; that it might contain within itself the capacity to stimulate experimental lives; that, despite its inability to discursively justify its “agency,” the architectural object nonetheless contains a potency not found in the reductive precision of the word.

26. What emerged at the outset of the twentieth century as protracted counter-cultural speculations on possible forms of life has devolved into a faux-architectural form of financial speculation (condos, townhouses, apartments): extruded spreadseets for co-isolating the Creative Class.

Sincere dreams of *living with and for one another* have been devoured and regurgitated by an ongoing project towards “spacious open-concept layouts,” with “plenty of storage,” and “an array of modern, stylish, high-quality finishes for everything from flooring to countertops.”

27. We would like to express a somber nostalgia for a long-forgotten historical moment—before diagrams or “disciplinarity;” before autonomy or “criticality;” before the culture of popularity prizes and Young Architect Parties—when a small architectural counterculture crystalized around the concept of collective life, and when the technical possibilities available to formal experimentation seemingly aligned, however briefly, with an intense political desire to live life differently, together.

28. We began with the vague notion of “architectural collectivity.” At the scale of the collective, the first and most decisive architectural gestures involve the *technics of massing*, where spatial and formal metastrategies begin to impose themselves on an imagined multiplicity. From that stage forward, all efforts grind towards the articulation of those initial carvings and divisions, which are, in a sense, *proto-architectural gestures*, containing and constraining architectural possibilities without determining specificities.

29. Housing and Drawing: two long, modern shadows whose darkness conceals the fact that both no longer exist. Were they in fact the same shadowed surface? Illuminated by the singular, dying light of Modernity, and twisted back upon itself so as to appear two-sided? If so, architectural reasoning must come to terms with a reality in which technics and politics are simply two names given to the very same primal impulse: *to live together, rather than merely survive on one’s own.*

30. Living Together: Haven’t we already *tried that*? Didn’t those naïve experiments dissolve into either Stalinism or Psilocybin?

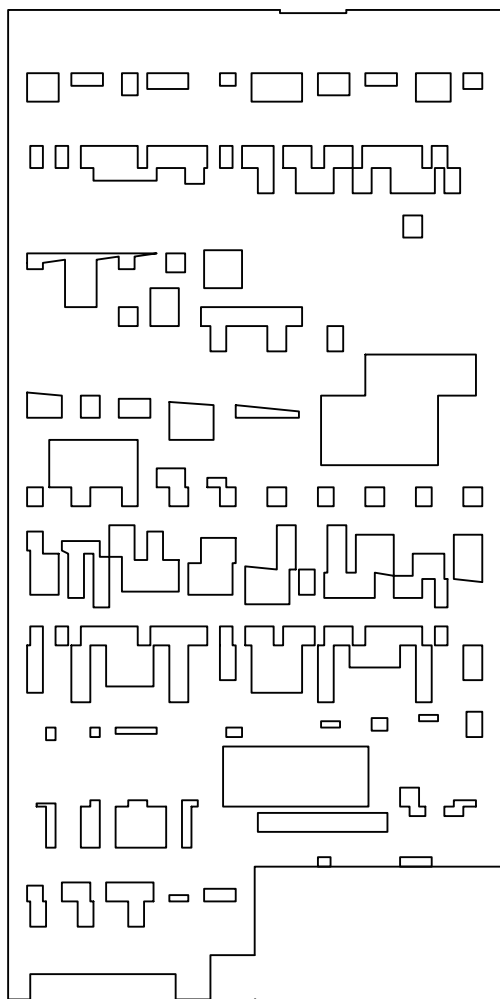
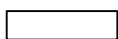
31. Only by telling ourselves different stories about modernity will we find release from its orbit. What if we were only able to once dream of living together because we had been *drawn together*? What if Housing was once possible

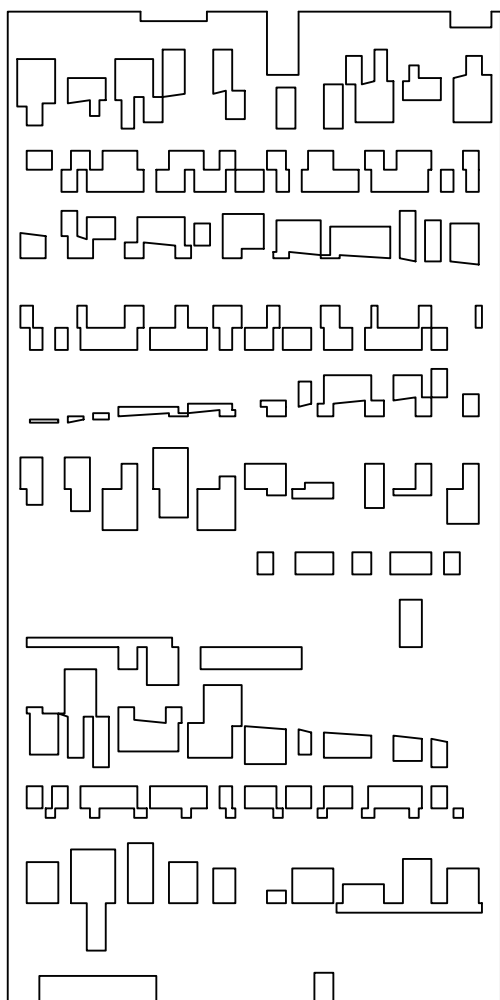
only because architecture had gradually discovered, within its own (non-discursive) orthographics, an immense platform for drawing *things* together—materials, bodies, politics, concepts, friendships, desires, reveries —as *architectural objects*? Not as “theses” or “arguments,” but as *object manifestos*. Before it disappeared, was architectural orthography actually a kind dream-technics? A technics for the experimental discovery of new ways of life?

32. If so, our questions now become: How can non-modern collectives be drawn together after the Age of Orthography? What would a post-orthographic material philosophy of collectivity even look like? And if one were able to somehow propose legitimately new architectural collectives—even presently impossible ones—*would anyone want to live in them?*

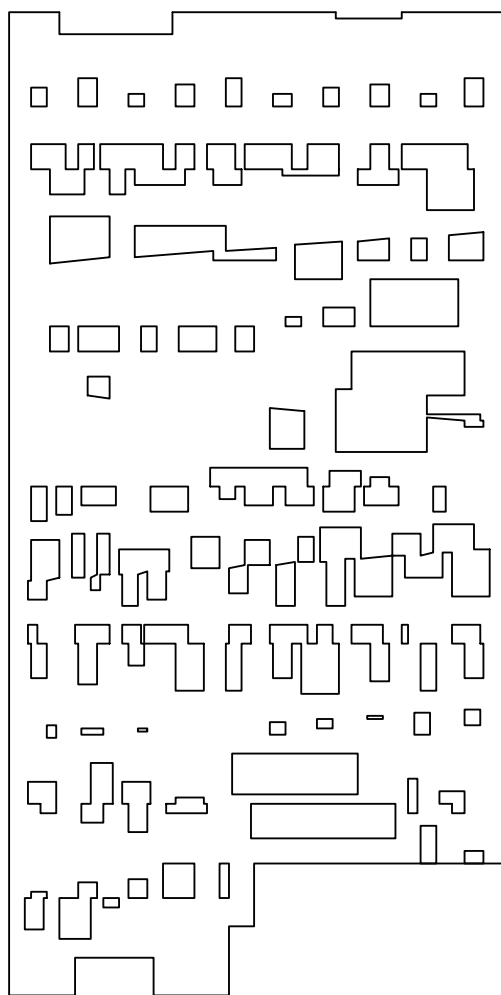
33. To the skeptics, for whom those questions hold no weight, we say fine, tell us another story, over which irony or anachronism do not hang like a luminous haze...



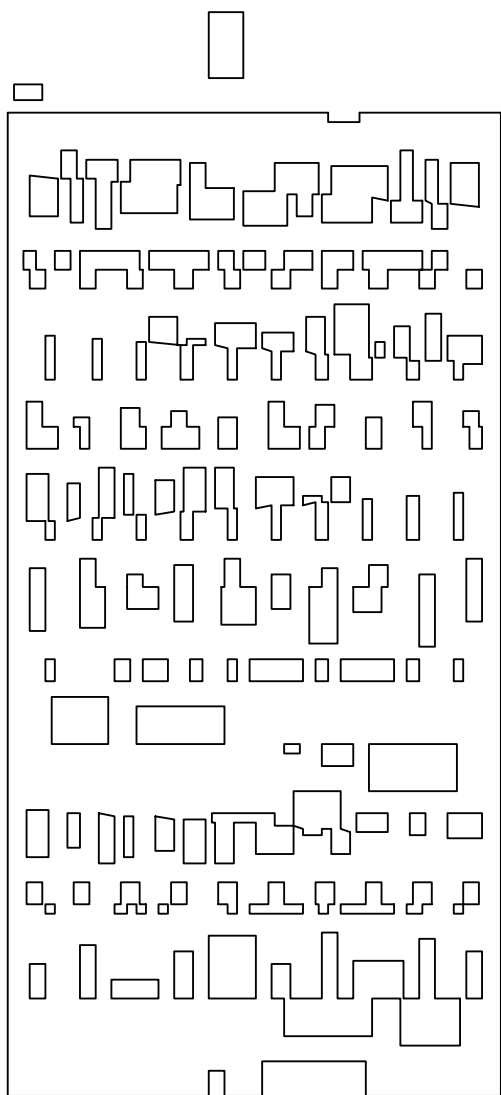


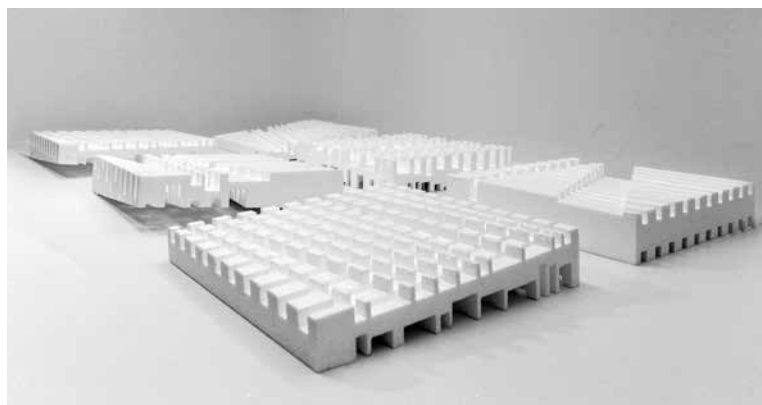


Above and following spread:  
Profiles.









PROFILING  
BY ANDREW ATWOOD

Before John May and Zeina Koreitem were MILLIØNS, John and I worked together. It was a brief partnership. In fact, I was not a partner at all, at first. He was a founding partner of my office, First Office. I was not. I came later, and he left soon after. Not a promising start for us, for sure.

But I can see faint echoes of the work we began together in the projects that John and Zeina are now exploring. Grids and foam and extrusions. Simple geometries, gradually multiplied by serial projection. It's all there. In a recent email to me, acknowledging their explicit desire to build upon that early collaboration, MILLIØNS referred to this way of working as "profiling," which, in this case, refers to the outlining of objects on different (often opposing) projection planes, and the subsequent projection of those outlines across and through one another. The final step is usually a boolean operation: And, Or, And Not, etc.

*Profiling.* A funny term. When I first read it, I was confused. It was not the term I would have used to describe that early work. We had used flattened elevational outlines (profiles, I suppose) of cities, and projected them across each other. It was meant to be a kind of perverse "urban analysis," carried out by people who'd grown suspicious of that term. Adding the "-ing" seemed now to be a way of expressing the activation of these profiles through a process of projection. It all seemed so simple. Too simple. Bottling up everything we'd done into that one little word.

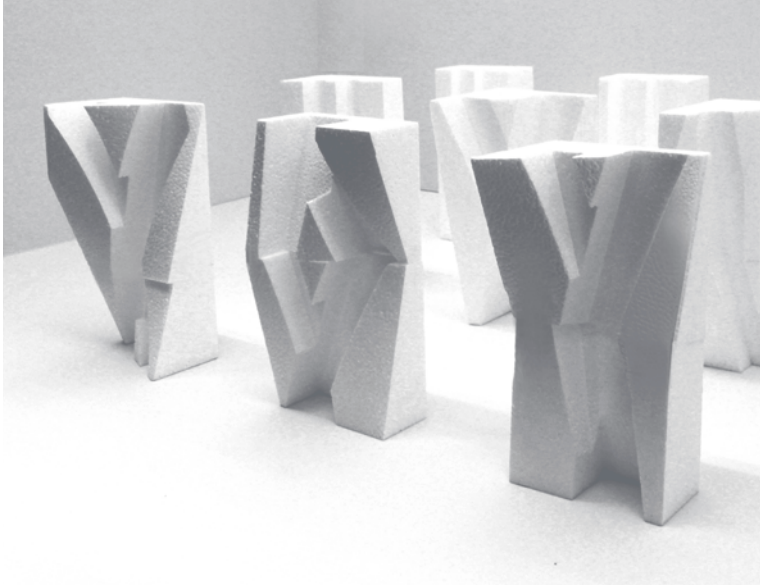
To be fair, the word was used in passing. Literally. It's obvious now that the technique was a starting point: "We used it early in the process as a *simple* way to undermine the typological reasoning of modern housing." From that simple start, MILLIØNS had quickly moved on to more difficult questions.

Andrew Atwood is assistant professor at UC Berkeley and principal of First Office, an architecture practice based in downtown Los Angeles. Atwood has taught at both SCI-Arc and USC and has published articles in *Project Journal*, *ThinkSpace Pamphlet*, *Perspecta* and recently *Log*. First Office's work has been exhibited in the United States and abroad, including the Beijing Biennale, the Pacific Design Center, the Storefront for Art and Architecture and at the MAK Center, Los Angeles, among others.

1. See May, John (2012). "The Logic of the Managerial Surface," *Praxis Journal of Writing + Building*, No. 13 "Eco-logics."

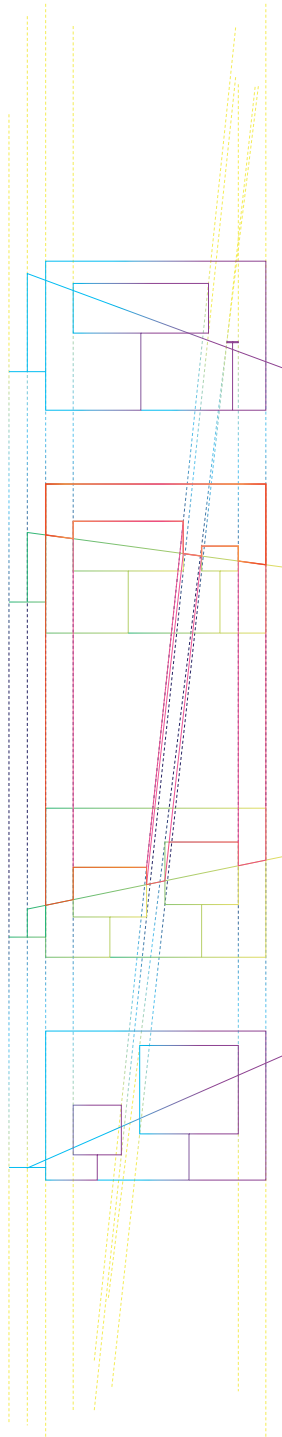
But it occurs to me now that profiling might not have to go down like this, as merely a footnote to a series of earlier projects. There could be more. If we look to the world of information science, profiling is a form of real time analysis and simulation, used to optimize the performance of computer programs. For MILLIØNS, profiling is a metaphor used to describe a specific representational technique, and might be considered one aspect of what John has called the "managerial surface;" images which are computationally assembled, via algorithms, to become *useful*.<sup>1</sup> Profiling creates new kinds of types out of generalities; it produces new representational realities for their pure use value. Profiling, then, narrates a world that is valuable only insofar as it can be intervened upon.

In the world of MILLIØNS, a thing like a profile is less a system of lines and curves than the information used to imagine new forms [in this case, architectural forms of collectivity]. As we encounter these forms today, their existence is contingent upon the amassing of "socio-economic data:" viz., *demographic profiling*. Rather than anchoring its experiments in the space between a curve profile (a drawing) and a building, MILLIØNS seems to be suggesting that architects should examine the productive collusion between information and form, all the while looking for the gaps and frictions latent in the real time transfer of information to other forms of representation. Some of which might be called architecture.

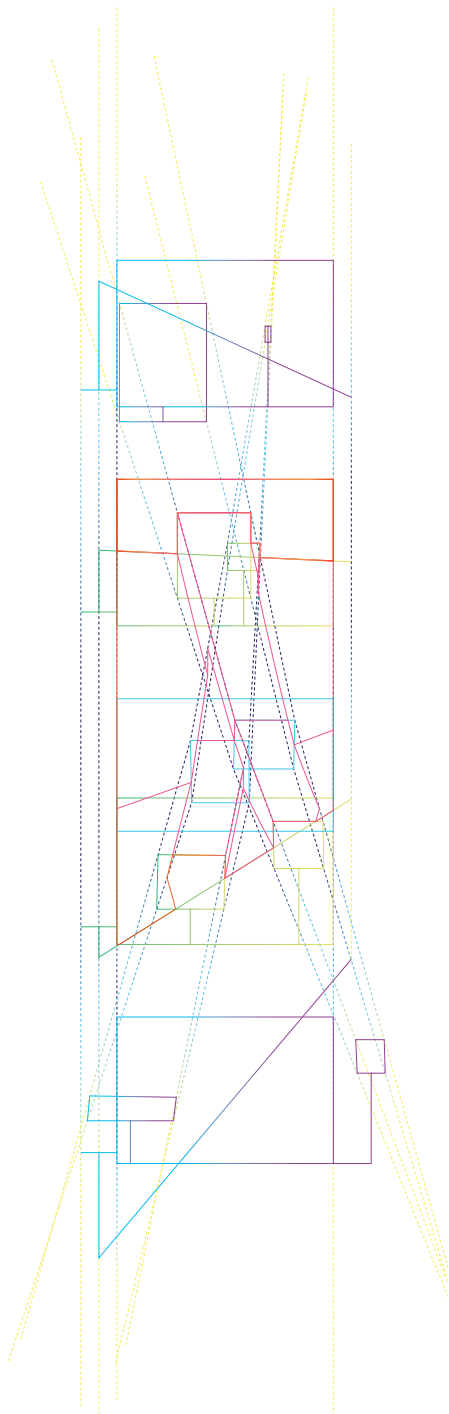


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Vertical Sectional Studies.

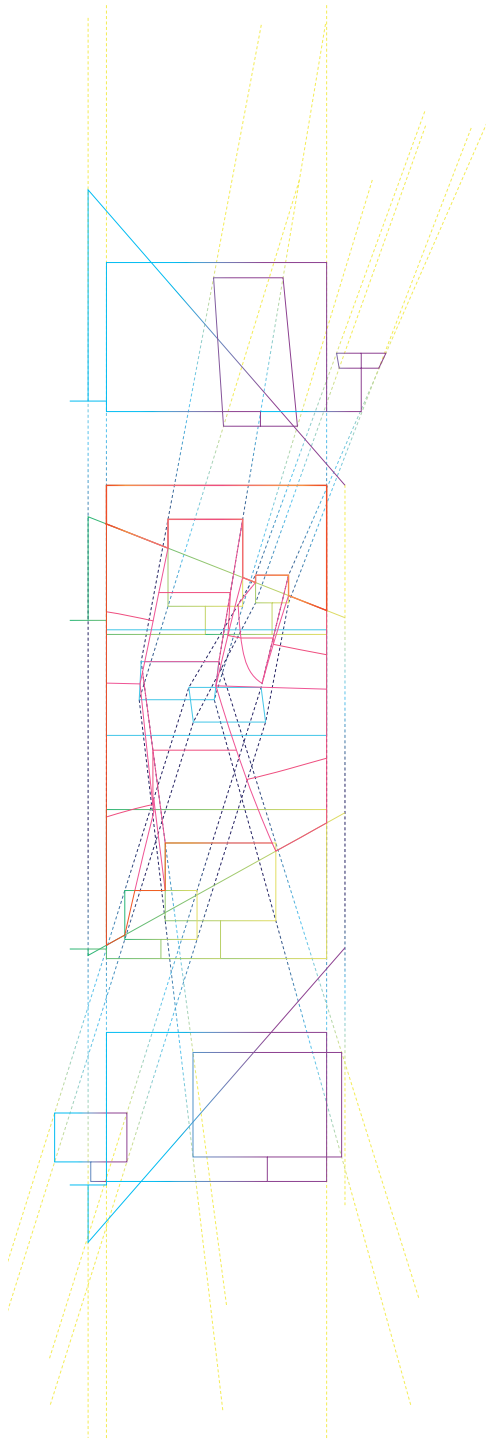


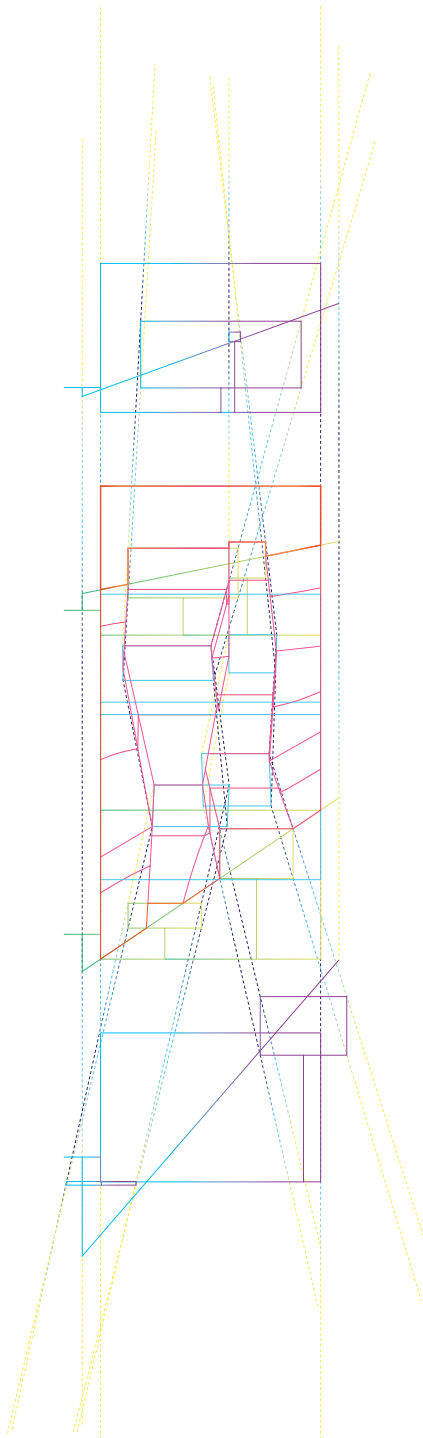


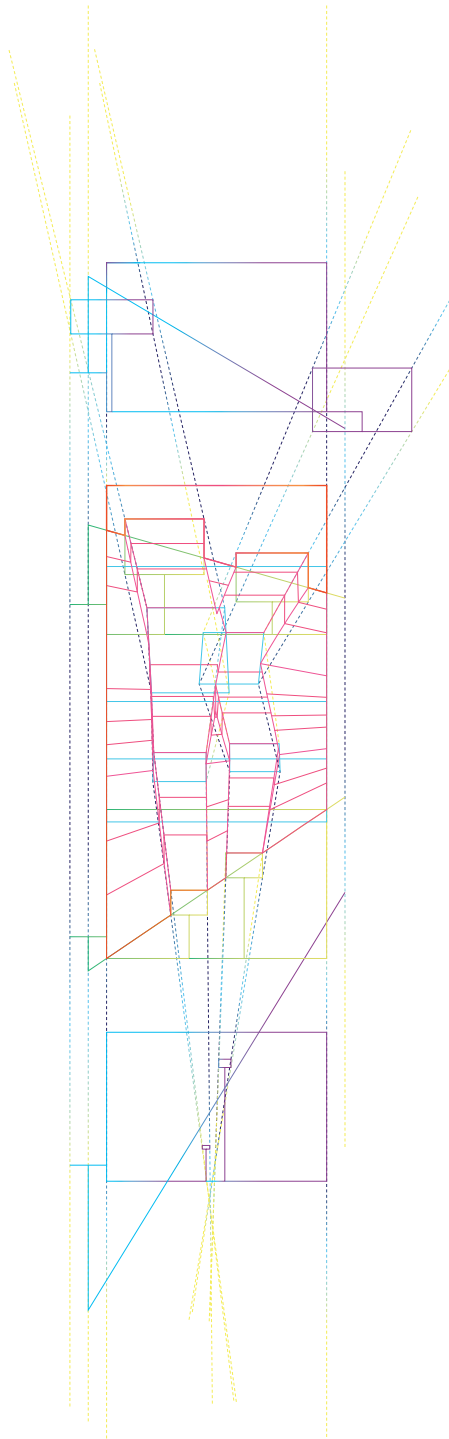
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Machine drawings.



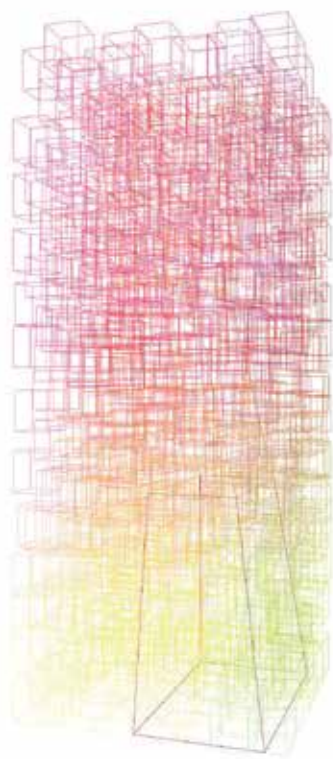




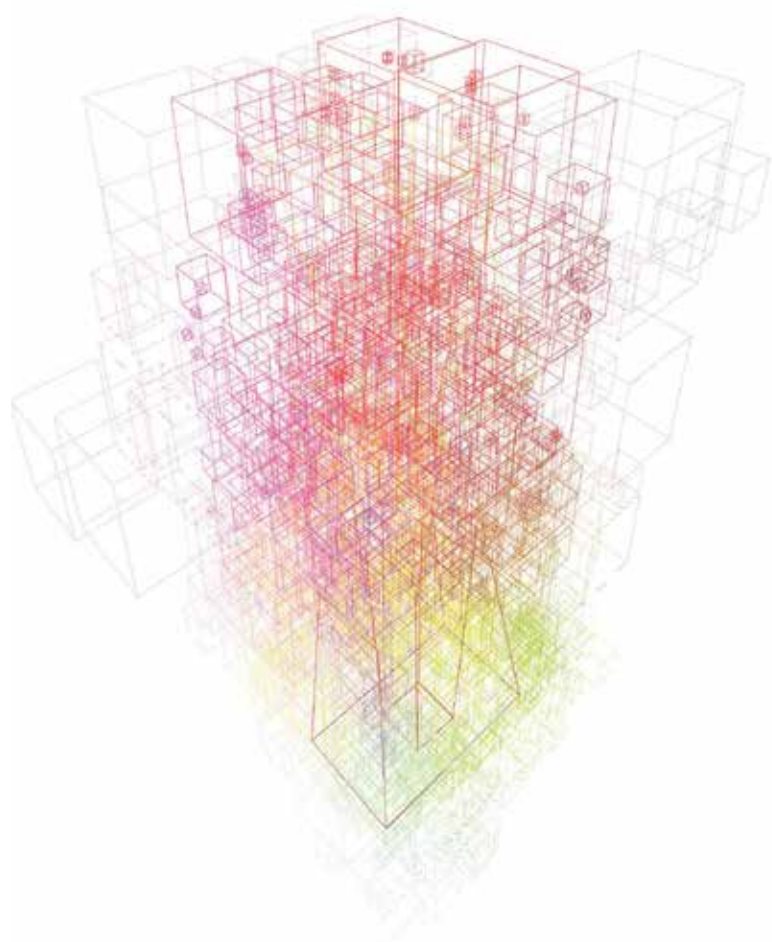


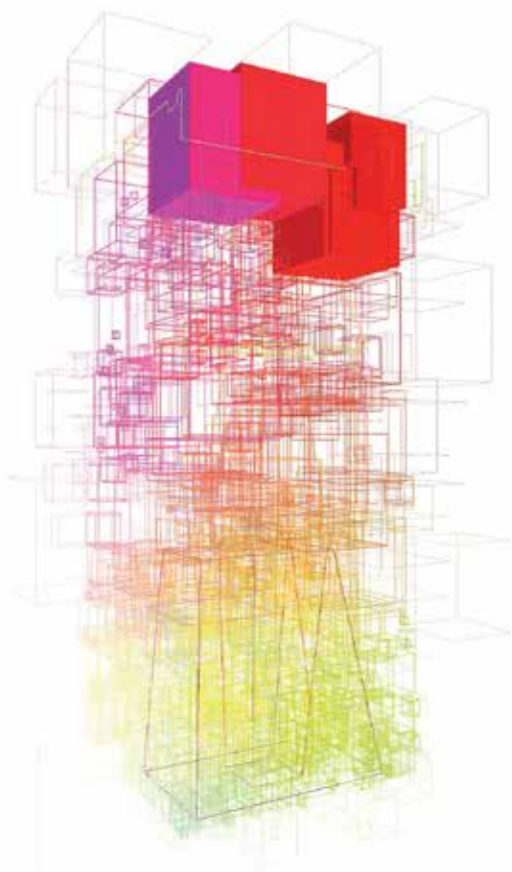






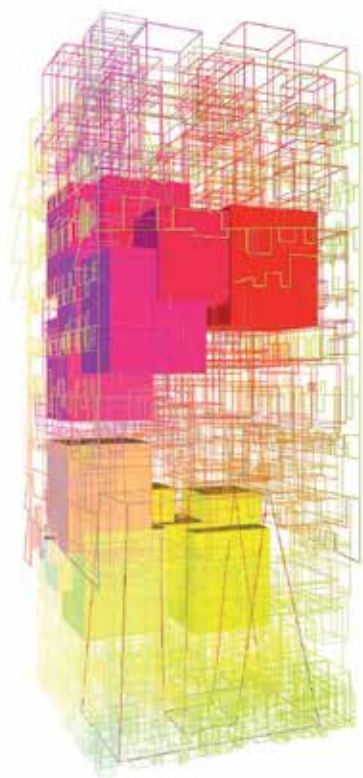
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Animation still.



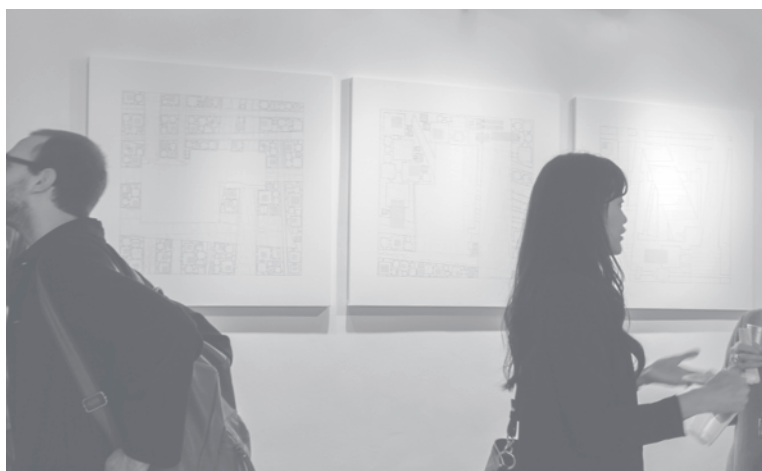




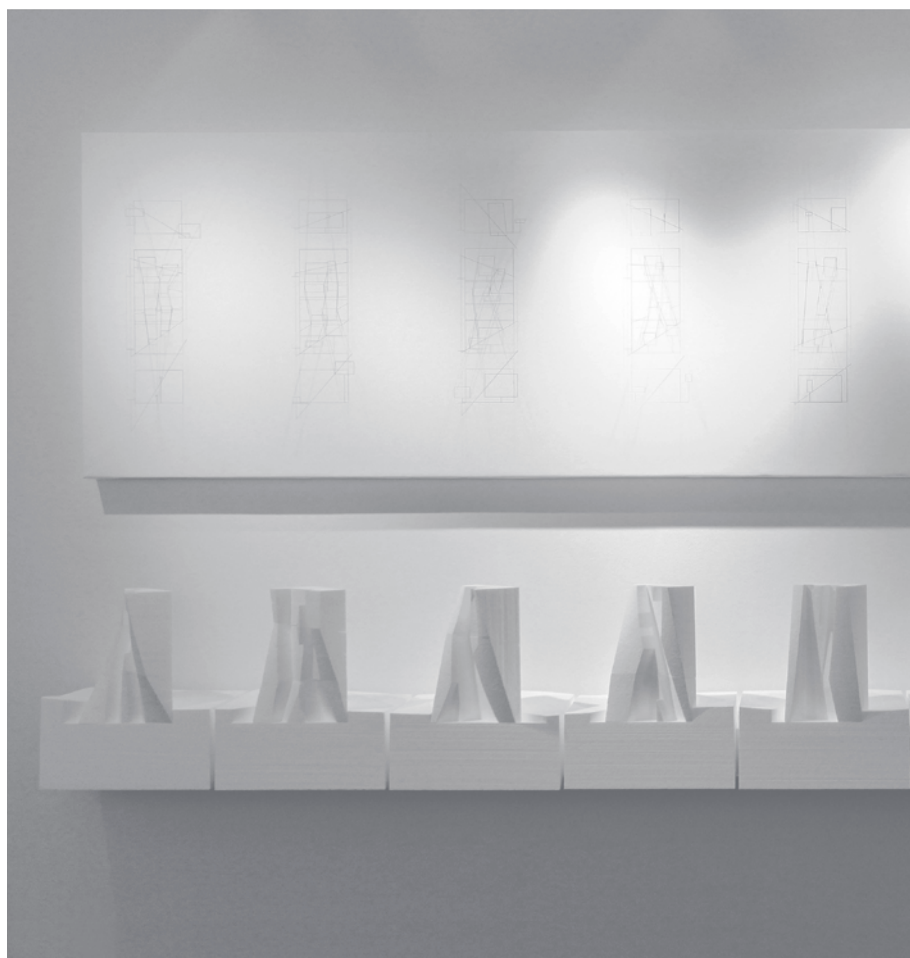


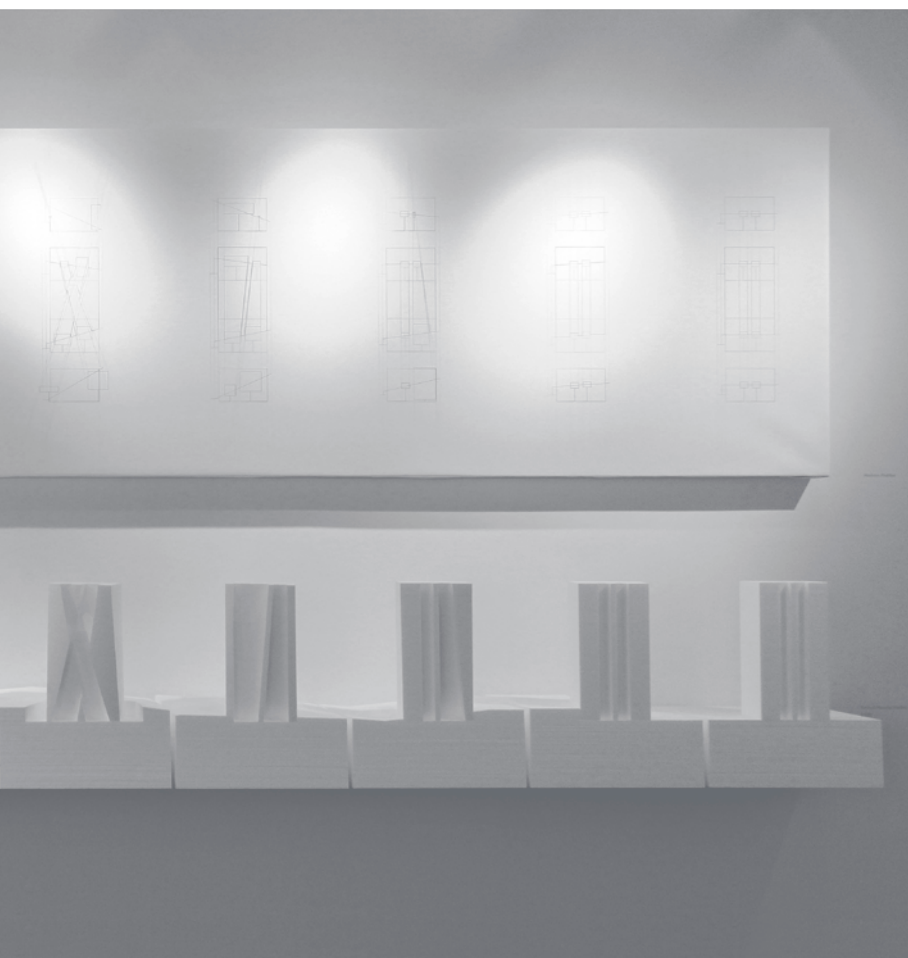






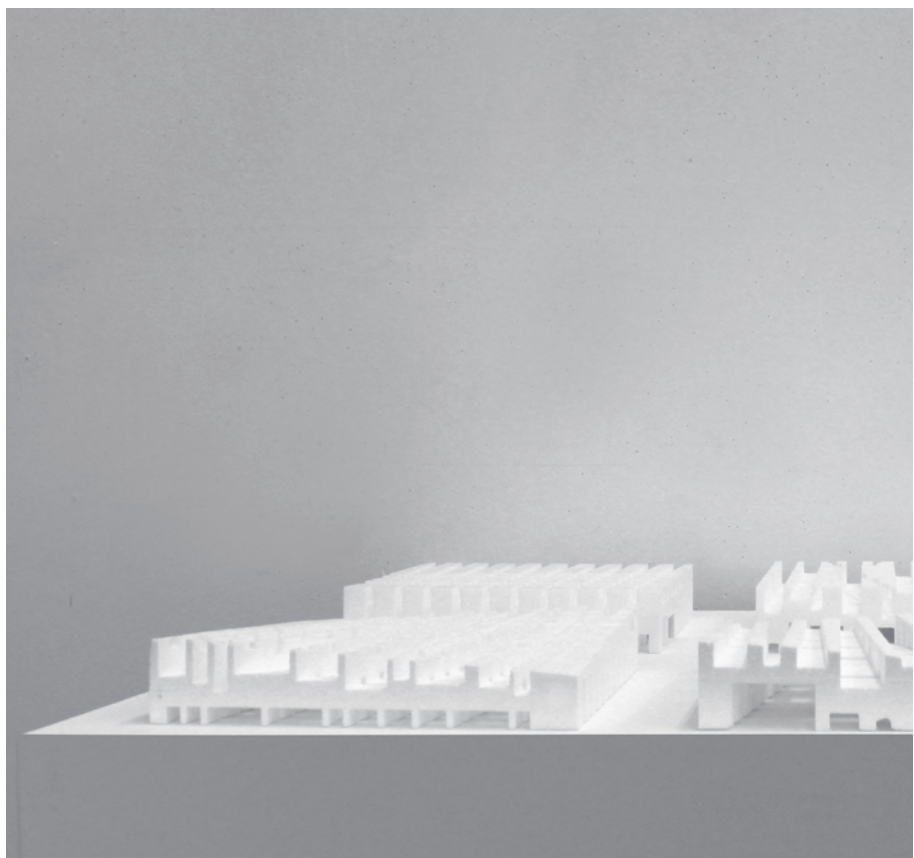
Above and following spreads:  
*New Massings for New Masses*  
on view at the Keller Gallery.



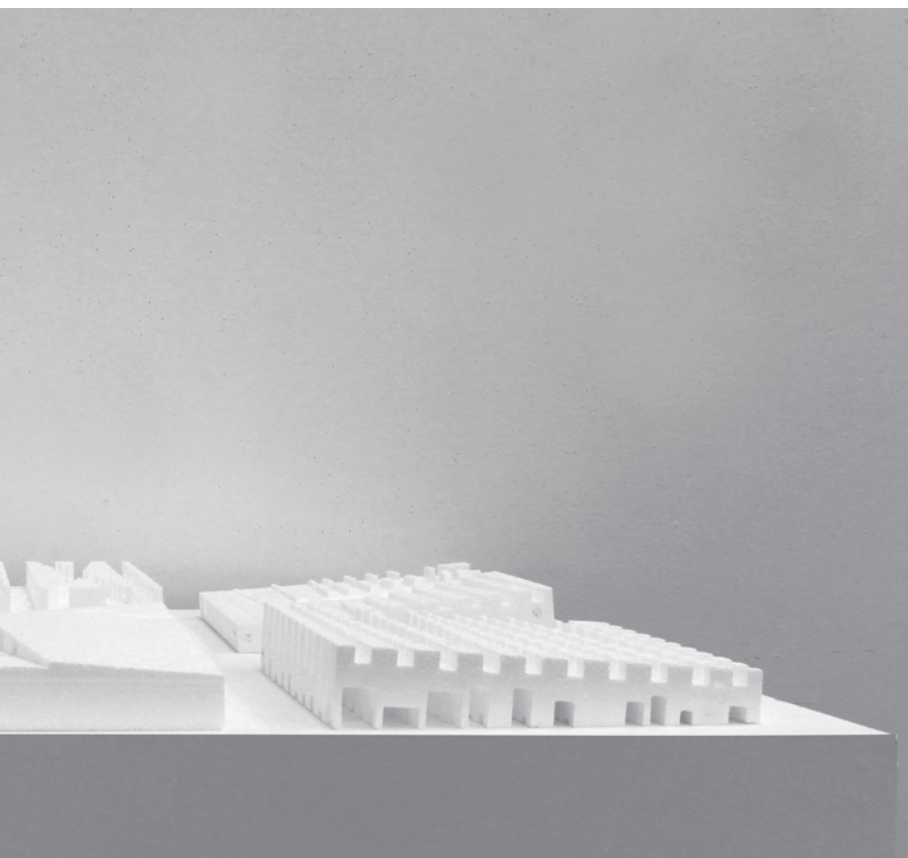


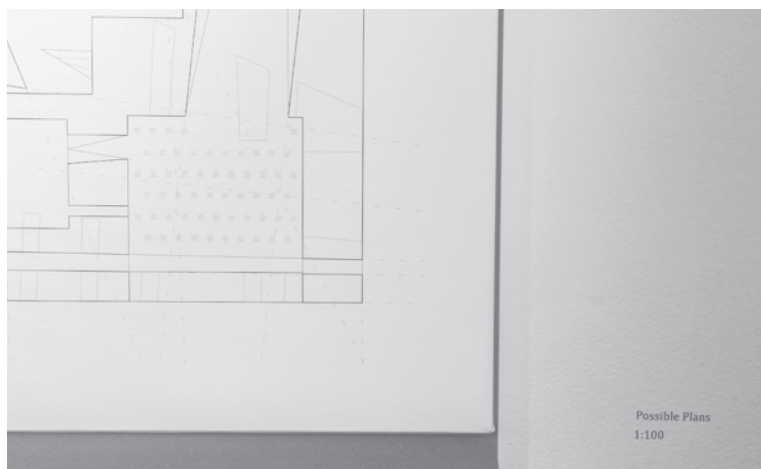






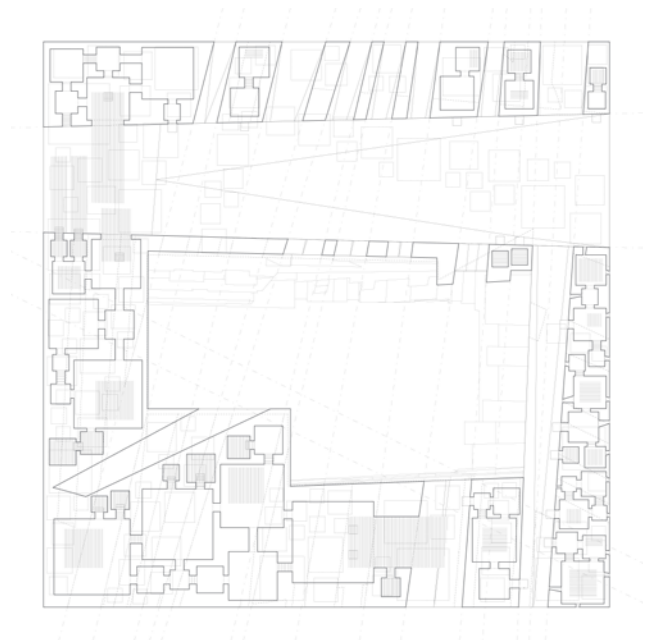


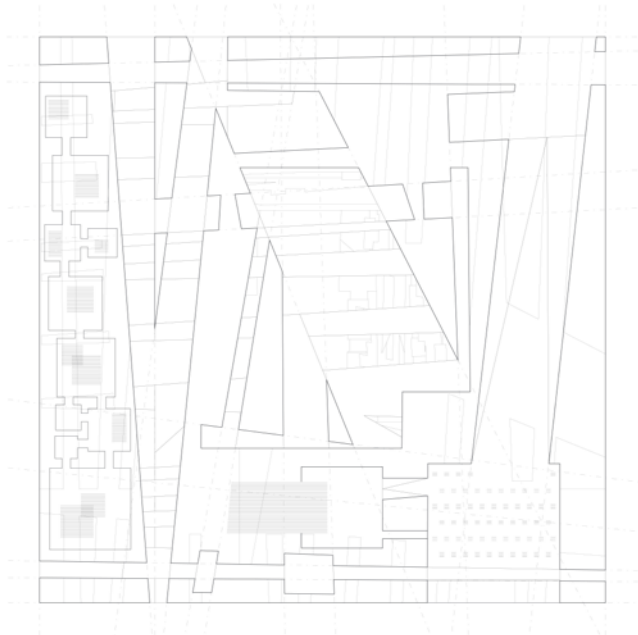


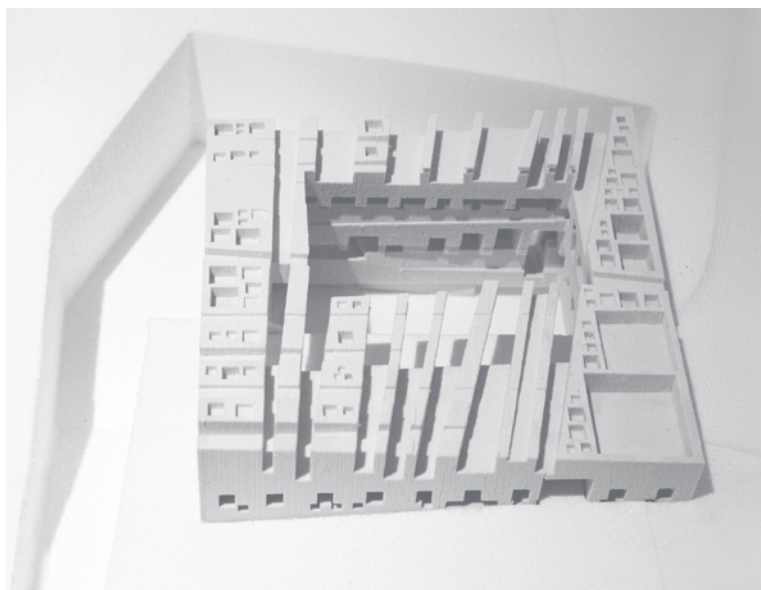




Above and following spreads:  
Plan drawings







## NONMODERN COLLECTIVES BY KIEL MOE

Architecture has become subsumed, with little thought, within a series of conventions that now dominate its practices and pedagogies. Architects have become willing, even enthusiastic, BIM-enabled personal shoppers for institutional clients; workflow-hyped simulators of thermodynamic realities they have little capacity to comprehend; shameless promoters of “new” software, materials, and techniques exploited for short-term market differentiation in practice and in the academy; certification checklist managers of cynical, neoliberal “sustainable development” alibis; liability-laden honchos of ever more disabling consultants in a culture of phantom expertise; market-driven parameter mongers and lumpen loophole panderers; and un-ironic hijackers of electro-numerical fabrication techniques for gallery devising installations. In the margins of all this, architects lie barely awake, singularly preoccupied with the misplaced virtuosity of external building shape. No longer concerned to imagine the architecture of novel collectivities and ways of life, this is the discipline of architecture evacuated of critical content and capacity on account of its self-selected modernist omissions, externalizations, intellectual habits, and conceits.

The sublime propensities and possibilities of the twenty-first century require far more from architects than what is afforded by this aberrant cocktail of technological determinism, acquiescent capitulation, and pseudo-autonomy. The opportunities for design in the twenty-first century demand other forms of knowledge, scales of ambition, and system boundaries; they demand deliberate techniques as shrewd as they are novel and discourse sufficiently ironic to address something, anything beyond itself. They demand that architects at once extend the discipline into *nonmodern* domains and, equally, to interrogate its most routine procedures and operations. Anything less seems but a pillow for parochial practices today.

Kiel Moe is a registered practicing architect and Associate Professor of Architecture & Energy at Harvard University Graduate School of Design. His design work and research received multiple awards such as the 2013 Boston Design Biennial award, the 2011 Architecture League of New York Prize, the 2011 AIA National Young Architect award, 2010 Rome Prize. He is author of multiple books: *Insulating Modernism: Isolated and Nonisolated Thermodynamics in Architecture*, Birkhauser, (2014); *Plot: The Urbanization of Manhattan* with Jane Hutton (2015); and *Energy Systems in Architecture* with Ravi S. Srinivasan (2015); *Convergence: An Architectural Agenda for Energy* (2013); *Thermally Active Surfaces in Architecture* (2010); and co-editor of *Building Systems: Design Technology & Society* (2012).

Rather than fragmented architects in a modernist apparatus of isolated knowledge, technique, and ambition, the twenty-first century pleads for *nonmodern* architects, capable of deftly and fearlessly converging reflexive knowledge, technique, and ambition into unambiguous, unsentimental projections of architecture. As a gush of cosmopolitan goodwill and optimism in this otherwise drear state, a few nonmodern designers have begun to finally forego the parlor tricks, technocratic rules of thumb, knowing nods, and operative witticisms that enable and ennoble the dominant conventions of late-modern architecture and their manifest platitudes.

Precisely where prior generations of architects insisted on form as the prime *métier* of the architect, the question of formation—*what is responsible for the appearance of anything*—is a central question plumbed by this small group of nonmodern architects. In these practices, the latent immanence of formation supplants the hylomorphism of form. As such, what is ultimately at stake in this nonmodern work is a radically different claim about causality: what could and should today sponsor the delicate, subtle relationship between in architecture and lived life. *MILLIØNS: New Massings for New Masses, Collectivity After Orthography* is one of few such projections of architecture that can see around and through late-modernity, past its own hulk and bulk, and toward the great potential of other causes latent in architecture.

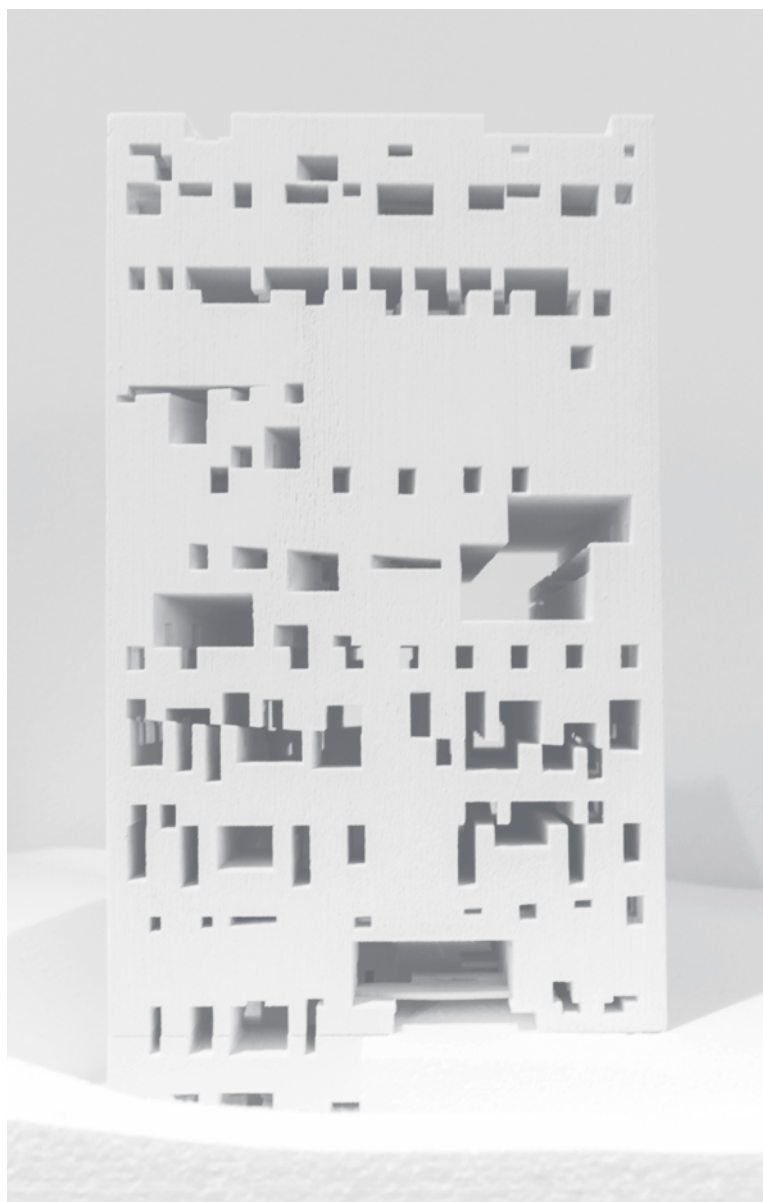
Whether through treatise, construction, urbanization, specification, perspective, stereotomy, or orthography, *architecture is a history of projection*. In every historical period, rather than merely incorporating or integrating what is available to life through conventions, the most intense and evolutionary of architects have always envisioned and devised the projective means to imagine novel collectivities and ways of life. In the finest and most intense of historical cases, questions about how to best orient the apparatus and projections of architecture towards magnificent collectives deliberately guided the work of architects.

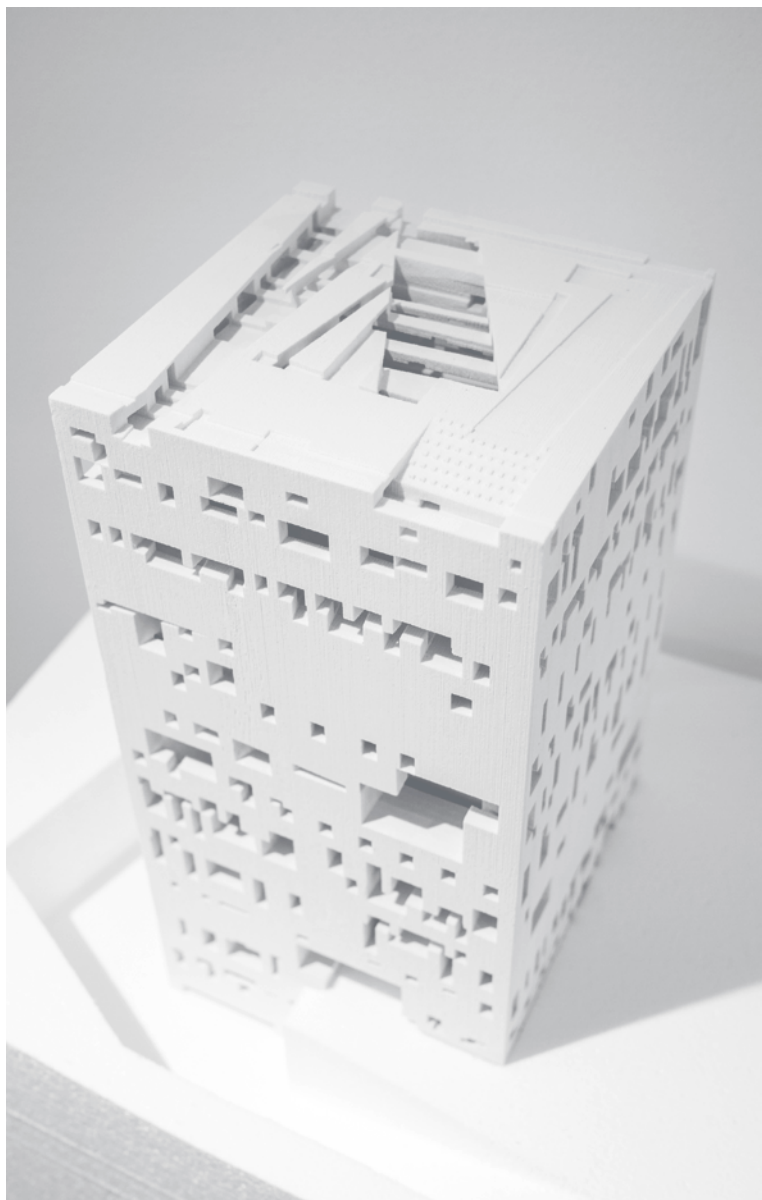
For *MILLIØNS* (John May, Zeina Koreitem, and their team), the fundamental question posed in this exhibit concerns projective working techniques for the formation of nonmodern collectivities. This is architectural research in its most literal form: to search, again, for the rudiments of possible and impossible architectures. The work strategically deploys—and deeply examines—the proto-modern techniques of orthography and stereotomy: lines have not worked so hard in an architecture gallery in a long time. They deploy models,



not as fantastic evocations of hylomorphic tropes, but rather as demonstrative of experimental technique and projection: models—as models of concern and action—have not been as crisply articulate in quite some time. No less exacting or precise than their resulting architectural lattices of points and lines, their exhibit text (“Aphorisms on Collectivity After Orthography”) equally specifies a nonmodern projection for a future collectivity that permeates the work. The intensity of their projection, taken as a whole, is astonishing, truly inspiring, and bodes well for the futures of architecture.

Articulations of nonmodern techniques and formations are as rare today as they are exciting. Freed from the fetters of modern, and especially late-modern neoliberal platitudes, the vital propensities of architecture are here imagined anew as the fundamental building blocks of novel collectives that eschew the conventions that dominant and constrain architecture today. The exhibit is both a projection of a way of life and a projection of a way of working, played out simultaneously. Taken together, both fiercely challenge the doldrums and conventions of what architecture has by now come to accept rather than project. The work is at once a demonstration and a provocation for students and faculty alike to question their assumptions about the constitution of architecture today, how it is formed, and what all, exactly, is specified in any given projected line in architecture.







**MILLIØNS  
ABOUT**

**MILLIØNS is a Los Angeles-based design practice with projects in California, New York and Beirut. MILLIØNS is directed by John May and Zeina Koreitem.**

[www.millionsofmovingparts.org](http://www.millionsofmovingparts.org)

# New Massings for New Masses

*Collectivity After Orthography*

MILLIØNS

