

Conversations<sup>1</sup>

↳ ON  
PAPERWORK:

A  
CONVERSATION  
WITH  
MICHAEL  
OSMAN

17TH INTERNATIONAL ARCHITECTURE EXHIBITION  
LA BIENNALE DI VENEZIA  
PAVILION OF TURKEY

Architecture<sup>12</sup> as<sup>2</sup> Measure<sup>7</sup>  
Ölçü<sup>4</sup> Olarak<sup>6</sup> Mimarlık<sup>8</sup>

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Melis Uğurlu:

In your work, one of the key roles you assign to paperwork is that it brings out and emphasizes the difference between the architect and the builder. The way you position paperwork seems to insist on this dichotomy, where on the one hand, there is design and on the other, construction: the intellectual labor of the architect and the physical labor of the builder, the immaterial products of the mind and material products of the hand. Here, paperwork itself also carries out a dual role: one that promotes and expands this gap, or difference, and another that almost paradoxically acts as a mediating instrument that, in your own words, connects what it has previously set apart. Could you talk a little bit more about this dialectical relationship that seems inherent to the role of paperwork?

Michael Osman:

Maybe I can be somewhat autobiographical to help situate my interests. When I was an architecture student, I was quite frustrated with the way that architecture was taught. There was a gap that I couldn't understand between the way we learned design and the way architecture was practiced. As a result, I decided to research the history of why that gap might exist. This, I thought, would allow educators to be more active in managing that gap in the future. One primary concern was: why is construction often so distant from questions discussed in studio teaching and in public reviews? That distance—I still believe—has produced a politically neutered position for design within the field of building construction, allowing for a somewhat oblivious attitude toward labor relations on job sites. I feel as though the question “who builds your architecture” could be addressed, first, by simply understanding how the architect's neutered political position came into being.

Those were the first ambitions for the project. I started seeing the distinction that you describe in your question as almost 150 years old, but no more than that in the American context. Over that course of time, several major transformations happened. The first was that the distinction between

design labor and construction labor needed to be invented, although those distinctions did exist in other contexts. In Britain, for example, the paperwork around specification was developed in the early 19th century. In that context, you could see a very different relationship between the labor practices of design and construction. But in the American case, specification seemed to have something to do with the introduction of processes of mass production into construction. In Sigfried Giedion's view, for example, large scale industry was the reason that American architecture could overcome the work of Europeans, who heavily relied on craft.<sup>1</sup> After that hypothesis was put forward in the 1930s, multiple iterations of that point of view followed into the 1950s and 1960s. I have found that the idea of the architect serving as the interface between industry and construction has produced all sorts of consequences.

First, as I said earlier, this might be the reason that construction has a limited role in the architectural studio instruction in the United States. Second, this might affect how architects calculate their compensation, especially when they quantify their labor based on the cost of construction. I would say that their precarity is therefore doubled. First: architects identify their work as an unquantifiable form of production derived from the identifiable cost of construction. Second: they isolate themselves from the contingencies on the job site and the specificities of the way management works there. In the American context, this has palpable negative consequences, and I think a historical study could be useful in helping us intervene.

M.U.:

I find the notion of "unquantifiable" in describing design production to be rather interesting, as it makes me think of another aspect of paperwork, which is the power that it holds not only in managing or organizing labor, but also in conveying presumably scientific, objective, and unequivocal data. And Bruno Latour, whom we see a lot in your work, was also interested in this "unique advantage" of administrative paperwork in the rhetorical and polemical situations.<sup>2</sup> We still utilize this role of paperwork today in architectural offices when we keep timesheets to track the otherwise unjustifiable or unquantifiable amount of hours we have put into work to present it to the client. This connection that paperwork provides becomes if anything more temporal than spatial. I am curious to hear how you see the role of paperwork in relation to spatial and temporal agency.

M.O.:

I would think that they are dialectically related. Any temporal quantification of labor relies upon a spatiality of the office. One aspect of the project I have been pursuing is historicizing the architectural office itself as a spatial condition of managerial control. I'd rather understand paperwork as a material registration of a very specific set of relations between hierarchical positions within the architecture office, not as an abstract entity.

The problem of the timesheet, for example, is that it gives us certain records about the way in which labor is performed, but unfortunately it doesn't allow us to see other aspects. In particular, now that architectural labor is embedded within screens and in the interconnection of wires between workers, our capacity to see the spatiality of architectural practice is further suppressed. This only strengthens the dominance of temporality over labor. While Latour seeks a realistic description of an existing condition, this does not give us many tools to change this condition; that is, it is still hard to make the office correspond to our ethical beliefs. Much as I have learned from his method, Latour makes it hard to know how to act, especially when the complexity of any situation is only

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1 Sigfried Giedion, "American Development," and "Toward Pure Forms," *Space, Time, and Architecture* [1941] (Cambridge: Harvard University Press, 1969), 335–54; 381–96.

2 Bruno Latour, "Visualization and Cognition: Drawing Things Together," *Knowledge and Society Studies in the Sociology of Culture Past and Present* 6 (1986): 1–40.

amplified every time you take yet another look at the intersection of one more technical system with all the others. The priority of time in the management of labor shows how the medium of management works, partly through the timesheet. But it would be nice to produce a counter-hegemonic view of the architecture office where, for example, collaborative work could be quantified in a different way.

This is a more general political-economic critique of the way in which management works. I feel as though architectural pedagogy should incorporate some sort of critique of managerialism as well, to prepare students for making architectural offices that will reflect their own values about work, as opposed to adopting principles of 'best practice' in professional organizations.

Ian Erickson:

To take this conversation about quantification a little further, the authority conferred onto paperwork by its previously mentioned 'unique advantage' of presenting scientific and unequivocal data creates a kind of documentation bias, like the adage of 'if you didn't record it, it didn't happen,' and carries the implicit assumption of exhaustivity in recording these events. Your chapter on paperwork in your recent book *Modernism's Visible Hand* begins by describing the different kinds of information included in these technical documents—schedules, budgets, market conditions, regulations, to name a few—yet these categories of information are not exhaustive of the concerns of architecture.<sup>3</sup> What kind of information is not measured, documented, or included in these early forms of architectural paperwork? And what is the significance of their absence?

M.O.:

In a way, that is a situation of unknown unknowns. But I think we can begin to understand those absences as strategic absences. For instance, there is a new gender dynamic emerging in offices and the question is: how do we understand and think about that aspect of practice? If we understood that dynamic through the bureaucracies of family leave, for example, we would only have evidence of values that are now more than 50 years old.

How do we adopt a new set of practices in the architectural office? Do we want to mediate the interpersonal relationships through the law? Thanks to the #MeToo movement, the dynamics of the work environment are more regulated and more visible today. But the question I'm asking is: what kind of society do we want to assemble through those regulations? Today's office life is better than it once was, but we haven't really taken stock of the contemporary conditions of architectural labor. The Architecture Lobby is one social movement attempting to do this, and it has ties to academia. But much more than that can be done, and a historical view would help make debates over office practice more self-aware and more integrated into the education of future architects. In a certain way, these aspects ought not to be made into paperwork but rather discussed as a set of values that we share as professionals.

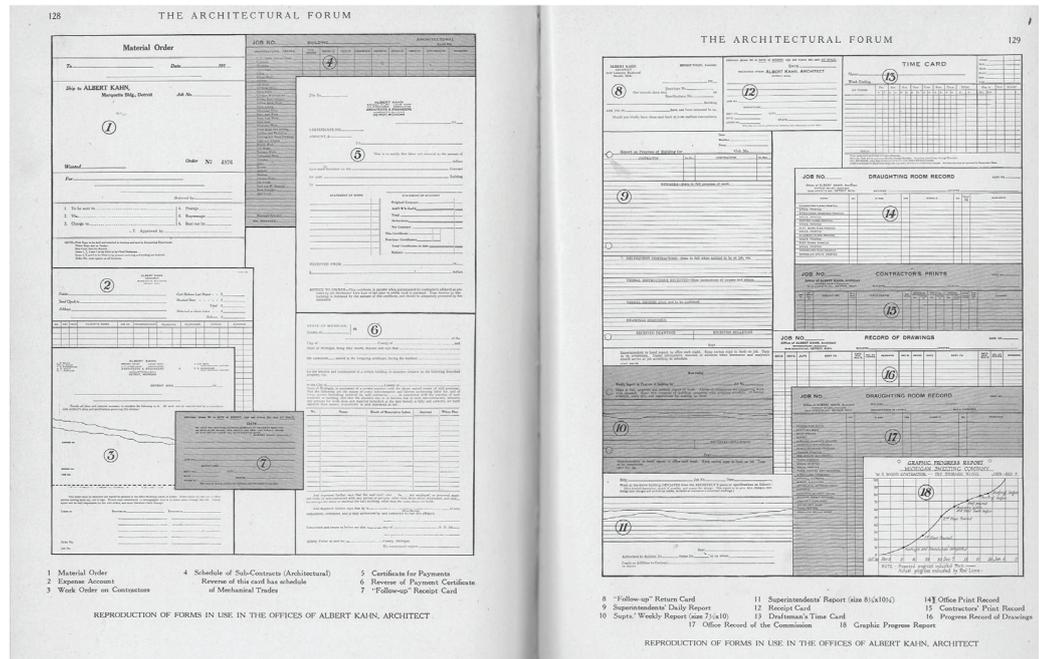
Another point would be to discuss the assumed hierarchies of intellectual labor and material labor. I am disappointed, for example, that the old industrial order has yet to incorporate changes found in new tools of automation. Think, for example, of measured drawings that once required people to measure a building by hand. Now that can be done through a 3D scan. How should we integrate those surveying tools into the office workflow? What do we do with other automated processes? This is where the university can be useful in debating the ethical relationship between architecture and building practice.

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3 Michael Osman, "Regulation through Paperwork in Architectural Practice," in *Modernism's Visible Hand: Architecture and Regulation in America* (Minneapolis: University of Minnesota Press, 201), 165.

I.E.:

Automation also brings up the question of error. The rapid adaptation of paperwork and managerial instruments has brought increasing orders of complexity to the building industry, even as it has made claims towards efficiency and standardization. Within these complex and seemingly efficient systems, what is the role of error, oversight, and accident?



Reproduction of the forms used in Albert Kahn's offices. These included: "1, a material order form; 2, an expense account sheet; 3, a work order on contractors form; 4, a schedule of sub-contracts; 5, certificate for payments; 6, the reverse side of the payment certificate; 7, "follow-up" receipt card; 8, "follow-up" return card; 9, superintendents' daily report; 10, superintendents' weekly report; 11, superintendents' report; 12, receipt card; 13, draftsman's time card; 14, office print record; 15, contractors' print record; 16, progress record of drawing; 17, office record of the commission; 18, graphic progress chart." George C. Baldwin, "The Offices of Albert Kahn, Architect, Detroit, Michigan," *The Architectural Forum* 29:5 (November 1918), 128-9.

M.O.:

Error is exactly what automation seeks out, to be perfectly frank. A good reference on this topic is the book *Cybernetics: Or Control and Communication in the Animal and the Machine* by Norbert Wiener, published in 1948. The book sets up cybernetics as a field of knowledge for understanding how organisms incorporate error into their control circuits. Error allows us to understand the bonds of humans to machines in very specific ways. Our understanding of the potentially accidental and erroneous effects of our machines reflects our own values and our inability to accept certain kinds of errors. Therefore, error is what we write into historical narratives by writing code for machines that make sure that certain things don't happen while other things can happen.

You have to allow error into a technical system in order for there to be choices. We understand that humans have free will only because they make mistakes or take risks. I would say that automation is never going to eclipse the erroneous, or even edit it out. Rather, automation directly corresponds to the way in which we incorporate error into our lives. Just to give an example: auto-correct, more often than not in my case, corrects my errors with another error. This "technological insufficiency" is part of the experience of automation. We could translate that back into architectural work. I'm sure somewhere, or at some point, those same tools of artificial intelligence will track the process of producing a set of construction documents. And the relationships that we are building between architects and engineers, engineers and subcontractors, subcontractors and builders, builders and clients, and so on will be monitored in some way by tools of

artificial intelligence. Such artificial intelligence might replace one error with what it believes to be a non-error; but it may very well be just another form of error.

What happens, for example, when three, four, or five people are simultaneously working on the same file? In a studio class, we might be able to see how the communication between students models another form of design interaction. We can't help but adapt to the forms of technological transformation. But the question is: how do we act and intervene upon the way in which they impose on our lives? It is important to consider—in schools and in offices—the way software brings its own values to the way architects work.

M.U.:

Another characteristic of paperwork, which is brought up by Latour in his text "Drawing Things Together," is that "writing and imaging is material and mundane," which leads to them being "so modest, so practical, so pervasive [and so on] that they escape our attention."<sup>4</sup> Perhaps this description of paperwork is linked to the topic of error as well. What do you think about this mundane nature of paperwork?

M.O.:

I am committed to undermining a distinction between our conscious purposes and our unconscious habits. The mundane habits of work and our most exalted purposes are directly correlated to one another. Whether our purposes are political or are aesthetic, which cannot be mutually exclusive, we should be able to understand how our habits and routines amplify our purposes or detract from them. We mostly write the political history of architecture through a history of purposes, but I think you could also write it from the point of view of habits, which is to say: instead of looking at architectural history solely as the achievement of goals, we could also understand those achievements as leaning heavily on certain kinds of habits.

So often, we think about ideology as existing within a world of advertising and consumerism, but ideology exists in so many other domains of our lives. How do we make visible those mundane ideologies we live with every day? Marxist feminists in the 1970s, for example, wrote an ideological critique of the mundane aspects of domestic labor.

Together, the architectural producer, the architectural critic, and the architectural client are elites who form hegemonic power around architectural culture. But, enabling all their hegemonic acts are infrastructural relationships between other agents. The nice thing about Latour is that his writing makes us realize how much we take for granted as points of agreement; the things we don't disagree about. As a result, Marxists say he depoliticizes things. When you add the mundane, it takes out the shock. This is a shortcoming because it is hard to mobilize people and instigate social movements when you're stuck in the mundane. For example, how do you mobilize people about climate change if you blame it on every little behavior? By blaming global warming on lifestyle, we lose the capacity to make dramatic political change. When we think that by biking to work, we are saving the planet, we are in fact not really doing anything. We are just biking to work.

M.U.:

I think at this point I also want to expand our context a little bit. When studying paperwork, bureaucracy, or administrative management tools, your work largely focuses on the office setting. In our project for the Pavilion of Turkey, we are also interested in looking at the larger scope of architectural labor or production, which encompasses the sites of construction as well the extraction and transportation of materials—the peripheries of architecture or architectural settings. Have you given thought to these exterior realms and do you think the framework of your research can be applied to these as well?

4 Latour, "Visualization and Cognition: Drawing Things Together," 3.

M.O.:

The end of my book, *Modernism's Visible Hand*, focuses on the architectural office. But I have done other work where the effect of managerial paperwork finds itself more profoundly outside the office. When I looked at the history of concrete, for example, I was thinking about the relationship between the architectural office and the administration of a construction site. Office practices were able to estimate the amount of labor required to build a concrete building, down to the second. They also calculated the lengths of time that it would take to transport concrete aggregate, mix it, pour it, and build all the different parts required for the formwork's assembly. I think concrete is amazing because it is not quarried and then laid like a stone or fired like a brick; it is assembled both elsewhere and on site with multiple temporalities.

Concrete has the capacity to absorb different temporalities. Maybe this is why it was selected as the preferred material for building the developing world. Turkey, for example, is predominantly occupied by concrete edifices, which I imagine is partly because it could absorb contingencies: you can get sand from here, cement from there, get gravel from here, rebar from there. The capacity to assemble things and manage the different temporalities is something that allows for flexibility on a job site as opposed to having to wait for all the bricks to arrive from one place and then mix your mortar. But there is some probabilistic certainty around concrete. I find it revealing that the 20th century is one focused on statistical thinking and focused on that material.

There is an amazing piece of work by my colleague Lucia Allais and her collaborator Forrest Meggers that I have been helping edit. They have worked on the history of concrete and the problem of carbonation, which is a chemical process that occurs within concrete and depends on humidity and temperature. With climate change, they are predicting that the 100-year life of a concrete building will shorten, and so the crisis that we are now encountering of failing bridges and buildings will be exacerbated.

These issues bring together the architectural community with the structural and civil engineering communities. I think it is nice to see a collaboration between a historian and an engineer, because the intervention of knowledge in the field thinks about the interdependencies between field work, construction management, office management, and office work. All those aspects of concrete construction are aligned so that we can build resilience, or whatever it is that we're after.

I.E.:

I would like to end on a note about the discipline. Many people lament that architecture doesn't seem to have its own native discourse and that most of it is built on top of an art historical framework. Others are beginning to point towards the social, political and environmental assumptions and dimensions of the very procedures of architecture—its rules of conduct, specifications, and standards, as a way to create or carve out a critical space for an alternative discussion on architectural specificity. Does your research share similar hopes? And also, bringing up some secondary questions: is paperwork native to the discipline of architecture in the first place or is it an export from early modernist managerial capitalism; or to scale-up even further, anything at all is native to what we call architecture?

M.O.:

I defer here to my colleague Zeynep Çelik Alexander, because her book examines architecture's claim to be a discipline.<sup>5</sup> This claim seems to have derived from psychology's ambiguous role between the sciences and humanities in the late part of the 19th century. But as I understand your question, it probably has more to do with what we have called "interdisciplinarity" since

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5 Zeynep Çelik Alexander, *Kinaesthetic Knowing: Aesthetics, Epistemology, Modern Design* (Chicago: The University of Chicago Press, 2017).

the 1970s. I think that it was interesting in your speculation to regard paperwork as a very specific way of mediating the built world. It is the very medium in which architecture actually exists. I would also go farther, beyond architecture, and put any kind of claim upon creativity in that medium. My thinking is that any discipline that seeks to identify its product as creative, whether that is science, art, architecture, or what have you, is going to make that claim of creativity by building bureaucracies of paperwork. Any claim to be a discipline will also be mediated by paperwork, because a discipline relies upon producing new knowledge and collecting and archiving old knowledge. To do that, you need to build the infrastructure to hold that stuff together. My argument would be yes, the discipline of architecture depends on paperwork as would any other form of creative production. In fact, it is strange to think about any form of knowledge or creativity not having some form of paperwork.

### About the author

Michael Osman is Associate Professor at the Department of Architecture and Urban Design at UCLA where he directs the MA/PhD programs in Architectural History and Theory. He is the author of *Modernism's Visible Hand: Architecture and Regulation in America* and a founding member of the Aggregate Architectural History Collaborative.