

Log

SUMMER 2013
Stocktaking

STOCKTAKING

34° 01' N, 118° 29' W

John Muir School, Santa Monica, California

Reyner Banham, urbane Englishman, spent most of the 1980s in the woods. Little is known about Banham's seven years on the forested hillside campus of the University of California, Santa Cruz. There are no iconic photographs of Banham ambling among the trees, like there are of him traversing the Mojave Desert on a Bickerton or rumbling through the concrete jungle of Los Angeles by car. Banham seemed to prefer the state's arid flatlands to its damp hilly forests, and when given the opportunity to pose among the foliage, he did so – prim and proper – in front of a mural of the redwoods adjacent to a busy LA intersection. The fully bearded critic dons a full chino suit, striped shirt, and bolo tie, his buckaroo hat casting a shadow over a stone-faced expression. Banham favored artifice over naturalness, but knew – any sartorialist does – that timeless style was the effective combination of the two. Only trees painted on stuccoed walls and an aging face adorned with mirrored aviator sunglasses – acrylics and plastics – can convey cool in perpetuity.

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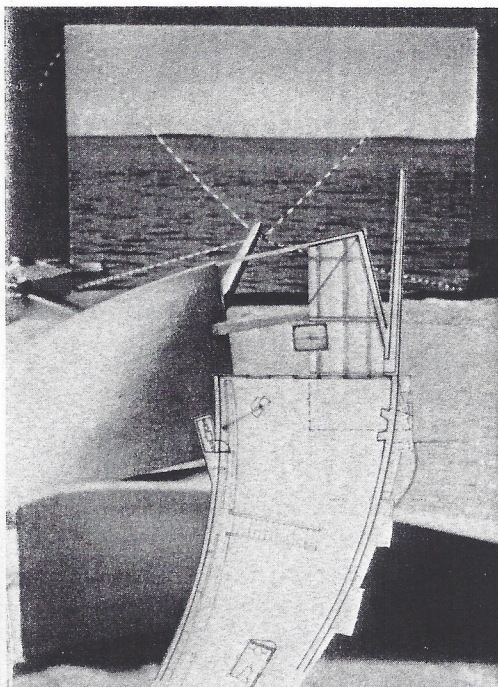
Elizabeth Diller

Architecture is a technology that has not yet discovered its agency

ANTHONY VIDLER: Looking at the state of architecture now, what is the most crucial aspect of the science or technology of the profession that you see developing that could be extremely important for the future? Is it material questions or is it software questions? In what way does technology allow for or develop the alibi to design?

ELIZABETH DILLER: Design needs no alibi but, undoubtedly, technology is indispensable to it. We communicate, document, analyze, test, simulate, and fabricate by pushing buttons, not pencils – though I still start with a sketch on a receipt or piece of scrap paper before a thought leaps into the digital system. The many technologies at play in architecture are interdependent, like a biological organism; it's hard to pick out an aspect to evolve without taking everything. But if I had to single something out, I would say material science is a new frontier that will impact architecture in unimaginable ways. Also, there is much to be done to marry dumb and smart materials with computation and real-time responsiveness. Architecture will one day be reducible to bricks, pixels, and bits. The design world today, however, is still split into distinct fields of expertise that are rarely talking to one another.

But I also believe there is a fundamental problem in associating technology in architecture only with applied sciences. Architecture itself can be thought of in a broader definition as a technology that involves many inseparable soft systems like cultural, economic, and political forces. Our interest in this view of architecture is as old as our practice and very evident in early works like the Slow House. In that project we asked, Which is the higher technology, the video of the view of the sea or the framed window's view of the sea? Both are equally mediated and that is not a bad thing. We made a case for the



DILLER + SCOFIDIO, SLOW HOUSE, LONG ISLAND, NEW YORK, 1991. PHOTOCOLLAGE WITH PLAN.

picture window as being the more technologically sophisticated, because if the aspiration of new technologies is to eventually make hardware disappear, the picture window needs less material stuff to perform. It relies on the act of framing to bestow cultural value. This observation was pertinent when we were looking for refuge from the clamor of debate between technophiles and technophobes in the '90s. We decided to stay technoneutral. It reoccurs in our work with the mediatheque window at the ICA in Boston and the Tenth Avenue Overlook at the High Line – we opt for less hardware.

As our work has matured, we have realized that architecture is a technology that has not yet discovered its agency. To be effective, architects have to step in from the margins and assert themselves in the center with the policy makers and funders, etc. The periphery has lost its romance and superiority over the gray, dirty mess within.

AV: Technophiles think certain forms of computation, like parametrics, will substitute in one way or another for the old-fashioned way of designing, and that, in some ways, there is a parametric style that enriches architecture through the use of certain forms of computation. Patrik [Schumacher] is one of the generators of the sense that at a certain moment the design process is authorized, if you like, by what the iteration does.

ED: When I hear “parametric style” as a self-proclaimed movement, I want to run. It’s an acritical abdication of design responsibility to software. Zaha [Hadid]’s work is no less strong without the alibi – your term earlier. It’s important to note that much of the emerging work in architecture not only shares common tools but common interests, like life sciences, fields, etc. As a software tool, parametrics has indeed made sweeping changes, like fostering an iterative way of working on integrated systems through the entire process of design, from modeling and documentation to fabrication. You cannot divorce any part from the whole, surface from structure, complexity from cost. The consequence of a tweak here can trigger an avalanche there. The choice of relevant parameters is all-important to the aspiration of any project. But parametric design has little to do with the generation of ideas; it’s more about having a partner for a design dialogue. The system can speak back in real time, but only the architect has the authority to judge.

AV: You’ve already indicated, in the example of the Slow House, that a certain tension existed between the technology of the window and the technology of the video screen, which actually gave criticality to the project. That kind of tension, in many of your early works, was the critical nature of the project, like the seat with the TV, and so on. It seems to me that in your more recent work the fundamental criticality is not there, but somehow the

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question of program emerges very strongly
in your initial thinking of the problem. That
is, your criticality comes from looking at a
set of stated requirements and, one, deciding
whether those are the real requirements, and,
two, deciding whether their combination in
particular ways can either invert or transform
the normal way of doing things, the tradi-
tional way of doing things.

ED: Yes, we tend to start by interrogating
program. Programs are inheritances and
should be tested for relevance against new
trends that are a consequence of global politics
and economics, shifting social structures, and
technological changes. What are the merits of
spatial conventions, and what are they meant
to represent? In whose voice does the architect
speak? How can the architect leverage con-
trol to emancipate space from expired social
codes? Can architecture act in the open or
does it have to be stealthy?

I want to come back to an issue that went
by too quickly – the anxiety that authentic
experience is being supplanted by forms of
mediation and technology. Does an intricacy
in carved wood detailing have any less value
if we understand it to be the product of a
five-axis CNC router, not of a craftsman? Is
the architect's hand less valuable in an age of
large team collaborations, digital facsimiles,
and outsourcing? What's real, anyway? Slow
House puts an actual view through a large
plate glass window in juxtaposition with the
same view on a monitor. The latter has the
flexibility to be zoomed in and out and played
back for good weather in bad. These side-by-
side instruments were to produce a resonance,
a pulse. But I think it simply problematized
the condition and remained rhetorical. The
leap from critical to generative occurred for us
in *Moving Target*, a dance piece for the stage in
Belgium. We suspended a huge one-way mir-
ror over the stage at 45 degrees. Three danc-
ers exchanged partners in a *pas de trois* – a live

dancer performing prone on the floor with a
2D hyper-virtuosic dancer projected onto the
mirror and refracted to the floor, and a softly
lit live dancer behind the mirror partnering
with either. The impossible space produced by
the use of video and Mylar created a magical,
synthetic effect in which actual and mediated
presences were equivalent.

AV: One always thought, when you were
doing those projects, that they were excep-
tional, and that they were drawn from a
certain tradition of art-world installations
but were introducing space and the media-
tory questions of technology, and there was
never a thought that it would be difficult to
turn that into architecture, into real building.
You seem to have been pretty successful in
that. Yet it seems to me that when it comes to
architecture, you deal with these questions in
a slightly different way.

ED: Every project presents a site/situation –
a sociopolitical and temporal context. There
are many players in a building project and
multiple sets of aspirations. There are also
many restrictions like budgets, schedules,
and legal and public safety issues. You have
the health and safety of thousands of people
in your hands, and if you screw up it could
be disastrous, legally and ethically. It makes
you think twice about architectural indul-
gences at a time of limited resources. There
are many forces that you need not deal with
when you're doing self-generated, temporary
projects. Yet, the unanswered career-long
problems persist and are still rattling around
in your brain, trying to find a way to the sur-
face. Those problems help make sense of the
rest of the clutter.

Blur was one of those crossover proj-
ects. Fog was the base material for a low-res
building enabled by an intelligent real-time
weather tracking system. But as an occupiable
structure, it had to satisfy stringent building

codes in Switzerland because hundreds of thousands of people would visit it. The building was the size of a football field and stood on four thin columns in the middle of a lake and accommodated thousands of people hourly at up to 25 meters over the water on slippery grating with no visibility. It took great effort to convince the building authorities that we did not need to install a sprinkler system; the building was in fact a sprinkler system. But we had a big epiphany when we realized that filtering the lake water before it was atomized was a matter of life and death. Unlike the intestines, the lungs are incapable of processing bacteria. If we did not succeed in purifying the water beyond drinking-water standards, we would have created the equivalent of Legionnaires' disease, potentially killing off visitors. When you're working in the public realm, especially with public funding, you have to check your agenda against other agendas.

AV: In your many years of teaching, what would you say, pedagogically, is the role of studying, looking at, or analyzing history? That is the first part of the question; the second part is, What is history to you, as an architect?

ED: I teach what I practice . . .

AV: We've gone through phases where modernism took history in an abstract way and reduced the historical object to a set of spatial organizations. Then postmodernism tried to bring back elements of apparently historical themes and quotations and citations. Now there seems to be a phase of architectural production that is, in fact, much more powerfully ruled by the technologies of building, organizations of program, and site, rather than referring back to or drawing from historical precedent.

ED: I don't exactly see it that way. I think students are a product of histories, whether

consciously or not. We're the product of our teachers, who are a product of their teachers; in this way, each time, the world is edited and curated. As a responsible architect you have to understand that you don't start with a *tabula rasa*. The world was there before you got there. You have to acknowledge that you're part of a complex discipline that has a history. Your work may not be about quoting history, but you need to know enough of it to know that you're not quoting it, especially if you're planning on blowing it up!

You need to start with a basic knowledge of history, but not necessarily its full depth. With that base knowledge you can build up a parallel knowledge in other fields so that you can position architecture vertically and laterally. You dive deep on an as-needed basis when you start every project. You fill out your knowledge by being hungry for it. That's the way it will stick, through a need to contextualize an argument, to see where others have tread. Architects need to empower themselves by knowing history. Then you've got to throw everything out the window and discover new logics. Staying on topic, I recently ran into a very wealthy man in the finance field at a fundraiser who told me that the best course he ever took in college was Architecture 101, a big survey class taught by [Robert] Venturi. Many nonarchitects tell me that these survey classes are the most memorable learning experiences in school.

AV: History, on the one hand, becomes a kind of survey, but on the other, it becomes analysis. It becomes analytical of certain processes, the ideas that infuse the objects, spatial organizations that were used to put that object together, how the composition works, and so on.

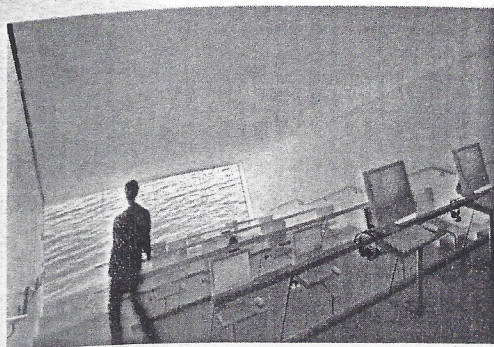
ED: Of course, it's an investigative tool, a way to understand an integrated view of the world backward. As we accumulate more histories, we're interpreting ourselves forward into the future. We can be critical of institutionalized

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DILLER SCOFIDIO + RENFRO, INSTITUTE OF CONTEMPORARY
ART, BOSTON, 2006. VIEW TOWARD WATER FROM INSIDE THE
MEDIATHEQUE. © IWAN BAAN. COURTESY THE ARCHITECT.

histories with fuzzy beginnings and ends that
may be incomplete. When we start a project,
we situate ourselves somewhere in the shift-
ing history of the discipline. We may choose to
rewrite the history on our terms though. It's
all fair game. It depends on whose story you
choose to believe.

AV: You just posed my next question when you
used the word *discipline*. Is architecture a disci-
pline? Can it be defined in disciplinary terms?

ED: It's a field of knowledge with a system
of rules and a deep history. There are institu-
tions that teach it and give degrees based on
expertise in it. Licenses are given to practice it
based on preset knowledge. I think that quali-
fies architecture as a discipline. But part of
what defines the discipline is that it has great
discomfort staying within its own borders.
Architecture envies every other discipline in
the name of interdisciplinarity – music, biol-
ogy, geology, linguistics, you name it. This
restlessness attests to the notion that our dis-
cipline has been overly mined and we are all
looking for unexplored territory. Inwardly,
architecture needs to gather many other disci-
plines to do its base work.

AV: Is there a need to redefine the profession
in relationship to those licenses in such a way

that all those single, autonomous, or semi-
autonomous professions that determine the
way a building or a piece of the city get con-
structed could be called, altogether, a profes-
sion? A profession of constructing, say.

ED: That's an interesting point. These days,
the fields of architecture, urbanism, and land-
scape are already dissolving. At the same time,
we live in a progressively professionalized
world in which the generalist knows a little
about everything but not enough about any-
thing. The architect's most important role is
to be the equivalent of a movie director.

AV: So architecture is a defining, or even the
unifying process.

ED: Yes. On a typical cultural project, there
are maybe 30 experts from diverse fields – you
have your acoustician, your waterproofing
consultant, your vertical transportation con-
sultant, your facade consultant . . .

AV: And each, one at any one time, can knock
you out of the water, in fact.

ED: Particularly the pest control consultant!
But the reality is that a generalist could never
dig deep enough into fields that have evolved
scientifically to sustain ever-larger and more
complex projects. But you still need the archi-
tect to organize the specialists.

AV: Do you think architecture schools are de-
livering the kind of education that can, in that
sense, give students the kind of knowledge
and insight and criticality to play that role?
Let's say the traditional structure of schools
– the studio in the center, and the series of
courses that everybody has to sign up on for
on the periphery.

ED: Schools support the conventions of spe-
cialization. Your structural engineering class

and your mechanical engineering class are rarely integrated. Your history and your design classes typically do not talk, and both of these are at an arm's distance from the technical classes. There could be a different problem-based learning model, like you see in medical and business schools. However, whose problem is it? As architects, we often create our own problems and teams to figure out a solution. Team-based work is common to architecture, but not in schools.

AV: That could be across the student body too. You could have student engineers, student architects, student landscape architects, student acousticians. They could make prototypical teams, in a certain kind of way.

ED: I've often thought about doing that, but I stop myself because I know no student would want to role-play the mechanical specialist. It isn't sexy enough. But why not? The fate of the world rests on issues of energy consumption and limited resources. On an architecture team you can no longer see your role in isolation – you cannot press here and expect it to not come out there. You can't make an aesthetic decision without a structural impact and a mechanical impact that have a financial impact and a time impact. And so team-based design is a dumb but fast form of parametric design. But architecture schools aren't evolved enough to teach design laterally. They're organized by very strict accreditation requirements.

AV: That goes for every other professional school. The academy is set up to perpetuate these divisions, in fact. We have been talking about interdisciplinary work for 30, 40 years, but it hasn't actually informed curriculum.

ED: You rewrite the curriculum each time. The main rub with interdisciplinary work is who starts. Like opera, What comes first, music or lyrics? You can't start with all the

expertise in the room. Architecture has to start solo, it has to be driven by the liberties that come from naivety. So, again, like the movie director, you have your script, you have your interpretation of that piece of writing, and you have your idea of how you want to tell the story. Not that ideas can't percolate from the bottom up or sideways. A structural experiment can generate an entire project or a facade system. But in the end, architecture has an irreducible hierarchy, with one brain that is driving the story and that says which story has to be told.

AV: So the architect, going back to our understanding of program, is the storyteller and the director of how the story gets put together.

ED: Yes, but the support disciplines are not only in a supporting role; they can be co-directors.

AV: They could be part of the story.

ED: Yes, they could be part of the story. They could be shifting the story, perverting it. But someone has to start. And that is usually the architect. We like to put all of our collaborators around a table once we've put something on the table – like a really big, complicated problem we don't know our way around and that we can torture everybody with.

ELIZABETH DILLER IS A FOUNDING PRINCIPAL OF DILLER SCOFIDIO + RENFRO AND A PROFESSOR OF ARCHITECTURE AT PRINCETON UNIVERSITY.