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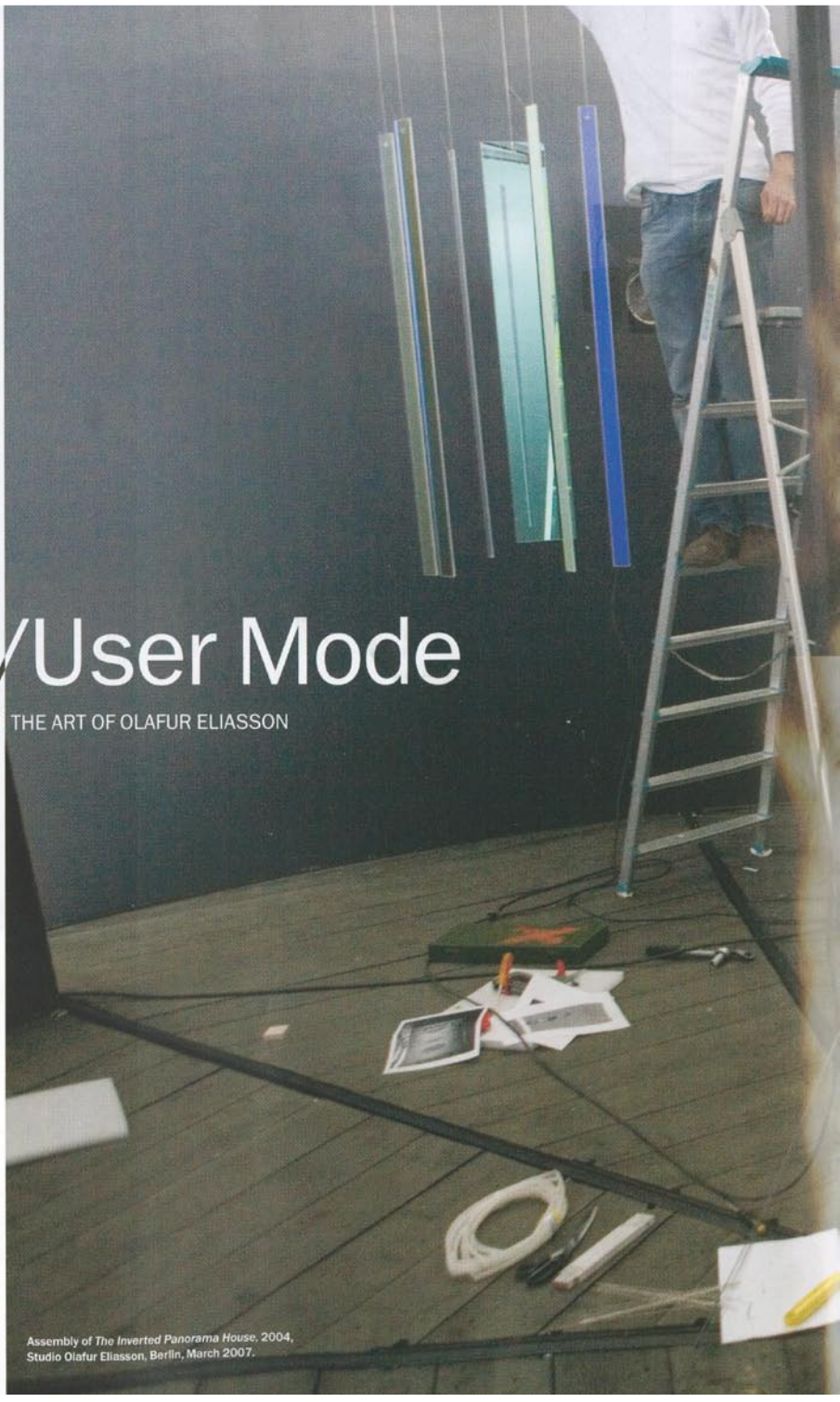
The Server/User Mode

CAROLINE A. JONES ON THE ART OF OLAFUR ELIASSON



Assembly of *The Inverted Panorama House*, 2004, Studio Olafur Eliasson, Berlin, March 2007.

FEW ARTISTS have had Picasso's arrogant confidence: "I do not seek. I find." Far more typical of modernity was the desire to align one's work with *research*: Constable's cloud studies, Seurat's Chevreul-inspired pointillism, Kandinsky's work on synesthesia. Materialization could sometimes seem incidental—yet materialization was exactly what the artist could bring: a way to make research come alive as experience in the body of the viewer. Robert Irwin's collaborations with scientists from Bell Labs began to mean something when he materialized those laboratory setups of the *ganzfeld* in public art museums. The theatricality of such maneuvers was rhetorically minimized by reading the work as *de*materialized—feeding tensions between theory and materiality, research and production, that are more present than ever in contemporary art.

The case of Olafur Eliasson sharpens such debates. The artist insists on physical materialization, but in the service of *experience* (perhaps in the French sense of the word, as "experiment"). The built-in tension between research and production is fueled by Eliasson's insistence that his studio is "like a laboratory," while it also functions pretty effectively as a factory for contemporary art. The artist cultivates this dynamic—"the translation from thinking into doing is the radical thing"[1]—but it forces the question: Just *what* is being researched and produced? In the art of Eliasson (and, I would argue, much of his generation), the objects being produced, and the sociomaterial technologies they imply, are only part of the story. Seen in a broader context, the physical works are nodes in the ongoing activity of *knowledge production*. It is as if the "antiretinal" impulse of Marcel Duchamp emerged from the other side of a postmodern wormhole to take paradoxically embodied form (not only retinal, but acoustic, tactile, olfactory) in Eliasson's subject-making machines.

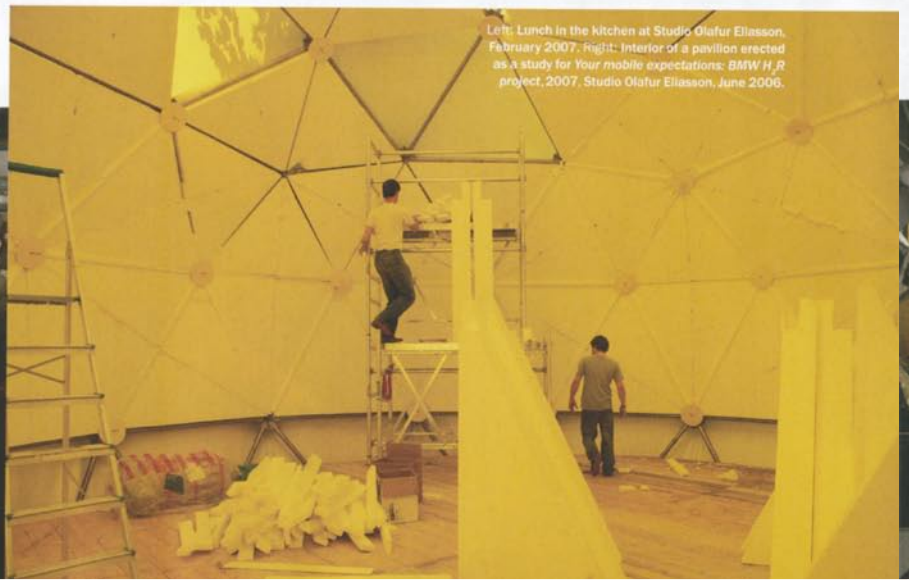
"Knowledge production" needs pluralization into *kinds* of knowledge, and attention to the ethical frame articulated in Gilles Deleuze's reading of Michel Foucault:

> Everything is knowledge, and this is the first reason why there is no "savage experience": there is nothing beneath or prior to knowledge. But knowledge is irreducibly double, since it involves speaking and seeing, language and light.[2]

Beyond double, in fact: For to the twinned systems of speech and vision we must add proprioception, ratiocination, memory, and the multiple flows on which the body surfs to constitute a constantly morphing subjectivity. An Eliasson installation can initially overwhelm, with streams of sensory data that activate both rapid "magnocellular" processing systems in the brain, and the slower "parvocellular" ones (the first feels intuitive; the other, reflective). The complex research, technical experimentation, and layers of representation in the work become evident only on a second, slower take. ("There is a degree of spectacle in my work, which I'm not afraid of, but I just need to manage it critically.") In much contemporary knowledge production, what counts is nonuniversalist, localized, and embodied. The subjectivities generated by contemporary art can be performative, relational, networked, or (in Eliasson's case) restlessly phenomenological.

The historical impetus for all this can be traced to the postwar shift from information to informatics, affecting economics, science, and art.[3] These epistemic shifts were portended by factory models of aggregative labor (physicists scaled up from desktop experiments to the industrial assemblages of big science; artists shopped out work or set up basic assembly lines). While they implied de-skilling, such new forms of labor also freed art and science to reach new planes of conceptualization, and demanded radically new receptive frames. They drew on earlier machinic ways of being (machines for living [Le Corbusier] and readymade desiring-production machines [Duchamp via Deleuze and Félix Guattari]) and became in the postwar period the "large business" machines of particle detectors (physicist Luis Alvarez), "mechanical means" for mass image production (Andy Warhol), "executive" artists' serial modes (Frank Stella), and eventually even ideas as machines for making art (Sol LeWitt).[4] The machine was more than a metaphor. It retooled the producer *and* the receiver. The concept of knowledge production is thus useful only if it can capture these discursive dynamics, by which the "object" of art or science is nothing less than the local "subject" making meaning: of experience, of data, of sensory phenomena, of the broader social field.

The localized uptake of dispersed information followed the paradoxical logic of late modernism, which had ensured that "big science" (Alvarez) and "the business art business" (Warhol) expanded outward at the very moment they seemed most centralized. Responding to the anxiety produced by centralization itself, scientific centers of production were scattered in the cold war, but then linked by new superhighways (designed to function as military airstrips in the case of attack); telephone systems were wired for reliability through packet switching (backed up with redundant electrical systems). The artistic author



Left: Lunch in the kitchen at Studio Olafur Eliasson, February 2007. Right: Interior of a pavilion erected as a study for *Your mobile expectations: BMW H_R project*, 2007, Studio Olafur Eliasson, June 2006.

function was centralized, in the guise of a work-stream manager, even as the author name was stamped on prints, films, national advertisements, and mass-distributed imagery. The structural implications for a future "network" of servers and users was already in place—even if relays were imagined as "nerve centers" subject to the control of the market or the state. It becomes possible to argue from this history that neither science nor art was simply "mimicking" a preexisting industrial model. Cultural agents' dispersed informational activities in the 1970s and '80s *preceded and informed* the design of industrial practices not widely implemented until the '90s. In only the most dramatic example, microwave proto-Ethernet links first emerged on the West Coast of the United States in the '70s to tie dispersing physics laboratories together; in 1989, the software innovator Tim Berners-Lee appropriated some of this net protocol to propose the ideas behind the World Wide Web. Still operating as a scientist, Berners-Lee made it clear that the laboratory was not merely responding to changes in the wider industrial world but was a prototype for everywhere else: "The problems of information loss may be particularly acute at CERN, but in this case . . . CERN is a model in miniature of the rest of the world in a few years' time."[5]

With the fundamentally decentering tools of the Internet and the Web, there emerged a new logic of multiple, interacting servers and users. In Perry Hoberman's 1998 installation *Systems Maintenance*, for example, visitors are presented with life-size furniture, a model of the same objects at one-eighth scale, and a virtual room displayed on a computer monitor, all three of which can be manipulated and are then video mixed into a single-channel projection. Viewers become *users* and either maximize or "cure" the chaos of three different informational systems. Similarly, Ken Goldberg and his collaborators began to enlist the Web for what he dubbed "telepistemology," encouraging users to explore the conditions of doubt and faith driving the production of knowledge.[6] The old economy of maker/receiver shifted ineluctably around 2000, toward a "hive mind" of users and servers. In place of the studio as final site of authentication, we were forced to accept knowledge production as inevitably hybrid, mediated, deferred, and diffuse.

Numerous practices emerged from this situation to characterize today's art world. The "relational aesthetics" emphasized by Nicolas Bourriaud play readily into a server/user mode of distributed knowledge production via socially networked practices.[7] (But if Bourriaud finds Rirkrit Tiravanija exemplary, we would want to add the social software of Cory Arcangel or look into Goldberg's users, one of whom proclaimed that "the people who witnessed [my intervention] become something more to me than they were before."[8]) Recent attention to the performative foregrounds intensely local knowledge (as in the work of Tino Sehgal or Santiago Sierra), without perhaps paying enough attention to the way documents and discourses form subjects outside the performance itself. Video is yet another vector for knowledge production (more obvious with the documentary thrust of artists such as Emily Jacir, Walid Raad, and Jennifer Allora & Guillermo Calzadilla, but evident as well in Tacita Dean's slow takes, or Bruce Nauman's focus on durational phenomenology). As an object maker and installation artist, Eliasson can sometimes be left off such lists—but he shouldn't be. His increasingly adamant insistence on the studio is one clue that his physical work needs to be seen in the context of research and other relations. The works' fabrication, the embodied experience they require, and Eliasson's efforts to shape his own discourse are all part of production.

Studio Eliasson is more than a stage for propelling objects into the world; it *is* a world, providing all the artist needs to complete himself.

Eliasson's earliest "guerrilla" artworks reveal this commitment. Of his *Green river*, 1998, in which scientific tracer dye is released into an urban waterway, he recently commented: "Not knowing it was an artwork was important. If people knew beforehand there wouldn't be the same discussion."[9] The intensely local quality of the "knowledge" accruing from these interventions is clear: The Stockholm police announced that the government had accidently dyed the river and that there was no cause for concern, while the Japanese authorities in Tokyo quickly put up posters soliciting information from a vigilant public.[10] As with Yves Klein's zones of "Immaterial Pictorial Sensibility" from the '60s, such practices force us to ask *where* the artwork is being produced—in the studio where it is conceived? In the river where it is temporarily materialized? Or in the

Left: Einar Thorsteinn's model workshop, Studio Olafur Eliasson, April 2007. Right: Olafur Eliasson (right) conducting a prism and light experiment, Studio Olafur Eliasson, June 2006.

Olafur Eliasson, *Green river*, 1998, uranin and water. Installation view, Stockholm, 2000. Opposite page: **Katharina Fritsch, *Werbeblatt I* (Advertising Leaflet I), 1981**, offset print on paper, 11 1⁄16 x 8 1⁄4".

mind of the urban dweller/viewer/patron/critic/art historian who "receives" partial knowledge of the action? Klein's patrons already "know" it is an artwork they are observing when the river swallows twenty grams of gold leaf. But Eliasson wants to slip observers into an unexpected relationship with *the real:* "That day, when the people in Stockholm looked at the river—to them, that the water moved was a surprise. The city wasn't a postcard!"[11] The idea was emphatically against "the art critic who found out I had done it and said that I 'turned the city into a watercolor.'" The artist wanted instead to give "time and the idea of dynamics to the city."[12] The renewed conception that the river is *moving* in time connects through Heraclitus to phenomenology, referencing Maurice Merleau-Ponty's observation that the metaphor of time as a river can only be explained "by our surreptitiously putting into the river a witness of its course. . . . Time is . . . not an actual succession that I am content to record. It arises from *my* relation to things."[13] This passage is a touchstone for Eliasson, whose work demands a body—one that needn't know theory to build knowledge from an unexpected encounter with the color green in a river. The discussion that both Eliasson and Klein crave (*notoriety* is the negative term for this kind of cultural capital) is what unifies their practices as forms of knowledge production, in which the artwork is an instigator of information, put into circulation in the sociocultural field.

Unlike Klein, however, Eliasson hopes to displace (but definitely not do away with) conceptualization. Many works announce their antidiscursive, anticonceptual intentions (*The blue window that never thinks*, 2000), prompting fleshy thought that may begin "mute," confused, or ecstatic. Eliasson's yearning for embodied reception is scripted in the second-person pronominal shifter in many of his titles (*Your foresight endured*, 1996; *Your sun machine*, 1997; *Your inverted veto*, 1998; or, in the current San Francisco Museum of Modern Art survey catalogue, *Take your time: Olafur Eliasson*). Clearly a nod to '80s postmodernism (particularly Barbara Kruger's confrontational pronouns), this interlocutory style is linked by Eliasson to ethical philosophy (e.g., Jean-Luc Nancy's *Being Singular Plural* [1996]). In the artist's words:

> To sustain an idea of the public, a sense of the collective, would be diametrically opposed to individuality and would sustain instead an idea of *individualities*. . . . I say this as an individual, but I also say this as a company owner . . . this can be said for the way you run a factory also.[14]

Thus, where Kruger's pronouns emphasize difference, Eliasson dreams of a volitional community, mining English for the unique ambiguity between a singular "you" and a collective "You" that might eventually form. This "You" is not universal but aggregative—an assembly of differences that must be negotiated in time and in space. In other words, postmodernism's dismantling of a false universalism does not prohibit the collective subject from reassembling *during the experience of an encounter*. This is central to the relational work of knowledge production—as in the public's reception of *The Weather Project*, 2003, at Tate Modern. Rather than pass through the voluminous space of the Turbine Hall, visitors lay on the floor (sometimes for the better part of an hour), lolling on the concrete beach created by Eliasson's simple solar illusion (mirror film, a disk of thin plastic, a mist machine, and monochrome yellow lights). The singular "you" became a collaborative "You," as individuals (former strangers?) negotiated to link themselves into complex figures—in one case, forming backward letters that would spell "Fuck Bush" in the ceiling mirror for all to see.

The status of Eliasson's "You" is suggestive for the server/user mode I want to emphasize here. Of course there are all types of knowledge production (and parallel forms of ignorance production perfected by the US media and scary creationist blogs). But it is Scandinavian socialism that drives the artist's hope that his works might have "socializing potential." Add to this the technological utopianism encouraged by his work with visionary Icelandic architect, amateur mathematician, and Bucky Fuller acolyte Einar Thorsteinn, and you have the charismatic ingredients necessary to hold "team Eliasson" together.[15] As the artist says, his staff "supplement rather than replicate" his functions, generating a "studio as *Wunderkammer*" where it is exactly what is most foreign that is brought near. The *Wunderkammer* trope plays out in his constantly evolving *Modelroom* (the studio fragment at the heart of the Eliasson retrospective now in San Francisco), which reveals Eliasson's interest in the trading zones among art, architecture, mathematics, engineering, and physics.[16]

Fullfilling the artist's self-professed "desperate" need to engage with the world, Studio Eliasson is many things. It is roughly thirty employees; it is a two-and-a-half-floor, 15,000-square-foot former train depot behind Berlin's Hamburger Bahnhof; it is a corporation, a factory, and a dynamic knowledge-production machine (as the etymology of *studio* still wants). This hub of activity has recently garnered much attention (the current article being no exception). It was featured in last year's *New Yorker* profile of Eliasson, in the June 2007 *Art + Auction*, and in a hefty Taschen volume (*Studio Eliasson*), and it is central to a stream of publications forthcoming from the studio itself, such as *TYT* magazine (an acronym for "Take Your Time," pronounced in German as "Teut"). Eliasson's studio emphasis strategically underlines the increasingly marketable physical objects with their shadow in research. Allowing the artist to be manifestly generous, self-deprecating, and collaborative, Studio Eliasson also leaves him intact as the central point through which all information must pass, proclaiming, *We are producers of knowledge, not (just) objects.*

Addressing the "Dear Visitors" directly in a wall label at Kunsthaus Bregenz in Austria in 2001,

PRODUCTION NOTES

Katharina Fritsch

WHEN I STARTED studying art in Düsseldorf at the end of the 1970s, I wanted to transform myself into a small manufacturing company. Many of my fellow students were shocked when I announced that I wanted to print pictures and mass-produce sculptures and sell the resulting works in large numbers. The inspiration came from my grandfathers—one of whom was a salesman for a chocolate factory; the other, of pencils—as well as from Joseph Beuys and his multiples, along with Fritz Schwegler, Gerhard Richter, and Sigmar Polke, who were all suspicious of egomaniacal art that claimed to express artistic genius. Also, at the time I was financing my studies with a job in a factory, which was another major inspiration.

In fact, my studio does seem to have become a kind of company, where over the past twenty-five years many series of three- and, more recently, two-dimensional artworks have been manufactured—partly with the help of industrial suppliers but also often made by my assistants by hand. In such a situation, it is important to avoid becoming a market-driven, calculating, cynical money machine. The art produced has to be good art, and that still has something to do with the poetic existence of the artist. Like the products I make, the idea of the company should tread the fine line between image and reality. □

Left: **Assembly of *360° Room for all colors*, 2002, Studio Olafur Eliasson, May 2006.** Right: **Assembly of *One-Way color tunnel*, 2007, Studio Olafur Eliasson, June 2007.** Inset, below: **Chris Burden, *Curve Bridge*, 2003,** stainless steel reproduction Mysto Type I Erector parts and wood base. Installation view, Gagosian Gallery, Beverly Hills, CA. Photo: Douglas M. Parker.

Eliasson stated, "In fact I did not make anything in this show—I only decided what should be a part of the show and what shouldn't."[17] The studio is central to this dynamic, defying standard fantasies of solitary creation with the complexities of production one might have seen during the baroque: master geometers projecting coordinates for a ceiling painting, woodworkers crafting moldings, sculptural technicians producing casts of putti, lowly assistants grinding pigment, and patrons putting in their two cents about emblems and iconography. The baroque artist was only as good as the team he had assembled, but effective in the given economy only if an "Andrea Pozzo" (for example) could still be the contractual result.

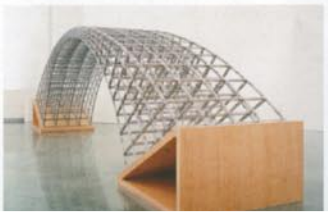
Studio Eliasson is both less and more than that baroque model might suggest. Less, because once a prototype is produced or a design completed, outside fabrication can be used to extend operations to steelworkers in southern Germany or carpenters in Switzerland. More, because the studio itself incorporates wildly disparate forms of expertise: digital parametric draftsmen, lighting technicians, architects, an archivist, a documentarian, cooks, babysitters. But if the current setup seems extraordinary, it will be surpassed by the expansion planned for January 2008. Taking over a former brewery in Berlin's Prenzlauerberg neighborhood, Eliasson plans to clarify functions that now overlap in the crowded site on Invalidenstrasse. The "ground"—in both senses—will remain the workshop, where thinking becomes doing. The floor above will have offices, with areas designated for archives, meeting rooms, and architects' desks (currently in a warren upstairs from the offices). On beyond zebra, Eliasson has visionary plans (if funds, negotiations with a Berlin-based art school, and zoning regulators allow): an entire floor for working with students and outside researchers, and perhaps a rooftop apartment for the artist's family.[18]

Studio Eliasson is thus more than a stage for propelling objects into the world; it *is* a world, providing all the artist needs to complete himself. He has remarked of his employees, "They represent me and all of not-me." Of this group (its ranks increased by temporary workers as needed), roughly a third are skilled fabricators (carpenters, welders, electricians), a third are architects and designers, and a third are discourse workers (trained art historians, an archivist, a secretary). The knowledge factory is clearly productive, yet the "laboratory" function insulates and buffers it from the booms and busts of the art market. Huge commissions (like a recent one from BMW) are so open-ended that designs in progress can often be adapted; "failures" are grist for future milling. The laboratory mentality also inoculates Eliasson and his coworkers against formalization in the white cube: "For of course we need a sort of bank of resources, a laboratory where we create some of the questions we are trying to answer in the institutional systems." Knowledge is thus resource *and* product, sustaining the collective's belief that theirs is a "flat" organization, antihierarchical in its distribution of labor, and permeable to restless streams of intelligence from all its players. (When I mentioned to one assistant that her reading material was cropping up in Eliasson's discussions, she said gravely,

PRODUCTION NOTES

Chris Burden

IN 1998 I built a thirty-foot-long model of New York's Hell Gate Bridge out of vintage Mysto Type 1 Erector parts. One of the parts I used, which I found to be extremely beautiful, was produced between 1913 and 1923. To make the bridge, I purchased so many of these parts that they became scarce in the Erector collector's market and their price started to escalate dramatically. Because the part is stamped out of mild steel, it is very susceptible to moisture and corrosion, so in 2001 I collaborated with Fred Hoffman Fine Art to fabricate dies to stamp out a replica of the part in stainless steel. I produced a series of bridges with these stainless steel parts, the most spectacular being *Curved Bridge*, 2003, which is thirty feet long and stretches the physical limits of the Erector building system. I am currently building a sixty-five-foot-high skyscraper with this same specialized part. The skyscraper will consume approximately one million parts and will take a staff of twenty-five people thirteen months to build. For the skyscraper and the bridges I do my own intuitive engineering. The stainless steel is milled in the United States; the stamping and electro-polishing are done in Los Angeles County; and the sculptures are assembled in my studio—also in LA County—under my direct supervision. □



Left: Olafur Eliasson and Kjetil Thorsen, Serpentine Gallery Pavilion, 2007, London. Right: Olafur Eliasson and Kjetil Thorsen's Serpentine Gallery Pavilion in fabrication, Stemwede, Germany, July 2007.

"It goes both ways.") Given the compelling nature of this laboratory model, the world of Studio Eliasson needs to be further parsed. It *is* a world, but it is just *a* world. The artist knows that it means little unless he can insert the "laboratory" function back into the white cube, making an aggressive incision into the institutional fabric of complacency and completeness.

Does it work? That is the ongoing question, perpetually adding itself to Eliasson's research agenda. If we describe this studio as I think we must, as a dynamic aggregate of flows and productions (informational, material, economic), then our own mental model needs to imagine a four-dimensional object in space-time. The various exhibitions, installations, and publications are mere slices of that object (n-1 dimensional representations). Studio Eliasson needs a public interface. Financially, two-thirds of studio funds come from public commissions. But the artist also continues to make those frozen time-slices of research ("exhibitions") because experience thickens in the flesh of viewers. Per Eliasson: "I need the world. When the institution is not around, I'm not afraid of running out of ideas or places to work. . . . I need to be a part of society, that's it, and I need to see myself in some relational aspect to society." Who knew people would lie down at the Tate? Or that visitors to his show in Paris would trace wormlike paths through the lava on the gallery floor? No one reckoned that the ice he had installed for the São Paulo Bienal would generate such enthusiasm that it would have to be roped off in a special area, or that depressions would form where people had been sitting to cool themselves off. "There was this whole getting-to-know ice. In a sense we know, but physically we don't."[19] The installations are invitations, and guests will behave—but not necessarily as anyone thought.

Attempting to counter spectacle with interpretation, the Eliassonian tropes of the revealed power cord, the raw spotlight, the visibly plywood platform, and the ungainly tripod produce knowledge that unmasks illusion.

Eliasson's invocation of the laboratory is aimed at the art world—an attempt to buffer the machinic phylum's associations with commerce and trickery. Referring to his spring 2006 Tanya Bonakdar Gallery installation *Your negotiable panorama* (which a viewer described as "a 360-degree horizon line reflected from a pool . . . concentrated into the undulating line of light on the wall, and on the spectators surrounding the pool"[20]), Eliasson remarked: "A show like this comes out of the laboratory. It's not about foil and water. It's about how we feel about those things. The pool is a machine that can produce a phenomenon." The machine needs bodies and feelings to navigate the slippery slope between a stimulus-construction and an architectural folly—"I'm very aware that it can come close to being a setup."[21]

Crucial to this navigation are the discourse workers, chief among them the artist himself. Interviews, titles, publications, wall labels, and the titles' "you"s provide constant reminders of durational experience, sensing, and the dismantling of sensation. They demand something from the viewer. Sure, we might see a strobe-illuminated fountain turning up on Chicago's Navy Pier (not to mention the city's annual "Green River" for Saint Patrick's Day), but it won't have Eliasson's interpretive apparatus, or the hard-won ethical frame. It's a risky operation, since the moving edge of knowledge production can quickly turn materialized ideas into kitsch or decoration—particularly for an artist who literally works with smoke and mirrors, or ravishingly beautiful refractive colored glass. Eliasson remarks:

> The real thing is to be more inclusive and less exclusive. The neo-exclusivity . . . which essentially puts us into some purified universalistic idea about what it really means to actually look at a Matisse painting is counterproductive to what I think can be quite liberating in my work. What is the socializing potential of having a moss wall, for example?

Well, it depends on whether the moss wall is a pioneering 1994 installation by Eliasson at the Cologne art fair, or just a clever backdrop set up for a display of antiques in a Paris shop (where I saw a "moss wall" in 2006). The "expectation threshold" *changes*.

Attempting to counter spectacle with interpretation, the Eliassonian tropes of the revealed power cord, the raw spotlight, the visibly plywood platform, and the ungainly tripod (all signifiers of the laboratory's rough-and-ready equipment) produce knowledge that unmasks illusion. Yet wonder must be allowed (as the germ of curiosity); leisure permitted (as the font of contemplation); beauty possible (as the seduction into knowing). Eliasson's burden is to locate these feelings in the culture-laden body of a viewer, rather than in Kantian universals: "The first challenge is to embrace . . . the kind of stored production of reality that this viewer always carries with him." (Such a piece is *Beauty*, 1993,

which creates a hovering rainbow from the "dumb" technologies of a mist machine and a spotlight. As viewers move, they can realize that all rainbows—all beauty—live only in the eye of each beholder.) The artist contends: "Exposing the representational layer sort of clears the experience and makes it possible for us to see our self seeing—or knowing that we are seeing and seeing that we know. In this way our knowledge of the representation is used to . . . deconstruct the sample and replay it."[22]

Eliasson struggles against the collapse of his work into formalism (lubricant for cultural capitalization), as when he met with his design team last July to work through the lighting plans for his temporary pavilion at the Serpentine Gallery in London, developed with Norwegian architect Kjetil Thorsen. The project was set to open the following month, and the lighting had to be resolved in a matter of hours. There were three areas in question: the spiral walkway, the structure's exterior, and the interior's central stage. The core value was simplicity (given budget and time constraints, judgments of "too complicated" ruled out many an option). But a productive friction also operated between architectural desires for seamlessness and the artist's insistence on "exposing the representational layer." Killing phrases included "too arty," "too sexy," "too kitschy," "too fussy," and, of course, "too complicated." In the most anxious space of illusion, the pavilion's theater, Eliasson convinced the architects (who needed convincing) that the best solution was to purchase off-the-rack tripods (just like one being used in the studio) for mounting recycled *Moonlight*s from a previous show. The mounting of the formerly hanging fixture would work to dissolve the theater's "fourth wall" in ambient light, and, more important, it would reference the studio. The team's work-flow manager murmured that they would need to change the *Moonlight* "to look a little different," but Eliasson seemed unconcerned. *Re*cycling (or "adaptive reuse" as designers would say) is intimately connected to *re*search—stoking the flow by converting one project's prototype into another's handy resources. The pragmatic desire is to foreground the pavilion's program of experiments, marathon lectures, and concerts that team Eliasson is also working hard to complete.

Eliasson describes the community of workers he has gathered as a "psychographic anatomy"—a body whose various desires need to be negotiated. "I profit from their uncertainty," he says of his skilled design team: "Everybody is slightly hesitant about whether the consequences of the choice I'm about to make are foreseeable. That can be very productive . . . in the artistic context of having acknowledged that what we work on are prototypes and models, constructions of reality. Which essentially are *real*." Commerce requires invariance and replication; Eliasson's practice aims to locate a given effect more unpredictably, in the monad of the percipient. There's nothing "scientific" in the gathering of data from such targets. For in contrast to the normative body science builds, Eliasson wants embodied interpretation in specific platforms that may not prove to be transferable at all.[23]

The server/user mode locates production in local knowledge, massively distributed. The contemporary obsession with experience or "relation" is empty, without attention to the murmur of uncertainty, doubt, confusion, information, and reorientation by which the body summons its representations of the world (its self). This is how "an Eliasson" can best be understood. It is not enough to have installed a strip of LED lights at standard viewing height in a black box at the 2005 Venice Biennale (*Your black horizon*). Wall labels, Web chat, exhibition catalogues, press coverage, and word of mouth are part of production, informing viewers that the LEDs waxed and waned as a function of photon levels emitted by the city of Venice from dawn to dusk, data compressed and transmitted into a repeating twelve-minute cycle. Suddenly this folly's seemingly pure phenomenology is entrained in a larger discourse about energy consumption and urbanism. We even wonder about the algorithm. (Is all the data compressed temporally, so that an hour's light becomes a minute's? Or is it a stochastic sampling of particular minutes within the hour?) *Your black horizon* may even begin worming its way into a darker space of anxiety about a global future without oil, an "event horizon" of black nights, a future catching up with us faster than we would like. Similarly, *The Weather Project* may eventually take more of its meaning from the city outside the Tate's Turbine Hall than it did from the "beach" below, as the industrial pollution that once produced London's famous fog is reinterpreted as the culturally produced "weather" of our global climate.

Studio Eliasson pursues multiple modes of production—outsourcing, collaborating, prototyping, fabricating, experimenting, representing, exhibiting, publishing—all of which fuse at the level of knowledge production. Like the communities of servers and users being established in contemporary scientific practice, these artistic experiments are dispersed social-technical-spatial entities in which no single author holds priority on the production of knowledge or power over its distribution.[24] We can see in all this the harbinger of larger shifts, in which the dispersal of contemporary knowledge production offers considerable freedom to form local subjects and volitional collectives. Makers become nodes in a net; takers are just other nodes generating further meanings. The studio is a model, but of a larger world of servers and users. Its imagined dominance cedes to the ones who imagine, and the "user function" may be what we need to think about next. □

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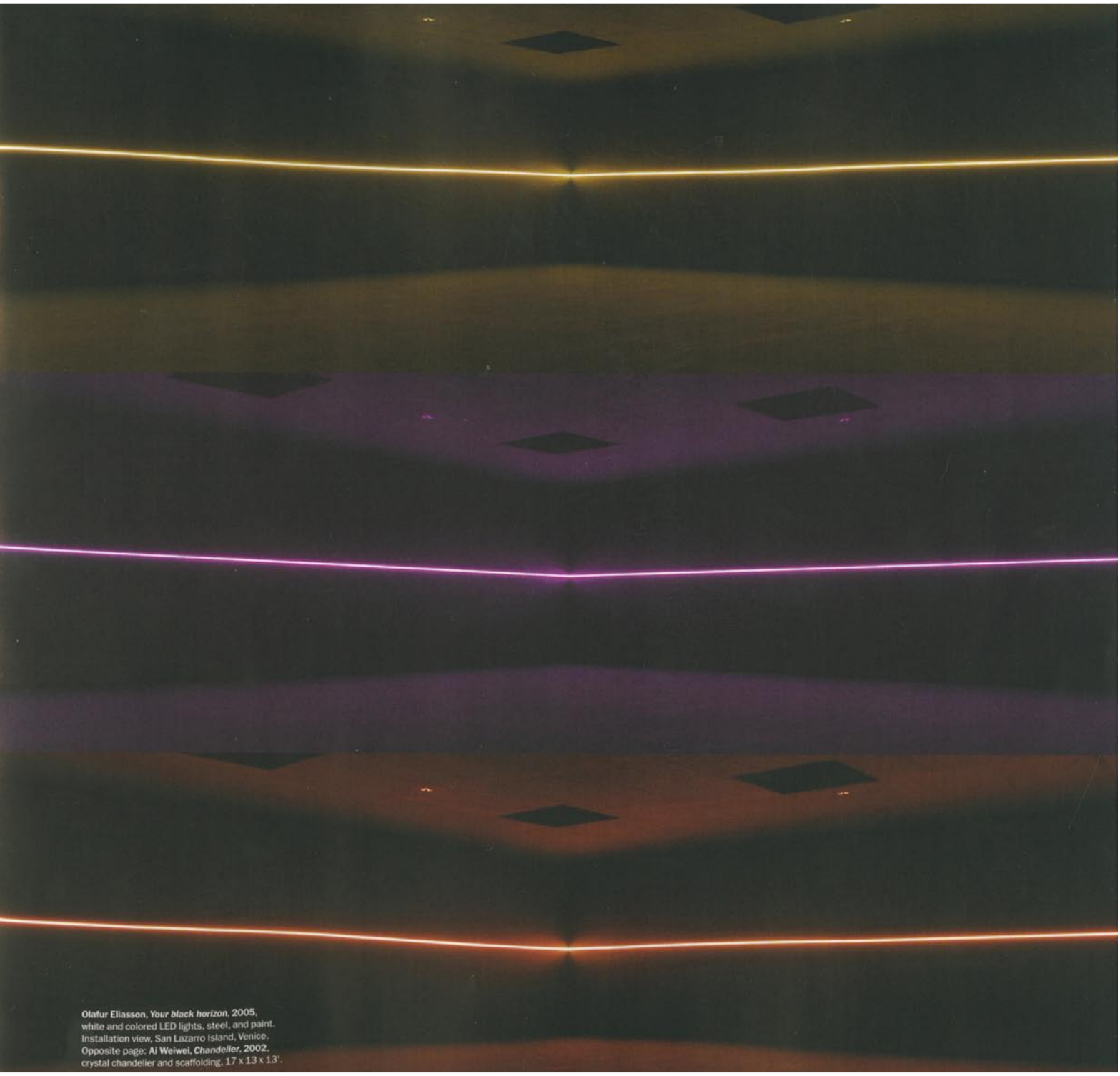
PRODUCTION NOTES

Ai Weiwei

AN ARTWORK CONSISTS of the formulation of an idea, which has generally been materialized as a painting, a sculpture, a video, a text, or some such that conveys the message to the viewer. Today, an artist's conception of a work is more intimately related to mass production and to industrial and scientific developments, so that the method of making a work not only conveys the concept but is itself a part of it.

In my own practice, I always think of an artwork not just as the final product but also as the whole process of how it was developed and handled along the way. The people who are involved in making a work contribute to its character. Materials, labor, and financial aspects also strongly influence a work and add meaning to it. In that sense, a new method or technology for making things opens up not only practical possibilities but also new modes of expression and understanding.

Traditionally the artist was a kind of craftsman, but this is no longer necessary. Now the artist acts more as someone who comes up with an idea, directs the production of a work, and makes judgments. Such an approach to artmaking frees the artist from having to master particular skills and introduces novel materials and techniques—along with the meanings behind them—into the so-called art world. This points to a radical change in the condition of both art and artists. As a consequence, artists have to learn how to express their ideas through the process rather than through the skills that create a particular result. □



Olafur Eliasson, *Your black horizon*, 2005, white and colored LED lights, steel, and paint. Installation view, San Lazarro Island, Venice. Opposite page: **Ai Weiwei**, *Chandelier*, 2002, crystal chandelier and scaffolding, 17 x 13 x 13'.