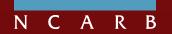




# What is IDP?

The Intern Development Program (IDP) was developed to ensure that interns received the appropriate experience needed to competently practice architecture.

Completion of the program is necessary in order to fulfill each state's experience requirement to become a licensed architect. If you don't know what IDP is, you can find out more by going to the NCARB web site at www. ncarb.org. There you can download the *IDP Guidelines* to learn about this important requirement in your path to licensure, and read the *IDP e-News* at http://www.ncarb.org/idp/enews/index.html to keep up to date with the latest program developments.



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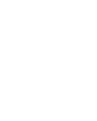
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## Reviews

**Comments** 

**Features** 

**Projects** 

64 Last Word: "The Profanation of Solitude"

# 

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# ARCHITECTS WITHOUT ARCHITECTURE

In his 1964 MoMA exhibition/book Architecture without Architects, Bernard Rudofsky cataloged centuries of vernacular buildings "produced not by specialists but by the spontaneous and continuing activity of a whole people." Architecture, as both a profession and an institution, was being condemned as inwardlyfocused, self-interested and elitist. Similar sentiments followed, from Hans Hollein ("Everyone is an architect. Everything is architecture.") and Peter Cook ("The prepackaged frozen lunch is more important than Palladio."), among others.

Whereas Rudofsky was asking whether architecture needed architects (it did not), this issue asks, fundamentally, whether architects need architecture. And if architects do not need architecture, what do they need? Some would argue that they need little more than a problem to solve. In that case, disciplinary anxiety over what architecture is or can be becomes secondary to the training and thought processes that are specific to the discipline.

As Fred Scharmen points out, defending architecture as "belonging" to architects is problematic, given the term has been hijacked and there is no going back. Google searches result more often in computer science babble than with anything that relates to buildings. But that is the point; architects do not need architecture to be theirs. If anything, the power of the architect is expanded as the definition is broadened,

even as the training remains, by and large, the same. Hollein was half-right, half-wrong; everything may be architecture, but not everyone is an architect. Architects can look around and identify architectural problems; not everyone can.

But within architecture, the fallout from the Sixties is everywhere, having created various schisms or "camps" that quite often mirror the cliché dialectics that have plagued the discipline for too long ("Form versus function, not again!," Ole Bouman laments). The dots are not always so easy to connect, but at some level the debate is reduced to questions of priorities and ethics, which can be divisive, particularly when considered out of context. What is preferable is a general acceptance of what architects can do, not what they need to do.

The rise of information technologies over the past few decades has significantly decentralized the power traditionally held by governments, corporations, professional organizations, and cultural gatekeepers. Blogging has challenged the newspaper, cheap video cameras and YouTube have challenged Hollywood, and open-source programs have challenged the big software companies of the world. None of this is news, but the impact of these shifts in the relationship between producers and consumers is just beginning to be understood. Architecture, lying at that junction of production and consumption, can only hold out for so long. **C** 

# ZACHARY R. HEINEMAN

2009-2011 Editor-in-Chief



# PRUJECIS

# projects

# RE-SCHEMING PYRAMID SCHEMING

"The reputation of all of the people who were the architects of this war is shot." -Cokie Roberts

Use of the word "architect" as a metaphor will forever be indifferent to the National Council of Architectural Registration Boards' efforts to protect the professional title. Anyone in the business of designing buildings who has done a job search has experienced the frustration of finding their results clogged with calls for "Software Architects," "Information Architects," and "Systems Architects."

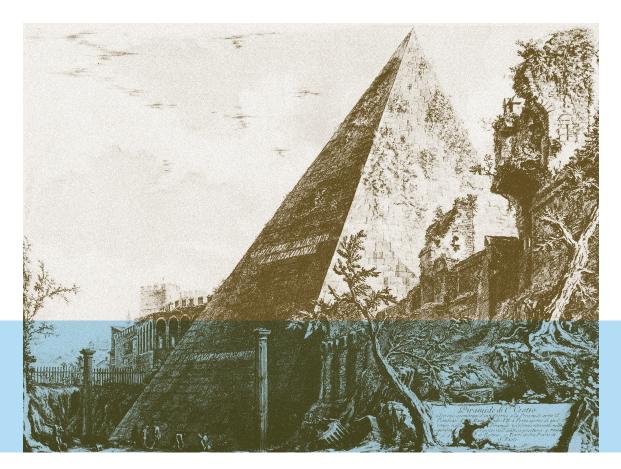
Dick Cheney, Karl Rove, Paul Wolfowitz, and others have all been called "the architects of the Iraq War." *USA Today* has referred to Ponzi schemer/scammer Bernard Madoff as an architect. In the cultural imagination, architects do not just design pyramids, they design pyramid schemes. What's an evil super-villain without plans?

The word has come to be used to describe anyone who is engaged in the long-term organization and production of singular, constructed output, whether that output is a building, a website, or a war (or, as in the case of The Architect from *The Matrix* trilogy of films, an entire simulated exploitive reality). Architects, now finding themselves with fewer and fewer actual buildings to design, have the opportunity to move beyond their annoyance at this re-appropriation of a regulated and difficult-to-earn professional title. The use of the word to describe malevolent power-hungry masterminds is a clue to the kinds of things we should be doing: taking better control over our agency as political actors.

Architects have been engaged in political processes at least since the time of Thomas Jefferson, who wrote, "Design activity and political thought are indivisible." To track politics is to track the planning, zoning, and funding channels that shape projects. Politics provides a context which it is at least as influential as the physical environment in which buildings exist.

In some respects, architects already use political means on a daily basis, as facilitators and community organizers. Before a project's outcome is tested at 1:1 scale in the real world, its viability is tested again and again on a different site—the conference table. All politics is local. At every meeting, the architect carries the responsibility of advocacy for the non-existent object. While listening and learning from all the constituents—clients, consultants, users, culture, material, climate—the architect must also facilitate and maintain the group consensus long enough to create something at the end of the process.

This is the key to the hijacking of the term architect by other professions, and also the reason why its use in an expanded sense can be recaptured to the benefit of our own discipline. People working in software and interactivity realize that the best models for making things at a certain scale and complexity are found within architecture. No other field needs to wrangle so much diverse input, and few others have consistently made output with so much potential long-term cultural influence. We can cede the use of the word to describe a general method of working and making, as long as we make sure that method stays true to the values and techniques that have made our own best work so impactful.



### FRED SCHARMEN

Scharmen is a cofounder of D:center Baltimore and works for Ziger/Snead Architects. He received a BS in Architecture from the University of Maryland and an MArch from Yale School of Architecture.

Image: Pyramid of Cestius by Piranesi, courtesy of Wikimedia Commons.

Once we have defined architecture as a method, we can start to ask questions of other disciplines to find out if the method is applicable. A preliminary set of questions would include: Are you self-critical? Do you have a coherent set of ideas that parallels production and allows you to talk about why you make certain choices? Are you able to position those ideas relative to the ideas of other peers and define a space for conversation or debate? Is the task large enough that it requires a division of labor, a split between concept and execution, and the continuous maintenance of evolving consensus between multiple stakeholders? Do you contribute to the public realm? Do you add more to the solution of a problem than the simple fulfillment of the brief?

Self-awareness, theory, discourse, community, and surplus—these are the things that the discipline of architecture has to offer other fields that make things. These are also the skill sets that those trained as architects can bring with them as they move into other jobs. Just as journalists are asking themselves about the essential nature of writing and publishing, now that the older models for making money in those professions have become destabilized, we architects have the opportunity to reorient and reprioritize our own work. When architecture is seen as an act of cultural production through political means, we have a chance to renew the possibilities of our profession and our training, and use our schemes for good instead of evil. **C** 

# **CUMINENIS**

comments

# YOU DON'T NEED AN ARCHITECT TO KNOW WHICH WAY THE WIND BLOWS...

In bold white on black, the title alone, *Architecture Without Architects*, was explicit in its implications. Bernard Rudofsky's "short introduction to non-pedigree architecture" was not another patronizing tour of global exoticness. As a step in Rudofsky's lifelong tirade against Euro-centric design culture, it demonstrated that contrary to Western convention, architecture flourished beyond the institutions of architecture. While architecture was customarily defined within the realms of architect-design villas, skyscrapers, cathedrals and palazzi, vernacular architecture was something inevitable, arising from the needs and cultures of people.

The 1964 publication reflected the emerging zeitgeist set on breaking down race, class and cultural boundaries and the institutions that upheld them. While mass revolt raged in China, Cuba and against American forces in Vietnam, the Western revolutionary movements struggled to realize their ideals at home. After years of protest and debate with dissatisfying results, many wanted to establish methods that cut through symbolic opposition and activated real social change. Yet even those who took up bombs and arms soon realized the elusive nature of real effect: the Weathermen's attempt to destroy the Pentagon with bombs was not unlike the Yippies' attempt to levitate it with vibes alone—both expressed disapproval against what the building stood for and an inability to materialize that disapproval effectively. While the Weathermen continued to carry out what they understood as "symbolic acts of extreme vandalism directed at *monuments* to war and racism," the keys to ending war and racism remained elusive and still do.

After decades of theory-heavy methods that used architecture as an expressive vessel for figurative meaning and suggestion, many contemporary architects similarly struggle for methods that realize radical social change. In recent years there has been a rapid growth in the number of organizations, university programs, publications and practitioners working toward an architecture of activism, seen as effective in directly addressing the ills of the world. As architects and architecture students focus on the problems of displaced, disadvantaged and "common" people, humanitarian concerns are increasingly being framed in architectural terms: social housing, disaster relief, sustainability and infrastructure.

Yet in answering this call to arms, whose call is being answered?

The non-architects praised by Rudofsky are now the full-fledged discontents of globalization, their local economies, way of life and culture wrecked by the effects of our exported free-market economy. Is a well-designed structure of repurposed PVC pipes and pallets really a direct response?

In the current model of architecture as activism, the challenges of design are too often seen as being interchangeable for the larger challenges of our time, making the decipherable solutions of the first act as stand-ins to the incomprehensible latter. In order to more realistically address those challenges, a more critical dialog and responsive methods are needed. Although architects can design for democratic processes, community building and empowerment of the disadvantaged, this is purely gestural and suggestive. Conversely, the pre-occupation solely with action and implementation follows paths that lead to easy moves rather than real change. As Slavoj Zizek frantically warned on *Democracy Now*: "Don't get caught into a fake discourse of humanitarian emergency."<sup>1</sup>

The current model of "do-gooder" architecture exemplifies this trap. Working from a simplified state of emergency, it not only fails to directly address the larger problems, but actually maintains them. In making it every citizen's responsibility to help the disadvantaged, it does not call out those accountable for creating the disadvantages. In making poverty and powerlessness more comfortable, it disregards the worsening imbalance of wealth and power. It simplifies complex problems so that feel-good goals are achievable. Disillusioned and critical reactions are kept at bay, perpetuating a constant state of spring cleaning. Busied by the continual symptoms, there is no time to consider the cause. As humanitarian aid programs are often the friendly bolsters of NAFTA, the World Bank, the IMF and the military, humanitarian aid workers have to consider what they inadvertently perpetuate.

Foremost, we must consider how we, as architects, might further the hierarchical system with our valiant attempts to usurp it. Often, the mentality and the role of the architects in humanitarian projects mimic the kind of power structures their designs supposedly discourage. As a head architect of Snohetta proclaimed while lecturing about their charitable projects: "As architects, we are mediators of democracy...and this was our payback to the community...they get to design with us."<sup>2</sup> These prized and flaunted benevolent projects all-too-often serve as thinly-veiled self-elevation.

In the end, the majority of activist architecture seems geared towards guaranteeing the architect's relevancy and possession of architecture, but, as it has been clearly pointed out, architecture is simply not ours to share. In the division of labor, architects have always enjoyed a standing of respect and worth; as this is due less and less to technical necessity, there is a growing dependence on social and conceptual merit. As reflected by the newly green-washed grocery aisles and Rudofsky's bold statement, we recognize the necessity of re-designs that postpone our expiration date. And rightfully so! If we do not step outside of mis-conceived institutions and ill-conceived methods, architecture will continue on without us as it always has. **C** 

### **MELISSA J. FROST**

Frost has a BS in architecture from the University of Pennsylvania and works for Snarkitecture in Brooklyn, NY.

# Image: Courtesy of the author

 Interview with Amy Goodman, 12 May 2008 (http://www. democracynow.org/2008/5/12/ world\_renowned\_philosopher\_ slavoj\_zizek\_on).
 Craig Dykers, Guggenheim Museum roundtable, 19 January 2010.





# OLE BOUMAN: ON SURVIVAL

Ole Bouman is the director of the Netherlands Architecture Institute (NAI) and contributing editor to *Volume*, a journal produced by the Archis Foundation, AMO (the research division of OMA) and the Graduate School of Architecture, Planning and Preservation of Columbia University (GSAPP). He is co-author of *The Invisible in Architecture* (1994), *RealSpace in QuickTimes* (1996), and *Architecture* of Consequence (2010). He has curated exhibitions for the Milan Triennale, Manifesta 3, and Museum Boijmans Van Beuningen. His articles have been published in *The Independent, Artforum, De Gids, Domus, Harvard Design Review, El Croquis, Arquitectura & Viva, Proiekt Russia* and elsewhere. He taught a studio at MIT in 2007 on "Unsolicited" architecture.

**Orhan Ayyüce:** What if I said that architecture was obsolete, unable to match the current complexities of mass public, economics, politics, conflicts and power? That, having become increasingly complacent and heavily produced by and for the upper class of the society (in the exaggerated sense of lvy League schools, corporate paychecks and boutique offices), it is an expensive product that only survives by following the money. And that, being pedictably occupied with ways of feeding its own development, it has turned unabashedly toward do-gooder positivism and has become a mouthpiece for conservative liberalism.

**Ole Bouman**: If the elite does not take on its social responsibilities, than the elite is not an elite. If you give yourself a bonus for failure, the end is always near. The worst thing that could happen to architecture (as with any cultural endeavor) is that it would be too widely associated not with wealth, but with greed. It would then, for the majority of people, soon lose its legitimacy.

Greed is the obsession with wealth, so excessive it becomes obscene. Architecture becoming obsessed with itself is not a good sign of health. People easily bash it by calling it architect's architecture, a collector's item for vain clients with large pocketbooks.

The second part of your question is more dangerous: You seem to be hinting at the risk of "do-gooderism" as a socially-accepted costume for the same obsession. It is easy to identify this fake moralism if you start to notice major shifts in peoples' position within the discipline. If someone made their career with disengaged postmodern theory or the production of iconic buildings for instance—doing little to situate creativity towards the common good—then a shift towards social responsibility or housing for the poor needs some additional scrutiny with respect to honesty. But if architecture needs to recalibrate its mission and discourse, then all talent is needed, even if it wakes up late.

**Ayyüce**: What about popular architectural media? Content and advertising are often hard to distinguish, and the desire to be published both feeds and contaminates architectural practice.

**Bouman**: If architectural media is facilitating a market, it tends to turn into a commodity. If it is simply covering what is done (info updates), how it is done (technical stories) or by whom (celebrity press), then it is purely derivative, a secondary economy of firsthand production. This is not particularly destructive to architecture, but is not productive either. Architecture needs a culture of speculation, reflexivity, and good storytelling. Architecture cannot thrive without the continued probing of its promise. I associate architecture with a world of ideas, of cultural analysis, historical backgrounds, psychological set ups, technological revolutions, social tendencies, and economical models. In *Architecture of Consequence*, I try to reconnect architecture with the burning issues of our time, to restore its relevance for society. Architecture, the lucid organization of space, is the pinnacle of human inventiveness. It deserves our best minds.

**Ayyüce:** Speaking of the best minds, I have been looking at photographs of Abu Dhabi's Happiness [Saadiyat] Island, a science-fictionally named, post-medieval, ultra-hyper-culture city, colonized by American and European art dealers and populated with the Louvre and Guggenheim. It is a form of speculative unilateral culture gentrification and marketing that is housed in venues designed by leading architects with medals. Can you dissect this for us? What is it?

Bouman: It is easy to dissect, but far more difficult to comprehend. Happiness Island is the perfect example of the current practice of "urbanism by speech", which starts with a story or an image and seduces people and capital to be spent on it. Instead of consolidating reality, this method creates it. Some see it as a fake operation of epic proportions, but I myself describe it as the ultimate social-historical gamble, not just sheer speculation. Something may go terribly wrong, but there is also a possibillity of rescuing current prosperity from almost certain collapse. We cannot judge it from the general perspective of the discipline. We need to understand it from the regional perspective in which global players are lured in. At some historical moments urban decency is not enough to move forward. The extremely rapid

urbanism in the Gulf is not the ultimate gentrification, but rather the only possible way to redeem that region from its geography (apparently by whatever means are necessary). This has never been done before in history, and if it succeeds, the results will be disastrous for the so-called West, which will start to realize that with all its thirst for oil, it has funded its own new competitors on the world stage. But if it fails, the accumulated fossil wealth of millions of years will be wasted on a *fata morgana* in only a few decades.

**Ayyüce:** With that in mind, what if somebody said "architecture is dead?"

**Bouman**: Architecture as our capacity to perfect shelter is never dead as long as we have a body in need of it. Architecture as our capacity to organize space wisely is not dead as long as we do something with that body. But yes, architecture as the art of expressing ourselves in built form may be comatose for a while, since now higher stakes are to be met. Architecture is much more resilient than other arts, because it serves all levels of Maslow's pyramid. Architecture has no successor. If architecture is dead, we are dead. It is indispensable. The issue is not whether it is dead or alive, but whether it lives up to the expectations of today.

### Ayyüce: So, what are the expectations then?

**Bouman**: We need architecture for more than self expression. Architecture, by definition, reflects the adventures of modernity. This will continue. But what is happening at the moment is the detachment of modernity from the forces that have driven it for 500 years: individualism and geography. Architecture, up

### **ORHAN AYYÜCE**

Ayyüce teaches at California Polytechnic State University Pomona and is a Senior Editor at Archinect.com.





until now an encounter between an individual architect and a place to build, will not be left untouched by this paradigm shift.

Of course you can understand examples like Happiness Island as the last stages of a disciplinary solipsism and hubris. But what interests me more is how they can be interpreted as examples of a modernity that has entirely lost its connection to geography. And there is, of course, a more general motive that needs to be taken into account. Think of Knossos, Chartres, Versailles, Magnitogorsk; you cannot deny humanity's quest for grandeur. We will always have lcarus; the goal is not to get rid of him but to have him fly in the right direction.

**Ayyüce**: You mentioned your recent book, *Architecture of Consequence*. Is the architecture discipline ready for a game change, and if so, what form will it take?

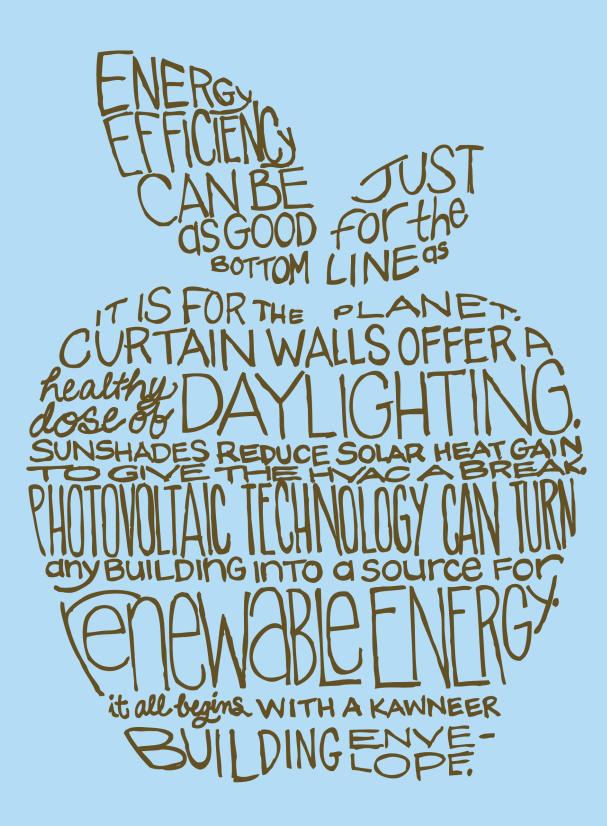
**Bouman**: Architecture of Consequence is about a transition from image to performance. Of course we have seen this kind of shift before. Perhaps it is the key antagonism that energizes architecture in modern times. Form versus function—oh no, not again. However, this time the antagonism cannot be resolved at the level of the building, by choosing to be formalist rather than functionalist or vice versa. Or to focus on facade over ground plan, etc. These dialectic oppositions have lost their appeal, as the urgencies architec-

ture needs to meet today are simply too big for that. And the time pressure to resolve those urgencies is simply too great to leave it to personal choice.

We are increasingly coming to realize that for far too long society has been privatizing gains and socializing losses, resulting in an intense crisis of the economic system. Humanity faces enormous challenges that, for many or for all, have become existential threats. Food chains are undermined, public health is at risk, energy is running out, living space has become cramped, the valuable time of our lives is slipping away, and social cohesion is in decline. We cannot deny these realities, nor avoiding coping with them.

And we need all the help we can get. In meeting these challenges no creative discipline, creative individual, or creative country can remain passive. And architecture has an even a more direct role to play. Since all these issues have strong spatial implications, architecture has a special obligation to help resolve them. There is a whole set of strategies and techniques to think about, all based on a strong will to resolve rather than to express. This the mindset of the shareware generation. To share space, time, services, materials, energy, public space and wealth. And, I am not talking about socialism here—I am talking about survival.

An unabridged version of this interview was first published on Archinect.com. **C** 



### Knowledge isn't just power; it's energy.

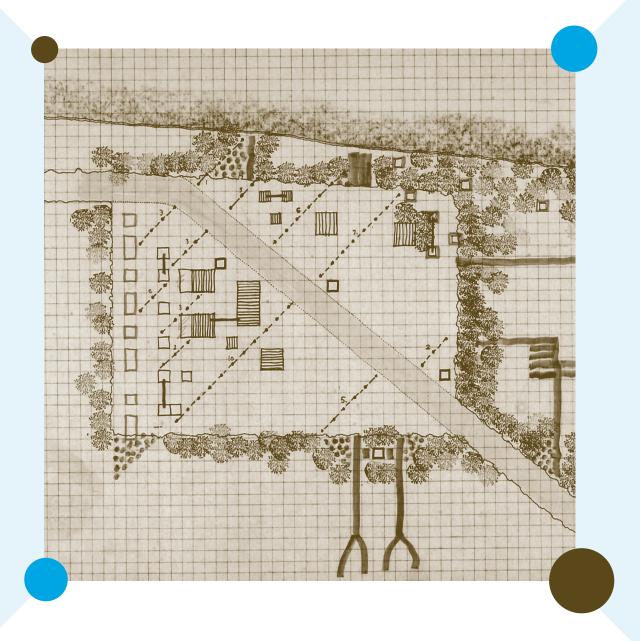
Kawneer's smart, healthy and secure solutions go beyond energy savings to meet the challenges of the institutional market and help you fulfill your sustainability objectives. By combining high-performance products with decision support from our Architectural Services Team and LEED planning tool, you won't have to worry about comparing apples to oranges. Together, we can energize institutional architecture.

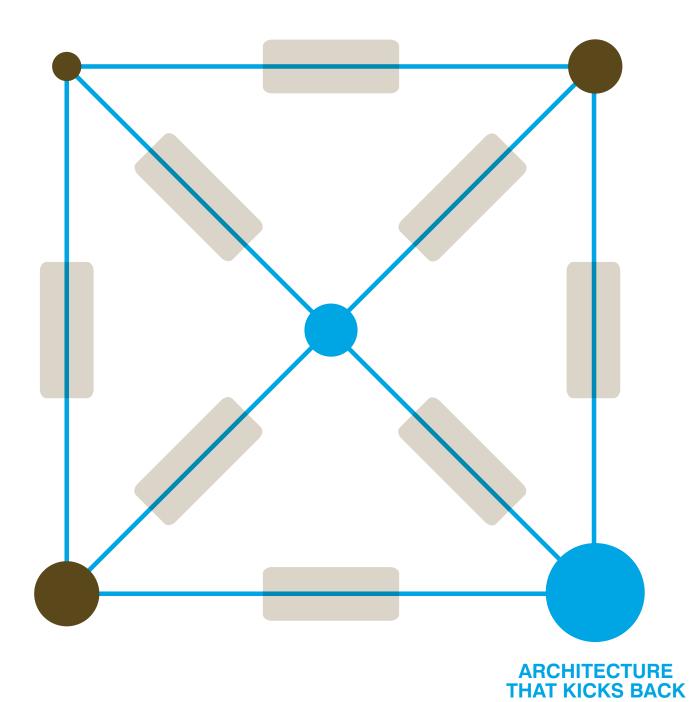
### EVERY DAY YOU MAKE A CHOICE. MAKE A CHOICE THAT COUNTS.

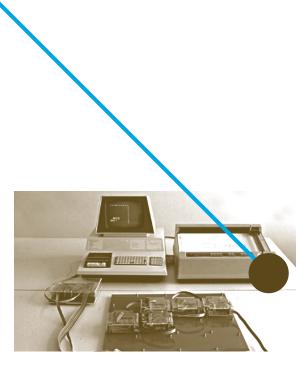
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# CEDRIC PRICE'S GENERATOR

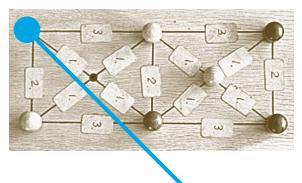
Cedric Price (1934-2003), the famously iconoclastic British architect, understood architecture as the means for setting conditions for interaction, as opposed to imposing the formal will of the designer. Famous for statements like, "Technology is the answer, but what was the question?" and for suggesting that architecture might not be the right solution to a problem-"Maybe you don't need a new house. Maybe you need to leave your wife."-Price questioned the very conditions and requirements of architecture.<sup>1</sup> He incorporated an array of interests into his work, including cybernetics, demolition, theater, politics, British history, the educational system and even cooking. Best known for the Fun Palace (1963-67), a collaboration with radical theater director Joan Littlewood, and the Potteries Thinkbelt, a mobile university on rails (1965), both unbuilt, and the completed Snowdon Aviary in the London Zoo (1960-63 with Frank Newby), Price maximized the ways for users to actualize themselves as they interacted with his architectural projects.

Generator (1976-79) sought to create conditions for shifting, changing personal interactions in a reconfigurable and responsive architectural project. It was to serve as a retreat and activity center for small groups of visitors (1 to 100) at the White Oak Plantation on the coastal Georgia-Florida border. Designed for Howard Gilman, the CEO of the Gilman Paper Company and a generous arts patron, it followed this open-ended brief: "A building which will not contradict, but enhance, the feeling of being in the middle of nowhere; has to be accessible to the public as well as to private guests; has to create a feeling of seclusion conducive to creative impulses, yet...accommodate audiences; has to respect the wildness of the environment while accommodating a grand piano; has to respect the continuity of the history of the place while being innovative."2

Price developed a scheme of 150 12' by 12' mobile, combinable cubes constructed with off-the-shelf infill panels, glazing and sliding glass doors. To this kit of parts, he added catwalks; screens and boardwalks, all of which could be moved by mobile crane as desired by users to support whatever activities they had in mind, whether public or private, serious or banal.

The initial arrangements for "Generator-menus," as he called them, would be determined through a set of programmatic research tools. Potential users of Generator listed all the activities they might want to do at the White Oak Plantation, such as reading, watching a film, picking one's nose, writing poetry, learning about history, going on a walk. They then rated the requirements for the activities they listed in terms of infrastructure, space, quietness and privacy. Finally, using a little handheld Three Peg Game, Price determined the first layouts for Generator. The rules for the game were simple: take turns with the other player in forming a line of three same-colored pegs, whether vertically, horizontally, or diagonally. The game, the requirements and the activity questionnaire created what he called menus: arrangements of Generator's cubes, screens and paths that would engage people in unexpected interactions with each other and with Generator as they used it.

The notion of changing the architecture of a retreat center, Price realized, would prove unfamiliar to Generator's visitors. He created roles for two people, "Polariser" (Barbara Jakobson, a trustee at the Museum of Modern Art who introduced Price to Gilman) and "Factor," (Wally Prince, the operations manager for Gilman's White Oak Plantation). They were to catalyze on-site interpersonal dynamics and logistical requirements. Polariser would encourage people to use Generator in novel ways and facilitate their interactions with each other; Factor would set into motion the desires of Generator's users onsite, operating the mobile crane to suit the menu and handling other human-to-site requirements.





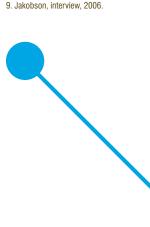
Conceptual sketch for Generator; colored pencil, graphite and ink on reprographic copy sheet; 21.6 x 30.6 cm; DR1995:0280:124

# MOLLY WRIGHT STEENSON

Steenson is currently in the PhD program at Princeton University School of Architecture and is the author of the Weblog Girlwonder.com.

Images from Cedric Price fonds, Collection Centre Canadien d'Architecture/ Canadian Centre for Architecture, Montréal.

1. Related by Barbara Jakobson ("Polariser"), interview by author, New York, November 29, 2006. 2. Paola Antonelli, "Interview with Pierre Apraxine," in The Changing of the Avant-Garde: Visionary Architectural Drawings from the Howard Gilman Collection, ed. Terence Riley (New York: Museum of Modern Art, 2002), 150. 3. John Frazer, Letter to Cedric Price (January 11, 1979), Generator document folio DR1995:0280:65 5/5. Cedric Price Archives (Montreal: Canadian Centre for Architecture). 4. Ibid. 5 Ibid 6. Ibid. 7 Ihid 8. Cedric Price, "PTb: Life-Conditioning," Architectural Design 36 (1966): 32; Antonelli, "Interview" 2002



Yet the human roles did not provide a great enough element of surprise, Price decided, and for that reason, he approached programmer-architects John and Julia Frazer. "The whole intention of the project is to create an architecture sufficiently responsive to the making of a change of mind constructively pleasurable," he wrote in a letter that accompanied Generator's drawings.<sup>3</sup> The Frazers replied, "If you kick a system, the very least that you would expect it to do is kick you back."4 They proposed four programs that would use input from sensors attached to Generator's components: the first three provided a "perpetual architect" drawing program that held the data and rules for Generator's design; an inventory program that offered feedback on utilization; an interface for "interactive interrogation" that let users model and prototype Generator's layout before committing the design.<sup>5</sup>

The powerful and curious boredom program served to provoke Generator's users. "In the event of the site not being re-organized or changed for some time the computer starts generating unsolicited plans and improvements," the Frazers wrote.<sup>6</sup> These plans would then be handed off to Factor, the mobile crane operator, who would move the cubes and other elements of Generator. "In a sense the building can be described as being literally 'intelligent'," wrote John Frazer—Generator "should have a mind of its own."<sup>7</sup> It would not only challenge its users, facilitators, architect and programmer—it would challenge itself.

Cedric Price sought to create a reconfigurable, flexible architecture of boredom and laziness that would bring pleasure to its users. This was a matter of creating the proper conditions for dynamics to arise, rather than explicitly codifying them in the architecture. The conditions of such delight, however, were not always sweet. They were dark, twisted and often strange. In the late 80s, Price said, "Designing for delight and pleasure should very seldom be seen to happen, and must encompass-indeed nurture-doubt, danger, mystery and magic...Distortion of time, space and substance is as necessary a design tool for pleasure as it is for religious architecture."8 He might as well have been speaking about his own design process, the fleeting nature of his hundreds of sketches, impossible to pin down to one moment or one thing.

Like many of Price's projects, Generator was never built. After nearly three years of design, the project was stymied by financial turmoil and a hostile takeover attempt within the family-run Gilman Paper Company. Moreover, while the project was designed to benefit employees of the company, the workforce did not support the project because of Generator's maintenance requirements. Gilman was unable to clear the hurdle and had to abandon the project. John Frazer continued to hope that the project would be revived, suggesting a new start in 1989, in 1995, and shortly before Price's death in 2003.

Technologically speaking, Generator was notably prescient. It represents the nexus of architecture and nascent ubiquitous or pervasive computing. The technical ideas behind Price and the Frazers' collaboration on Generator are only now being realized. Yet all of the groundwork was in place for Generator-its flexible program and its elements-before the sensors and programs were ever discussed. The programs were useful for the ways they could unleash unexpected interactions, but without the investigations into the connection of the social and the site and the underlying concepts, the idea would not have endured—an important precept for designers and architects working at the intersection of pervasive computing and design. Moreover, it was not technological fetishism that drove Generator and its interactivity. In his office, Price avoided personal technology: the fax didn't have paper; the phone was only answered during strict hours, he preferred using the postal service above other communication methods. In Generator, computers provided surprises and unexpected interactions outside of what traditional architectural practice would create because of the complexity they could handle.

Price's own words show the shift that Generator represented: "The most painless language of easy approximation for the willfully lazy that I've yet discovered," he said to Polariser in an early conversation bout the project.<sup>9</sup> By taking the playful so seriously, or the serious so playfully, by distorting the solid and the fixed, Generator shifted the roles of designers, actors, and users, calling into question who and what was responsible for interactions—and challenging the very performance of architecture. **C** 

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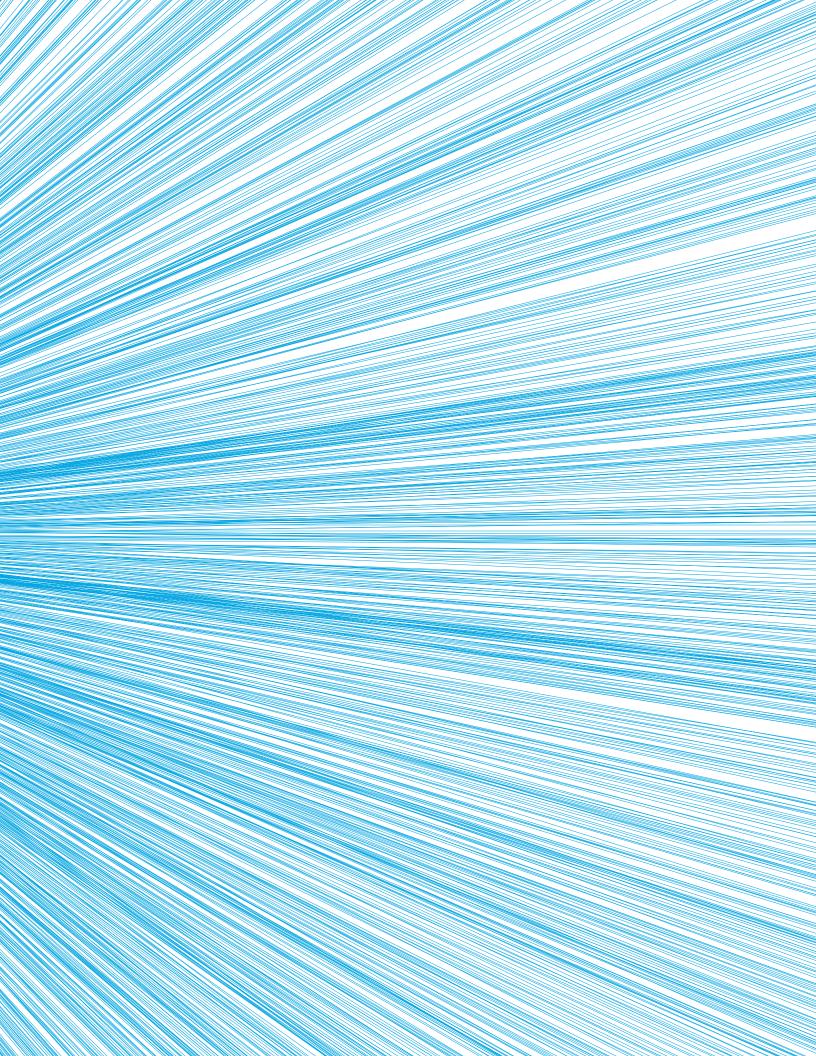


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# **EPI**CENTER



# A COMMUNITY-BASED INSTIGATOR LOCATED IN GREEN RIVER, IN THE DESERT OF SOUTHEAST UTAH



The Epicenter (Economic Progress Instigation Center) is a community-based housing and business resource center, instigating economic progress and creating decent shelter in the town of Green River in the desert of southeast Utah. It is a part of a larger umbrella non-profit organization, which serves the town with a myriad of unduplicated social services, including affordable rental housing, a Boys & Girls Club, a soup kitchen, and a thrift store (the only place to buy shoes in town).

The Epicenter crew is a studio-of-sorts currently made up of graduates of architecture, graphic design, industrial design, theology, Spanish language, and high school. Expertise is valued in any allied design field, or from anyone simply willing to sweat and wanting to build something with their hands.

In this rural town, the Epicenter has an opportunity to engage, collaborate with, and learn from a community that the design professions have chosen not to serve. Current projects include renovating a 104-year-old building, developing affordable housing through Habitat for Humanity and USDA, organizing a music, art, and film festival, acting as a liaison for the design and construction of a new community center (designed by Marlon Blackwell Architects), provoking the idea of a river walk as an amenity for the town, applying for grants, involving the community in the construction of a skate park, collaborating to build volunteer housing, and partnering with the University of Utah's College of Architecture + Planning to bring expertise and enthusiasm for the town.

We see ourselves as part of a change led by students and recent graduates who want more than the ability to work unapologetically for the socio-economic elite (the most prevalent opportunity offered by the profession). We are crafting an alternative model of practice, one that accommodates our fervent desire to collaborate, to provide "shelter for the soul," and to emphasize place and circumstance. Our insistence for these ideals has led us to a radical mission, to be taken on by "citizen architects" (and citizen designers, more broadly).

The Epicenter was formed by recent architecture graduates who studied at Auburn University and participated in the Rural Studio. That program influenced our path, directing us away from traditional internships we worried might result in disillusionment and instead towards positions to serve. The lack of traditional jobs in the current economy, coupled with the availability of socially-minded positions available through organizations like AmeriCorps and Project M, brought us to Green River, Utah, or what we like to call the "Epicenter of the Revolution".

We have learned to create a framework that is completely adaptable. We talk and write about what we are doing, evaluating ourselves, our abilities, and the community in the process. Based on that critical assessment, we adapt. At first, our inclination was to come up with and execute concise, easy to digest, simple ideas. But through our experience, we have realized that 80 percent of our time and effort is preparation, phone calls, community meetings, estimates, budgets, emails, submissions, organizing, filing, presenting only after all this do we get to the part the community actually sees: the product, the "architecture." Our biggest lesson to date is that it takes a significant amount of initial work to create something tangible; we do not presume to come in as "outside experts," as that would be the wrong approach. We collaborate from within the community by capitalizing on existing systems, infrastructure, and the expertise of locals.

The town of Green River is a rural community of just 971 residents at the junction of the Green River, Interstate 70, and the railroad. We are often asked, "Why Green River?" At first, we didn't know (and we still aren't sure). But we know the fact that question is even asked is a significant portion of the answer. If it was easy and simple, then it would already exist. We do know some factors that answer why. The transparency that exists -the ability to understand who the decision-makers are—is requisite for our ability to create the Epicenter. The town is manageably small; it gives us the chance to wrap our heads around the dynamics of decisions made by residents. Even still, because of the context, the town is different and unique enough that when we seek out prototypes and examples from other similar places, they are hard to replicate here.

Our satisfaction comes from the ability to create social change at an individual scale along with the opportunity for creative expression rather than monetary compensation. In school, we learned techniques of design/build through the Rural Studio and DESIGNhabitat, and we felt the impact you can have in working within a community. The Rural Studio has been in Hale County for nearly 20 years; current students benefit greatly from an alreadyestablished and proven program that the community trusts. That trust was earned over time. We have been in Green River for a year and a half and sometimes forget that we have not yet earned that same level of trust. None of us ever met Samuel Mockbee, but his provocative disturbance of both the academy and the profession put into place ideals that have outlasted his physical presence. He said: "Every piece of architecture should express some moral. If it has moral merit, it deserves the title of 'architecture.' For me, professional challenge. whether I am an architect the rural American South of the American West, is how to avoid becoming so stunned by the power of modern technology and economic affluence that I lose focus on the fact that people and place matter... Everyone's too busy trying to make a living. We have to be more than a house pet to the rich; we need to get out of that role."1 What Mockbee described can only happen by valuing the specificity of a place and the experiences of those who have lived there. We are young and able, but we are often reminded of our limits. We see those limitations as opportunities to include others who can help us achieve our goals. As citizens, we must use our privileges and our talents to serve the public good. We have not learned anything we should be hesitant to provide to others. The elitist status-quo of the profession, selling knowledge products without context, has led to the commodification of architecture and the creation of a built environment that is too often uninspired and irrelevant. It has also created a job sector too easily affected by the pendulum of the economy.

We are entrenched within the community. From this place, a microcosm of so many others, we strive to maximize our role as architects and citizens. We value the potent outcome of collaboration over the egotistical assignment of credit, community participation over subversive upheaval, and local solutions over top-down decrees. To this Revolution we hereby pledge allegiance. **C**  JACK FORINASH, MARIA SYKES, HAYLEY CROOKS, JUSTIN QUEEN, GABRIEL WOYTEK, WES FUNES, JOSH HILLIARD, RAND PINSON, MATT MUELLER, AIMEE O'CARROLL, CHARLOTTE GRAVES, SERAH MEAD, BRETT RANDALL, CHRISTIAN AYALA, STEVEN SYKES, J. TAYLOR MASSEY, AND AMERICORPS NCCC TEAMS (GREEN 3, SILVER 1, BLUE 3)

The authors collectively comprise the EPICenter

Images courtesy of the authors.

1. Andrea Oppenheimer Dean, "The Hero of Hale County: Sam Mockbee," *Architectural Record*, 2001.

# **FEAIUKES**

features

# **SAMBO:** ARCHITECTURE'S ARCHITECT

### JAMES MICHAEL TATE

Tate has a BS in Architecture from Texas A&M and an MArch from Yale School of Architecture. He is currently an independent designer based in New Haven.

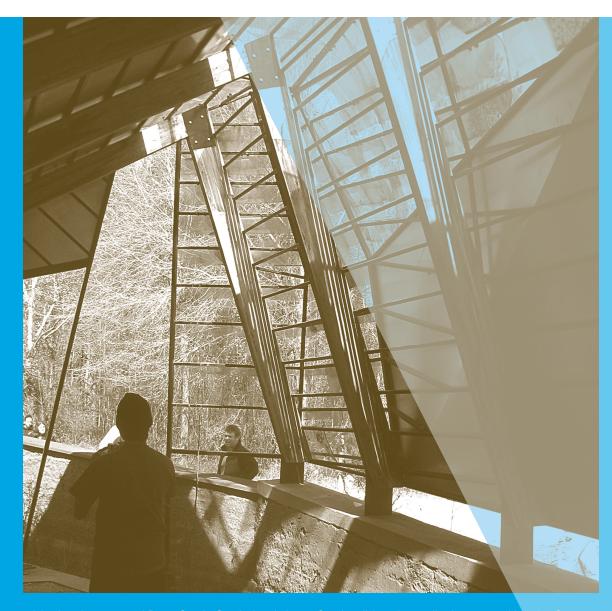
Image, Mason Bend community center, courtesy of Tony Vanky via Flickr. Architecture Without Architects—Rudofsky's project had its place in the late-1960s; however, its influence lingers in a negative way. In the wake of modernism, architects were largely forced, willingly or not, to choose between serving a constituency (social considerations) and appealing to an audience (aesthetic ones). The resulting internal disciplinary divisions undermine our specific expertise and the tangible qualities of our work, making them both increasingly illegible to our clients and largely unacknowledged even to ourselves.

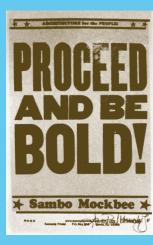
Architects Without Architecture—the phrase suggests a reconsideration of architectural production. In the United States over the past few decades, the number of architecture graduates seems inversely proportional to the number of commissions available in professional practice. We produce and prepare more students to enter a world that is increasingly without architecture. Schools, hospitals, fire stations, courthouses, churches, banks; only 50 years ago these typologies were a nexus for innovation, but now they are largely lost to the discipline, except through specialized practices and collaborations dominated by external consultants. The recent focus on natural resources has overshadowed the long and slow depletion of architectural ones.

Part of the conversation involves the all-too-popular word "inter-disciplinary." An attempt to escape the hermetic discourse of the past and define relevance in the present has made this word popular, even populist at times, an ideological descent of Rudofsky's project. But have we wandered too far outside of our own disciplinary boundaries? Are we caught up in extradisciplinary obsessions that overshadow architecture's real affective potential? This is not a call for autonomy (an anachronistic response), but rather for leveraging the basic tools of architecture: form, organization, and material. Our expertise defines possibilities, even as it establishes limits.

I met Samuel "Sambo" Mockbee ten years ago in 2001; I was part of the first year-long Rural Studio Outreach program, which invited non-Auburn University students to work on a design/build project. Sambo passed away that December, but the year I spent working with him, in constant dialogue, continues to influence the way I think and make architecture. "Citizen Architect", a film about Sambo and the radical educational program he established in western Alabama, was recently released and takes a first step toward defining a legacy. The film clearly demonstrates he was ahead of the pack on issues of social justice and the environment and gives a sense of the larger-than-life personality that provided almost limitless inspiration to students.

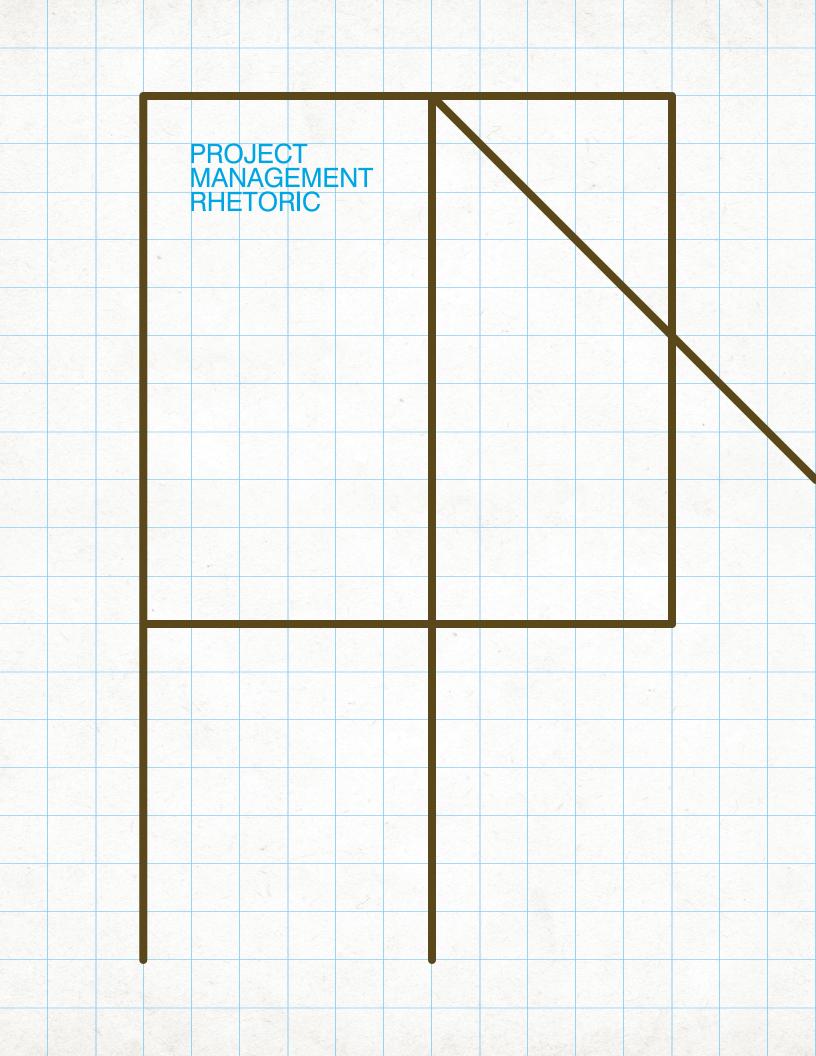
But what about the architecture? Sambo was dogmatic when it came to making, and his projects were bold, instrumental and intentional. Sambo demanded that each project challenge our sensibilities and perception of space, looking beyond immediate problems and given conditions to create notable exceptions within the impov-

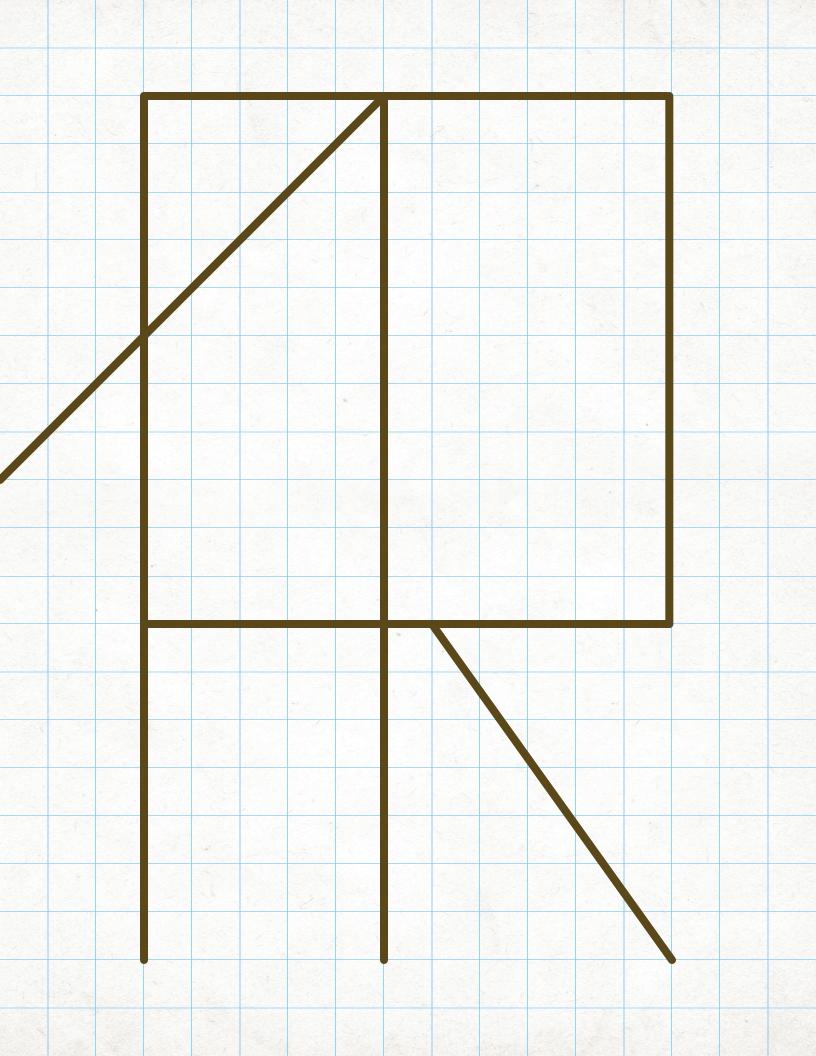




erished and segregated Deep South. Sambo's relationship to the discipline has been overlooked. What about his interest in John Hejduk, Aldo Rossi, and Charles Moore? What about his desire to create architecture deeply rooted in place but in direct defiance of the word *vernacular*? What about the dialogue between form and material? What about painting as a different form of textuality? What about stacks, piles, and mounds? What about romanticism and grit? What about collage and juxtaposition? What about drawings, models, and mockups in opposition to the purely digital? What about his desire for the day when architects could talk about architecture because topics like sustainability were simply taken as givens?

Sambo did not have allegiances to either the Grays or the Whites; yet there are tones of both in the work. But neither group would include him as an ally because, like Hejduk and Raimund Abraham, Sambo was a renegade. We must remember these things when defining the legacy of an architect who always put architecture first. The deep knowledge of (and obsession with) architecture separates Samuel Mockbee from many others who have been associated with him based on a social or environmental agenda. These are the qualities that make him an architect with and within architecture rather than an architect without it; we must take notice of the difference.





Immediately following the French Revolution, Jean-Nicolas-Louis Durand was appointed to a position at the Ecole Polytechnique and charged with teaching architecture to the engineers who would rebuild the nation-state. It was a difficult mandate, given that architecture through 1789 had focused primarily on taste and beauty, marking it as a monument to the *ancien regime* and an anathema to the Revolutionary values of reason and utility. Durand had been persuasive in arguing that architecture belonged in an engineering school, and in doing so secured its place in the new social system, but instead of simply stashing architecture in the trunk of engineering, allowing it to slip past the revolutionary checkpoints, Durand chose to disguise it in the open, dressing architecture in the engineer's garb.

But in the highly analytical context of the Ecole Polytechnique, a mere costume would not be enough; architecture had to work like engineering. Durand sought to establish the credibility of architects as rational practitioners who were committed to fulfilling the goals of the revolution. His three-part strategy aligns with the primary means of rhetorical persuasion identified by Aristotle: ethos (based on the character of the speaker), logos (based on the argument of the speaker), and pathos (based on the emotional appeal of the speaker). Aristotle also defined two techniques, organization and style, which would become central to Durand's architectural rhetoric, a new method based around the composition of elements over a rational and ordered grid.

Architecture exists not only as physical artifacts, but also through its history, theory, and pedagogy; to disguise the discipline, then, requires changing its arguments of the past (history), present (theory), and future (pedagogy). Durand rewrote history in the revolutionary terms of the present as lesson book for the architects of the future, yet despite his discursive reform, the buildings designed by his students outwardly resembled those that had been constructed before the Revolution. Durand prevented the re-facing of buildings by re-facing architecture itself. Character, imitation, and genius were privileged elements in the old pedagogy, and Durand was forced to reconsider each. Genius posed the most significant problem, being both opposed to rule and, by definition, unteachable. The solution to the "genius problem" was a pedagogy that turned architecture into a system of decomposed elements. Students were first given these elements, then the composite parts, then finally the building types in a continuous associative chain where, "one idea always prepares the mind for that which follows, and the latter always recalls that which precedes it."<sup>1</sup> They were then asked to conceive of their projects in the reverse order, from the whole down to the details. Genius was no match for system:

We do not believe that in the study of architecture it is possible to follow any other sequence – still less to dispense with one altogether, as do many architects, who say that rules and methods are the shackles of genius. Far from sharing any such opinion, we consider that they ease its emergence and ensure its progress; moreover, reason may dispense with genius, but genius can only go astray unless led and illuminated by reason.<sup>2</sup>

Durand's "rules and methods" made genius a prisoner of reason, and in the process relieved his students from being "detained at every step by the need to criticize."<sup>3</sup> By re-organizing genius and forcing it to be "led and illuminated" by reason, Durand was turning it into an asset rather than a liability. He was effectively managing the architect by simultaneously making the architect a manager of architectural elements

The strategic significance of this conversion can be found in a pioneering 1954 text by Peter Drucker: *The Practice of Management*. Although he concedes management to be, like architecture, an inexact science, Drucker proceeds by asserting, reminiscent of Durand, that "its elements and requirements can be analyzed, can be organized systematically," and consequently, "can be learned by anyone with normal human endowment."<sup>4</sup> Drucker takes issue with the "intuitive" manager who—like the "genius" architect was inclined to disregard "proven" rules and methods. Just as Drucker's "efficient" manager was trained to maximize the productivity of available resources, Durand's "uncritical" architect was trained to make "disposition" his "sole concern".<sup>5</sup> In making the architect a manager, Durand turned architecture into what Jean-Francois Lyotard would later call "a game of perfect information."<sup>6</sup> In such a game, knowledge is "complete" (albeit given by Durand himself), and as a result genius, if it still manifests itself, does so only by solving problems through composition.

By foregrounding composition (and providing the elements), Durand allowed his students to make endless numbers of "new moves" but never any "new rules". Composition provided freedom, particularly when viewed in contrast with the pedagogy of imitation that existed before the Revolution, but it was precisely through freedom that this new form of compositional genius could become a productive force within the system, as opposed to its traditional role as the prime threat that could lead to its undoing. Durand placed freedom as a yoke upon the figure of the architect.

Foucault contrasts "normation", control from continuous repression and discipline of the individual (saying "no") with "normativity", a form of control that gets its power precisely from finding new ways of saying "yes". Increasing societal freedom in France after the Revolution provided a means for assessing the general public, through broad observations that were then recorded in normal statistical distributions—"elements of reality"—that could then be manipulated remotely by a central government. The result was unprecedented control over the development of a population that was "unaware" of what was "being done to it."<sup>7</sup> Such was the power Durand, with his own "invisible hand", exercised over the hand of the architect.

Durand's method allowed for the unpredictability of his students compositions to become productive, corralled by the methodological and technical devices he enforced. Instead of cultivating the individual, Durand normalized the field with a distanced managerial gaze. This distinct form of governance, a form of normativity most clearly reflected in the building types he enumerated, was an architectural complement to what Foucault termed "governmentality". In this form, the normal functions as an "apparatus", a word which, in the original French *dispositif*, traces its roots to the Latin *dispositio*, the organization of arguments in Classical rhetoric, and the etymological source for Durand's *disposition*, the "architect's sole concern". The etymology of the apparatus helps in understanding Durand's motivations, which are also embedded in the method itself.

Durand's method required first making a freehand *croquis* stressing composition that although considered "freehand" (given that a ruled edge was not used) was by no means free. Every drawing done by a student of Durand was on grid paper, functioning, in effect, as an insurance policy taken out against the uncertain imagination of the architect, ensuring regular, symmetric, simple—and thus economic—projects. It is no coincidence that probability calculus was being developed simultaneously by Durand's colleagues and becoming the basis of a new type of governance and an "insurance society" led by Pierre-Simon Laplace, the interior minister and an external examiner of the Polytechnique to whom Durand was responsible.

The grid insured a certain amount of rigor (more importantly, it offered the appearance of it) to Durand's method while allowing for the freedom necessary to explore and potentially innovate. A building drawn on grid paper immediately looked more economical, more fit, and Durand's method required stripping drawings of detail; even column capitals were replaced with simplified geometric symbols to be filled in later for construction documents. This ostensible objectivity served a rhetorical function, and represented the deployment of the second device, style. Style was, according to Aristotle, "essentially, a matter of the right management of the voice," that is, the regulation of the instrument of communication. The grid similarly regulated, or, made regular, the architectural means of communication, the drawing.

Durand's pedagogy instrumentalized normativity toward the goal of "expediency", making his rhetoric decidedly of the political sort, free from ethics and values. His grid paper served to colonize the future by configuring the architect as manager in strict opposition to the architect as idealist. Managing by type and grid, Durand did not simply provide ideological cover for an emergent capitalist structure, he transferred it whole stock into the very substance of architecture. Through his method, Durand effectively put ideology to rest and was in no way silent; as Aristotle says of rhetoric, "Nobody uses fine language when teaching geometry."<sup>9</sup> C

### TROY CONRAD THERRIEN

Therrien is currently in the Histories and Theories MA program at the Architectural Association in London. He received his MArch from Columbia.

Images courtesy of the author.

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# **PIKE STREET LOOP:** THE SCIENCE AND FICTION OF DIGITAL FABRICATION



We are two decades into the age of digitally-designed architecture, yet few seem certain of how the enormous processing power of computers will affect the look and feel of real buildings and cities. The results of complex data scripting remain largely confined to computer screens, scale models, hidden infrastructures, and elite buildings; most ordinary buildings are conceived merely as cost-efficient boxes. One approach to closing the gap between the computer screen and construction site is the development of full-scale digital fabrication—or, in the words of the Zurich-based partners Fabio Gramazio and Matthias Kohler, "digital materiality."

The story, in the fall of 2009, that an orange robotic arm was building a wavy brick structure on a New York City street gave rise to futuristic fantasies and urgent questions. Would human construction workers, in the manner of auto workers, begin losing jobs to robots? Was the robot designing the structure as it went along, or just following a set of received instructions? Was the project to be understood as performance art, scientific demonstration, or a new kind of architecture?

As passersby and blog readers discovered, the 72-foot-long Pike Loop was a temporary installation whose purpose was to exhibit its own construction. Following three years of research at the Swiss Federal Institute of Technology (ETH), the architects were commissioned by the not-for-profit gallery Storefront for Art and Architecture to set their industrial robot to work in the median of a busy street in Chinatown. The robot, called R-O-B, executed the design for a curving, screen-like structure comprised of roughly 7,000 bricks over the course of four weeks, working in full view of anyone who cared to observe. Two human attendants monitored the robot's work and kept its brick and glue queues well supplied. According to

Storefront, Pike Loop is the first 1:1 architecturalscale project to be built on site by an industrial robot in the US.

Pike Loop is not, on its own, a significant work of architecture, or even necessarily a work of architecture at all. But it is the latest step in a significant body of ongoing research in digital architectural fabrication at ETH, following the completion of a Swiss winery façade in 2007, an installation at the 2008 Venice Architecture Biennale, and various studio projects. R-O-B's chief virtue is its capability to place bricks with a precision that exceeds that of a human mason, realizing hitherto impossible surface topologies. While most brick facades today are prefabricated in aggregate panel sections, the robot handles each brick as an individual pixel to be loaded into a customized surface fabric.

Just how perfect is the R-O-B's work? When the robot leaves the protected environment of the shop, external conditions become looming contingencies. For example, the weather must be fair enough for the glue (which is less permanent and more easily machine-fed than mortar) to stick to the bricks. The trailer must be positioned and repositioned along the length of the site. The human attendants must occasionally compensate for discrepancies due to minute geometric imperfections in the air-dried bricks. And the uneven pavement of the city street required the hand-placement of wood shims at the start of the installation.

Even when site conditions are perfect, R-O-B is no master mason. It is not capable of creating the rippling solid brick elevations of Eladio Dieste's churches. While complex curves can, of course, be molded, cast, or laser-cut in metal or plastic, Gramazio & Kohler are specifically interested in additive fabrication processes. And they are not the only ones: At the Harvard Graduate School of Design, Ingeborg Rocker of Rocker-Lange Architects led a Spring 2009 studio geared toward programming a robot to build an undulating doublewall structure. Instead of masonry bricks, the students used wood blocks.

When R-O-B is put to work in public, it creates a kind of in-situ theater. The freight container becomes a proscenium stage, illuminated at night like a glowing kiosk in which the robot does a stiff dance. However fleeting, the construction of Pike Loop was a spectacle. Intrigued passersby snapped photos, while a local general-interest blog registered curiosity: "Watching the robot in action is especially entertaining—my friend took the video with her iPhone—as it zooms back and forth with a great swooshing noise."<sup>4</sup>

Architectural construction typically becomes a spectacle at its symbolic milestones, such as groundbreaking and inauguration—and more recently, demolition. But modern architecture is not only about fixed objects; it functions as media and event, sometimes even during construction. As the Eiffel Tower rose visibly higher week by week, it triumphantly manifested the new technology that made it possible. At Pike Loop, continuous video documentation allowed the process to be condensed into a five-minute clip, streamed on the Internet and projected in Storefront's gallery.

R-O-B is about more than simple bricklaying; it draws on latent fantasies of self-building buildings. These fantasies, both liberating and threatening, are increasingly believable as computers grow more sentient and fabrication techniques more automated. Extrapolating from the work of the Futurists and other avant-gardes, Manfredo Tafuri argued that technology ultimately seeks to merge with humanity, allowing for a total "mechanization of the universe" through artificially-intelligent, hybrid machine-organisms.<sup>5</sup> But if intelligent robot-servants could be put to work constructing utopia, the old dream goes, couldn't they also take power?

One vision of such a dystopian future is Superstudio's "Continuous production conveyer belt city" of 1971. In the project the city is a gigantic machine that trawls across the landscape, "devouring shreds of useless nature and unformed minerals at its front end and emitting sections of completely formed city, ready for use, from its back end."<sup>6</sup> Over a decade later, Richard Rogers' Lloyds of London building put a positive spin on the fantasy of auto-construction through machine-inspired detailing that implied ongoing fabrication. More recently at Schouwburgplein, a public plaza in Rotterdam designed by West8, four giant red cranes loom above the flat, open expanse. These modified industrial robots are coin-operable, striking a variety of postures to appear menacing, playful, or anything in between.

Blurring the boundary between robotic means and ends, and between living and computerized organisms, Francois Roche and his Paris-based studio R&Sie(n) have proposed Swarm Town—a complex rolling topography shaped by a team of industrial robots. Better known is their 2006 Olzweg proposal for a competition held by the FRAC contemporary art institute. Here, an industrial automaton not unlike R-O-B slides along a track, creating a highly textured wall by placing thousands of green-glass rods at different depths and heights.<sup>7</sup>

Like other "hi-tech" creative projects, Pike Loop wraps its artistic intention in a cocoon of supposedly neutral and rational technology. But Gramazio & Kohler reject the engineer's cult of efficiency, and embrace the artist's radical search for new forms, new methods, and new visions of society. No longer content to arrange symmetries comprehensible to the naked eye and sedentary body, architects may in this way become designers of codes and processes. **C** 

### **GIDEON FINK SHAPIRO**

Shapiro is currently in the PhD program at the University of Pennsylvania.

Images courtesy Gramazio & Kohler, ETH Zurich.

1. Aaron Betsky, "A Virtual Reality: The Legacy of Digital Architecture" (*Artforum International* v. 46 no. 1, Sept 2007), 440.

2. "Pike Loop: A Robot-Built Installation in NYC." *Current Exhibitions.* Storefront for Art and Architecture, 30 September 2009.

3. Marcus Fairs, "On the Bri(n)ck at Graduate School of Design, Harvard University" (*Dezeen Design Magazine*, 11 May, 2009).

 "Pike loop: a robot-built installation in nyc, really!" (*Cherrypatter nyc*, 23 October, 2009).
 Manfredo Tafuri, *Architecture*

and Utopia: Design and Capitalist Development. Trans. Barbara Luigia LaPenta (New York: The MIT Press, 1979), 76.

6. Piero Frassinelli, "Twelve Cautionary Tales for Christmas." (*Architectural Design*, December, 1971), 740.

7. Giovanni Corbellini, *Bioreboot: The Architecture of R&Sie(n)* (New York: Princeton Architectural, 2010).





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Photography - RIGHT: Leslie L. Dan Pharmacy Building, University of Toronto, Toronto, Ontario. Lafarge's Agilia® self-consolidating concrete in the exterior columns and in the supports for the illuminated atrium pods, resulted in a finish of exceptional quality.

# SCORING MYRTLE AVENUE

Learning from the existing landscape is a way of being revolutionary for an architect. Not the obvious way, which is to tear down Paris and begin again, but another more tolerant way; that is, to question how we look at things. —Robert Venturi, Denise Scott-Brown and Steve Izenour<sup>1</sup>

The project of representing the city is ongoing. We were trained as architects, but now we practice as graphic designers. And while our involvement with architecture has changed, we still see and think of the urban landscape as a spatial and temporal construction. We are constantly thinking of ways to communicate this complexity and developed this "urban score."

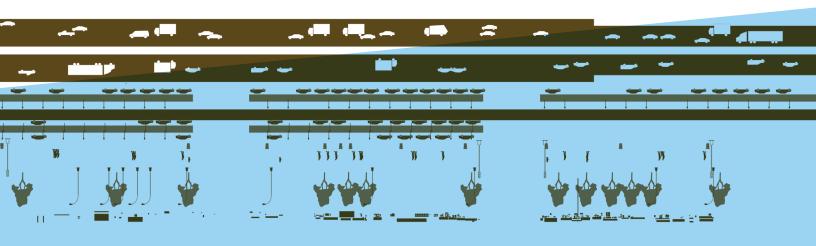
We wanted to look at Myrtle Avenue in Brooklyn, where changes were happening at a pace that was only going to accelerate. We set out to record what was happening, hoping to register this changing streetscape. Cezanne once said, "Things are disappearing. You have to hurry up if you want to see anything." We could not agree more.

Developing the drawing was a process of extracting layers of information from observational notes and redrawing them with a special eye towards their frequency and the densities that build up around certain points on the street. The score registers an interval of activity that corresponds to the amount of time spent on observation. The score is like a snapshot that has been pulled apart and abstracted.

### THUMB

Thumb is a partnership between Luke Bulman and Jessica Young. Bulman and Young received their MArch's from Rice University School of Architecture.

1. Learning from Las Vegas (Cambridge: MIT Press, 1993)





Signage (text)

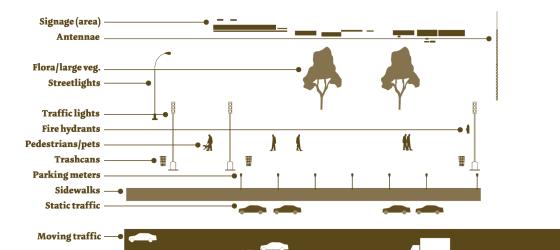


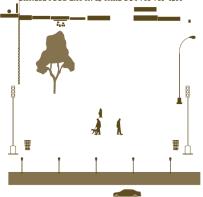


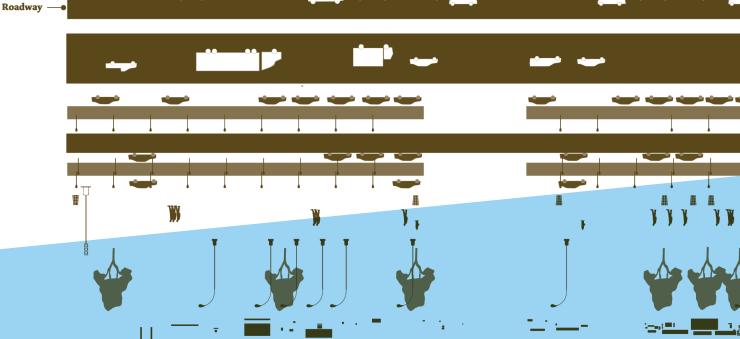
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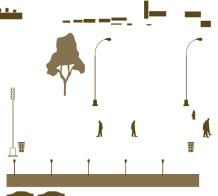


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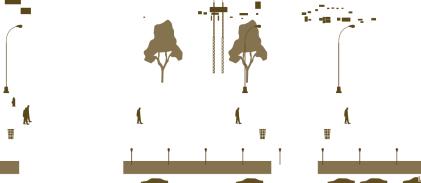


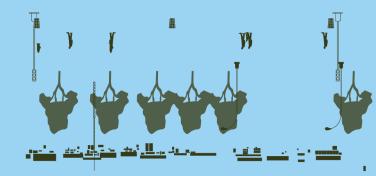
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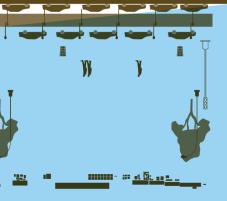
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Chapple is currently in the MArch program at Yale School of Architecture.

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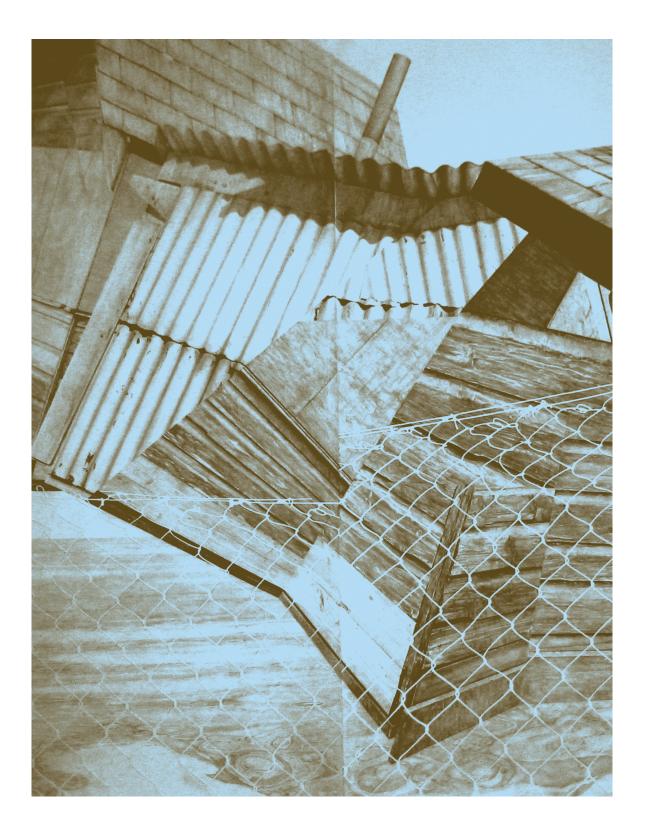
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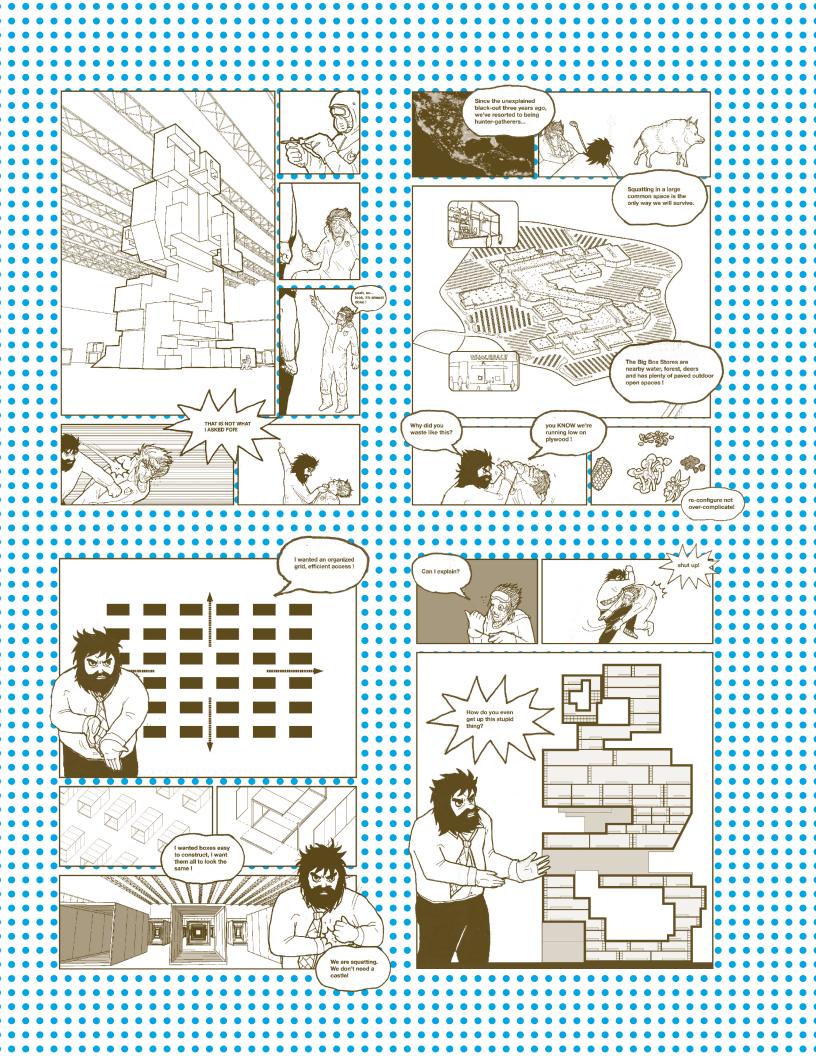
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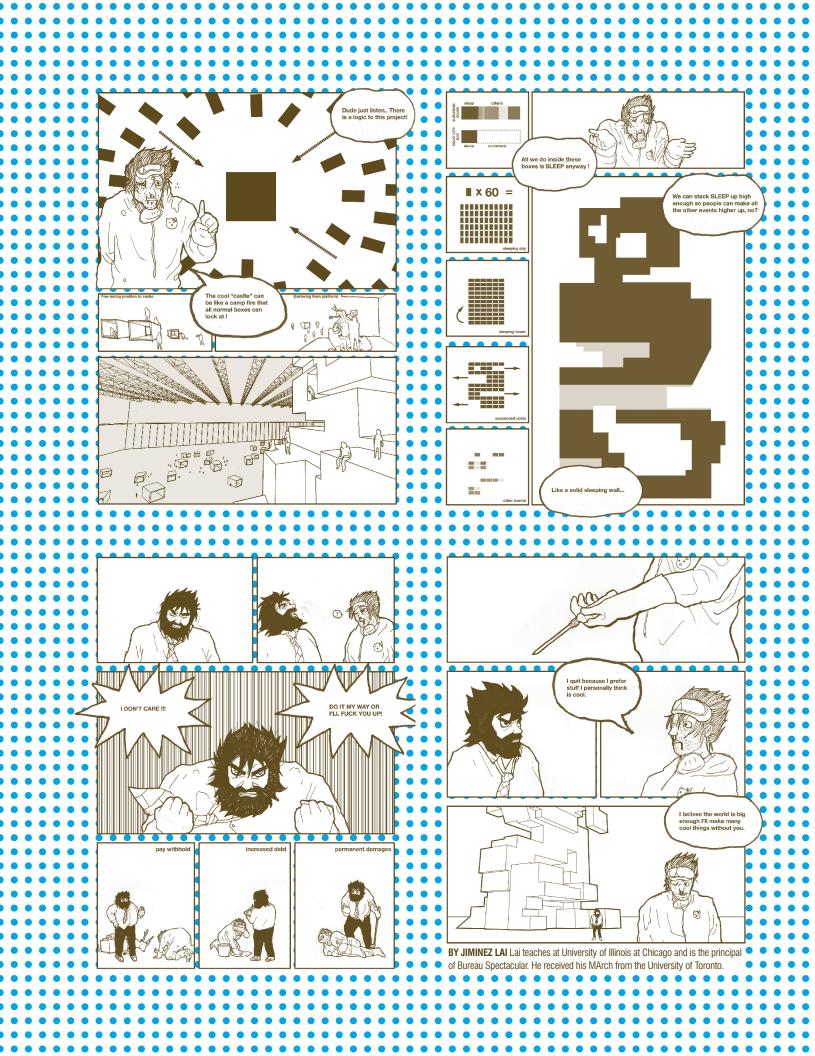
#### ALISON MOFFETT

The second

Moffett received a BA from the University of Tennessee and an MFA from the Slade School of Fine Arts in London, where she currently works.







#### OVERCOMING THE INTERNAL STRUGGLE

Frank Lloyd Wright wrote about architecture at a time when this country was experiencing economic conditions similar to the present, in the period after the stock market crash of 1929, during the Great Depression and before the onset of WWII. Wright was an architect through apprenticeship rather than formal training. A self-proclaimed "gatekeeper of cultural tradition," he simultaneously taught, led, and challenged the institution of architecture through his practices and beliefs. In a December 1930 issue of *American Architect* Wright had much to say about the profession. He wrote: "To be short, the Architect being more important than ever, it is imperative today that he seriously qualify for his job, 'profession,' or 'profession' be damned."

The power of this statement was never felt as readily as it might be felt right now, in light of the challenges and realities facing the profession today. The profession very well may be damned. I have to wonder whether the architectural profession as a whole or the title of "architect" itself has much, if any, weight with regard to building and design in the current economy. I also have to wonder if there is not a connection between the environmental/green building and sustainability movement, eco-terrorism, and the recent economic crises. The collapse of the real estate, mortgage, and banking sectors sent shockwaves through the economy that are still being felt worldwide.

The internal struggle within the profession over the disconnect between education, history, culture, tradition and modern practice with regard to what the practice even consists of in today's economy (or in this country for that matter) as well as the current trends in green building and sustainability, (neither of which arose from within the profession) have left many dispirited, uninspired, and just plain confused. Wright may have coined the phrase "organic architecture," but somehow his vision has been taken out of context, and seems to have become more of an environmental override of all things man-made, complete with a green stamp like a fascist symbol under the guise of green building and sustainability.

#### In the May 1930 Architectural Forum, Wright wrote:

It is no exaggeration to say that the expression of the machine age has so far been repression. How about the wasted timber resources, lost trees of a new continent to merely rot or burn as 'millwork?' How about the butchery by machinery of every traditional form ever borrowed and worn to win the contempt of the civilized world, especially of the Beaux-Arts, that was supposedly its advocate? How about neglect and insult by way of traditions to great new materials, and the separation in consequence of engineering and architecture, and the great change in human thought the ideal of democracy represents without any interpretation whatsoever in architecture?"

"Going green" almost seems like a euphemism for a green economy, or political and economic change meant to destabilize America's capitalist system, which subsequently many blame for the ecological and environmental problems across the globe. It also feels like an attempt by non-architects to dictate and maintain the status quo without the architectural profession while environmentalists, developers, product designers, and others gain greater control over the architects' domain.Wright and his principles of organic architecture are often cited as a means of achieving greater sustainability within this movement.

Additionally, Wright's commentary on the engineer and architect may be more relevant now than it was when he wrote it considering the current economic conditions in this country, and the condition of much of the built environment in the shadow of the industrial, and post-modern years: "We need the 'Engineering Architect.' Profession or no Profession; an Architect not only familiar with the shop work and factory conditions in America but an architect who can sense the human benefits actually to be derived from mechanized production that might make our living in a machine age less destructive to individuality, not more and more destructive".

The Machine Age gave way to the Information Age, and mechanical engineering may have given way to civil, electrical, and other branches of engineering. The need for an engineering architect is still the same if not greater now because of the remnants of the industrial past that still exist. The term must be reshaped and rethought to make room for a new vision, a new economic purpose, and a more holistic, and integrated approach to intellectualizing the built environment once again. Americans in particular are targets when it comes to the sprawling landscape dominated by the aesthetic and intellectual sensibilities of low cost warehouse-styled designs and fast-food chains that are central to the issue in the context of Post-Industrial Design. The built environment was once the domain of the architect within the profession (or without as in Wright's example), yet many have encroached on the architects' territory while ignoring the history of the profession and the principles of design primarily for the purposes of economic gain. Architects and aspiring architects must maintain faith in the relevance of their training and expertise, since it seems obvious that in many places the architect has never been needed more, within the profession or without.

In the United States today, the engineering architect that Wright imagined would be able to respect and recognize the origins of our industrial past. They would also be able to re-imagine and re-organize the old industrial landscape into a new and thriving vision for the future, rather than allow the remnants of our industrial past to continue to further erode and degrade the profession and the built environment. **C** 

#### **HEATHER L. HAILEY**

Hailey has a BS in Geography from the University of North Carolina at Charlotte. She is the 2009-2010 AIAS Chapter President at Central Piedmont Community College.

### URL + ARCHITECT = ARCHITECTURE

How changes occur and the orders in which they emerge are paced by both time and events. In biological terms the phenomena was first explained by Charles Darwin and Alfred Russell Wallace who in 1858 jointly unveiled their theories *On the Tendency of Species to form Varieties; and on the Perpetuation of Varieties and Species by Natural Means of Selection.* Examining the changing nature of life is a long-term process; the capacity to interrogate how, when, and why variations and mutations exist is in part inherent in the opportunities that rise and the potential for spontaneity or alliances to occur. Essentially, to visualize why things become, as Charles Darwin did in 1837 when he sketched the first *evolution tree,* one has to look for details, similarities, connections and mutations. Such a method is intricate yet extremely informative as scientists seek to clarify how nothing is singular or static and evolution is a perpetual state of life.

In this scenario, what is interesting for architects is that in studying gametes and genomes, scientists are unveiling how survival is a matter of interconnectivity. It transcends species, location, and composition. Thus, the reproduction of architecture, like survival, is profoundly influenced by the built world that transcends physical limits and geodetic boundaries. Indisputably (and unless we re-start the history of life), the built world is inclusive of its past, present and emerging happenings.

As information adjusts, advances, and shifts architecture will expand and further distance its production from governance. In fact, looking around our built environment it is striking how strong initiatives across the global landscape exist and it is not because of multilateral corporations or global associations, or in lieu of site-less sites like URL's; instead it is due to how executors think and disseminate ideas. So, the characteristics of the classical roman arch first developed during 400 BC are not quite visible from an airplane ride over the Mississippi River, yet in tracking the design processes of the St Louis Gateway, evidence of its intellectual ingenuity emerge.

The trajectory revels that, while Eero Saarinen is the architect of the project, it is the thread of creative thinkers, professional entities, and industries that provide extensive design ingenuity. They are experts and risk takers that forward architecture. Indeed, some of our most and least successful buildings do not lie in the virtues of law bearing domains; instead, collaborative participations conjure the outcome. As such, in threading processes, one can stitch together that ancient Romans, Hannskarl Bandel [engineer], Richard Bowser [ferry wheel/elevator designer], National Park Service [clients], Fire Department [structural adjusters], Pittsburgh-Des Moines Steel Company, MacDonald Construction Company of St. Louis and countless unrecognized individuals, provided their foresight and extended beyond the architect to produce the architecture of the St. Louis Arch.

Such transference of ideas rises as information permeates and replicates in similar ways to a living organism, where metabolic [building] processes repeat and mutate in remote locations away from the original source. In the age of advance digital information, the art and practice of building is distinct in that executors, autodidactics, carpenters, community groups, and others built regardless of law-abiding architects. This *to-from* activity, informed by URL's or feeding information back to the network, significantly offsets established norms and gives rise to impromptu occurrences and entrepreneurial design processes.

The difficult question is not how to safeguard the architect but how to openly embrace all aspects of building processes. At the rate that architecture divides, multiplies, and reproduces, the task and expertise of architects is relegated to a law-abiding builder rather than a creative producer. **C** BY MARIA DEL C. VERA - Vera teaches at the Southern Illinois University Carbondale School of Architecture. She received her BArch from NYIT and her MArch in Urban Culture from Universitat Politècnica de Catalunya-Metropolis.



### WHY ARCHITECTS HATE SUSTAINABILITY

Okay, you're right. Architects don't really hate sustainability; no one hates sustainability.

If we take the Brundtland Report's definition of sustainability—"a process or act that meets the needs of the present without compromising the ability of future generations to meet their own needs"—then sustainability is basically a premise that is impossible to oppose.<sup>1</sup> You cannot hate it. Hating sustainability would be like rejoicing in mass destruction…or hoping for environmental apocalypse.

That said, the premise of sustainability poses some really tricky issues for architects, i.e. people who are in the business of designing new buildings; whose job is to make things that consume tons of natural resources and energy; who build new office towers for wealthy corporations, replacing open space [nature] with overly-air-conditioned cubicles. See the problem?

Let me illustrate the dilemma a little further by explaining a change that has taken place with regards to the architectural conception of "footprint." Presustainability, a building's footprint was simply where and how it interacted with the ground-the surface or space occupied by a structure. Today, the understanding of an architectural footprint has expanded to incorporate the much more abstract notion of the building's impact and demand on the environment at large-the embodied energy it consumes and the carbon it emits. This change was initiated in part by ecologist William Reese's book Our Ecological Footprint: Reducing Impact on Earth, and has been expanded by the recent media emphasis on carbon counting and offsetting. Whereas the first type of footprint can be represented by a drawing of the building (a "plan"), the second requires a vast array of scientific modeling and measurements, life-cycle analyses, data tables and excel spreadsheets.

The premise of sustainability carries with it a moral imperative to "minimize footprint." In its extreme form, this injunction leads us to question the very act of building—not building always has a smaller footprint than building. Thus architects, from the outset, find themselves in a compromised position. Unable to achieve the ultimate goal ["minimize footprint," "leave no trace," etc.] they must constantly weigh various options, trying to anticipate which undesirable option will make their work have the least impact.

Now, I know what you are thinking. The outlook does not have to be so bleak. Architects can simply do their best to minimize the environmental impact of their buildings. The result may not be perfect, but with new technologies and different strategies, it can be more sustainable than what we've got right now. Of course, you are right, and there are certainly architects who are working in this way (and perhaps an equal number who are pretending to do so, but that is another issue altogether.

It is not enough to blindly accept the premise of sustainability and to assuage our guilt by offsetting carbon in an effort to minimize our collective footprint. We should not be afraid to be critical of the premises of sustainability, and our critique should not be interpreted as a dismissal of the problems at hand. We should embrace today's tone of looming crisis as an opportunity to reevaluate our priorities and to think really carefully about what it is, exactly, that we are interested in sustaining. As an architect, I am searching for a position that is somewhere between loving the ideas of sustainability and hating its current implementation. **C** 

#### ANDREA BRENNEN

Brennen has an MArch from the Massachusetts Institute of Technology.

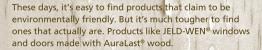
1. Our Common Future, [The Brundtland Report], 1987 (habitat.igc.org/opengates/ocf-cf.htm).

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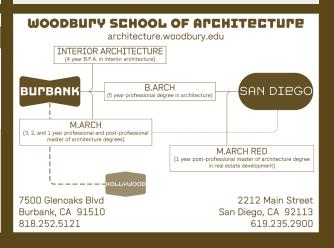
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#### **10 STEPS TO BECOMING** A SUCCESSFUL UNSOLICI **ARCHITEC**

#### Architects, don't wait for the phone to ring, act now!

The economic crisis has spurred a great deal of reflection upon the viability of a profession that is dependent upon commissions; not only are we financially exposed to the instability of the market economy, we perhaps feel a deeper crisis of relevance in only being able to react to our clients' wishes. Despite our skill and experience in manipulating space and material, we architects are incapable of addressing the needs of society unless we have first been explicitly asked to do so.



#### **Disconnect your**

telephone. Clients have not called for months,; this route to future work has been severed by the financial crisis. The same goes for competitions; do not enter them (the odds are against you) It is time to roll up your sleeves and grab those commissions yourself.

#### Find an issue.

Architects, your city needs you. Find an issue in your street, your suburb, your city or the world. It may be social, environmental, financial or even food related.

#### Become the expert.

Learn everything there is to know about this issue. Read all the books, speak to opinion leaders, take to the streets and speak to those most affected.

#### Determine a strategy. Now that you are the expert, you will know how this issue may best be tackled. The answer will probably not be a building, but architecture will surely play a part, as practically every issue has a spatial aspect in need of treatment.



Design. Produce a proposal as a treatment for the issue. Do not limit yourself to the conservative constraints of planning or titles. Do what needs to be done.

Unsolicited architecture offers an alternative to this reactive, service-oriented role, and instead calls for a new, more socially-motivated approach to procuring projects. The typical architectural commission can only proceed when the four pillars of client, site, budget and program are simultaneously aligned. In our consumer society, the projects that succeed are more often than not motivated by money, as opposed to social values. The Unsolicited architect does not wait for this rare eclipse, but instead occupies the territory where at least one of these pillars are absent, thereby making the project undesirable or even impossible to tackle using the standard tools of the commercial practice. Unsolicited architects tackle the big issues facing society that are otherwise overlooked by the market, they create briefs where none are written, discover sites where none are owned, approach clients where none are present, and find financing where none is available.

Unsolicited architecture does away with this reactive, service-oriented role of the architect. By starting with an issue instead of a commission, architects can act as critical agents, reclaiming their role in shaping the future of the city. This requires a professional shift toward a more entrepreneurial mindset; the tools of architecture and architectural thinking are only powerful if they can be unshackled from the increasingly marginalized opportunities to react to a given brief. In times like these, the risk of not getting paid for your efforts is perhaps one worth taking. To assist in taking this leap, simply follow these ten steps to becoming a successful Unsolicited architect. **C** 

#### **RORY HYDE**

Hyde is currently in the PhD program at the Royal Melbourne Institute of Technology.

Acknowledgements: The concept of Unsolicited architecture was first explored in a studio at MIT led by Ole Bouman in 2007, the results of which were published in *Volume* 14.



# 7

#### Run the numbers.

Engage a quantity surveyor and financial experts to calculate the construction and life-cycle cost projections of your proposal. Compare this to the amount the government spends annually to deal with the issue.

#### Produce a report. Assemble your work

so far into a document that outlines both the issue and your prescribed solution. Of course this is biased advice, but your future client will thank you for producing something they can easily act upon.

#### Build support. Call a town hall meeting, send your report to newspapers with punchy quotes, do a letter drop to local residents, demonstrate the effectiveness of your proposal in a quick and dirty urban intervention. The aim is to create public support for the urgency of your scheme. As it is addressing an urgent issue, not a commercial motive, this should be easy.

### Present your proposal

to your future client. ThisFor social issues, this will ordinarily be the government or local municipality, but it is equally possible to find a private investor if the life-cycle financing is attractive enough. With a solution to a thorny issue, public support, and a strong funding argument, you will have an offer that cannot be refused. It is set right up on the tee, all they need to do is hit it off and take all the credit, while you take home the commission.

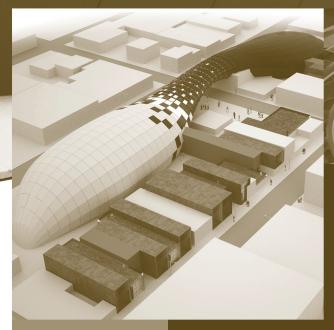
# 10

a) Reconnect your telephone. Sure this first one was hard, but you are now the expert with all the experience and all the answers. These services will be in high demand.

#### (b) Return to step 2.

Now you have a taste for action and relevance to society, time to get out and find another issue.

# Design outside the box, think Trespa



\*concept by Matthew Joseph Conway and Nicholas Pajerski third-year architecture students at the University of Nebraska - Linco

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#### **Call for Submissions**

**Crit 70** Overproduction (Fall 2010) In simple economic terms, overproduction means too much supply, too little demand, or both. In Marx's thinking overproduction is an inevitable byproduct of capitalism (with the profit motive demanding a continuous expansion of both supply and demand), while more recently, game theorists have demonstrated why overproduction is a "dominant strategy," albeit one with negative consequences.

These negative consequences became lucidly clear as the economic boom turned into a crisis. Speculation had led to overproduction of the built environment, seen now in the empty housing found almost everywhere. When something is overproduced, its presumed utilitarian function gets subsumed by its rhetorical function. Take, for example, the reappropriation of surplus or discarded objects or materials, such as with shipping containers, which have no reason to be anything but.

Overproduction typically means "too many", but it can also mean "too much", describing a form of excess. Musical artists are considered to be "overproduced" after spending too much time in the studio, where they rely on third-parties ("producers") and equipment like the "Auto-Tune" machine, designed to smooth over the misplaced notes of many pop stars.

Architects have a tendency towards fetishization, manifest, for example, in the wholehearted embrace of digital technologies. With the continuous introduction of new modes of production, overproduction at the object scale seems almost inevitable. But just because things are possible does not necessarily make them desirable

So, then, if the flip side of overproduction is restraint, what does restraint look like today? One could point toward Japanese architects, with firms like recent Pritzker-prize winners SANAA ([Kazuyo] Sejima and [Ryue] Nishizawa and Associates) embodying a form of restraint that uses available techniques without being overly reliant on them (or enamored by them). Indeed, Japan had its bubble burst almost two decades ago and perhaps provides some lessons for working in a "post-" condition.

*Crit 70: Overproduction* seeks written essays, built projects, studio designs, and competition entries that address issues of production, both the tendency toward overproduction and attempts to address it. The deadline is September 1, 2010. Please send questions to 2009-2011 Editor-in-Chief Zachary R. Heineman at crit@aias.org.

# **KEVIEW5**

#### reviews

#### AIAS/VINYL STUDENT DESIGN COMPETITION: BOHEMIAN FLATS BOATHOUSE

The American Institute of Architecture Students (AIAS) and the Vinyl Institute announced the winners of the fourth annual national student design competition. The competition, sponsored by the Vinyl Institute and administered by AIAS, challenged students to learn about building materials, specifically vinyl products, in the design of a boathouse for the Bohemian Flats Park in Minneapolis, MN. Cal-Poly San Luis Obispo's John Vierra was awarded first place and \$2,500 for his design, "Boat on Board".

This year's competition had the most registrations of the past four years at 227 students. Participants were required to research, respond to and highlight the unique aspects of designing a boathouse that not only embodied the community's rich history and cultural differences, but also address the harsh seasonal changes experienced in the upper Midwest. Additionally, participants were challenged to utilize green building principles throughout the design process, including consideration of the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) building standards. Competition objectives included developing knowledge about materials, products and installation, as well as creating a efficient and creatively designed facility would endure as a landmark on the river front for years to come.

Submissions were evaluated based on ingenuity and originality, as well as appropriate use of sustainable products and design clarity. The designer (or team) was given a set of general site information and brief background of the site's history.

Prizes were awarded as follows:

#### First Place (\$2500)

John Vierra – Cal-Poly San Luis Obispo, "Boat on Board"

Vierra's design immediately conjures up a sense of place. The easily recognizable precedent of a Mississippi River Sternwheeler was a daring yet ingenious design detail. The rest of the design plays off the imagery of the boat and results with the boathouse itself becoming a floating building that can transport people and ideas up and down the Mississippi River.

#### Second Place (\$1500)

Varia Smirnova and Oscar Rosello – University of Texas at Arlington, "Wall Rider" The design is nearly invisible at first glance. However, the way the shape is gently tucked into the landscape draws you in and you want to know more. Upon further review one starts to realize the level of in depth research that went into the overall design. From new and modern ways of using vinyl as a sustainable building product to old "tricks" of building into the earth, the teams design would make anyone happy to visit.

The jury awarded Honorable Mentions (\$750) to the following: Michael Zabinski (Dalhousie University, "Beacon '63"), Ksenia Kagner, Gabrielle Poirier, Simon Bastien and Michael Faciejew (McGill University, "Push, Pull, Float") and Kenner Carmody (Louisiana State University, "Krajka-da'lat").

The winning projects will be featured at the 2010 AIA National Convention and Design Exposition in Miami, June 10-12, 2010. Winning projects can also be viewed on the AIAS Web site at www.aias.org/vinyl. **C** 





**First Prize** John Vierra *Cal Poly San Luis Obispo*  **Second Prize** Varia Smirnova Oscar Rosello *University of Texas at Arlington* 







**Honorable Mention** Michael Zabinski *Dalhousie University* 



Honorable Mention Ksenia Kagner, Gabrielle Poirier, Simon Bastien Michael Faciejew *McGill University* 



Honorable Mention Kenner Carmody *Louisiana State University* 



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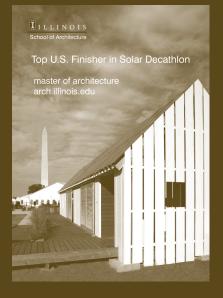
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#### 26th Annual Leadership Conference July 22-25, 2010: Washington, DC

The AIAS presents the 26th annual The conference offers more than Grassroots Leadership Conference to be held in Washington, DC July 22-25, 2010. The Grassroots conference offers instruction on how to be an effective leader, run a successful AIAS (COP). During these meetings, the chapter and motivate and organize students. The conference is designed issues and ideas relevant to students, for chapter presidents and/or other chapter leaders and is an opportunity to meet student leaders from across North America. Every chapter is expected to be represented.

leadership development programs. Attendees will participate in the governance of the AIAS when they meet as the Council of Presidents delegates are informed on important architectural education and the profession. This discourse sets the future direction for the organization.

# **KEVIEWS**

#### reviews

#### 2009 AIAS/AARP LIVABLE COMMUNITIES DESIGN COMPETITION

The American Institute of Architecture Students (AIAS) and Trespa North America Ltd. announced the winners of their inaugural national student design competition. The competition, sponsored by Trespa North America through the Trespa Design Centre in New York and administered by AIAS, challenged students to learn about building materials, specifically Trespa wall panels, in the design of a city entertainment center. University of Nebraska's Matthew Conway and Nicolas Pajerski were awarded first place and \$2,500 for their design, "Modern Bebop".

The competition had registrations from 39 different schools and universities. Participants were required to research, respond to and highlight the unique aspects of designing city entertainment center that not only embodied the their selected site's history and cultural differences, but also address the needs of designing an urban structure with a vast range of programming requirements. Additionally, participants were challenged to utilize green building principles throughout the design process, including consideration of the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) building standards. Competition objectives included developing knowledge about Trespa materials, products and installation, as well as creating an exciting facility that would serve as a landmark to the neighborhood while attracting more revenue for the community.

Submissions were evaluated based on ingenuity and originality, as well as appropriate use of sustainable products and design clarity. The designer (or team) was allowed to select a site of their choice so long as the neighborhood population being served exceeded 25,000.

Prizes were awarded as follows:

#### First Place (\$2500)

Matthew Conway and Nicolas Pajerski – University of Nebraska, "Modern Bebop"

The team's modern design serves as a great insertion space to the historic jazz center of Kansas City. By dividing the programming of the entertainment center the final design feels less massive within the neighborhood while the unique design stands out enough to draw visitors. It is refreshing to see the walls systems be used in such a non-traditional manner, and the jury applauded the designers for their willingness to step outside of the materials comfort zone.

#### Second Place (\$1500)

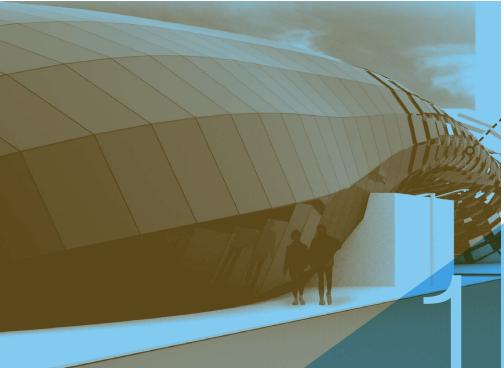
Roman Pohorecki – University of Washington, "Networking Hubs: Media Center on Capitol Hill" It is amazing how powerful a building can be when it is thought of as an anchor and not an object within a community. The large open atrium and pass-through from the city and the proposed subway hub under the building showed that Roman's design ideas went far beyond just planning a building.

#### Third Place (\$750)

Do Young Chung – Harvard University Graduate School of Design, "Dream Factory" Detroit continues to be one of the most interesting city case studies in North America. Designing a cutting edge urban hall that focuses on the interior shows that even in the "urban core" of a dead city a building can support the needs and goals of a community.

In addition to the cash prizes, the first place team of Matthew and Nicolas were invited to speak at an event hosted in their honor at the Trespa Design Centre in New York.

The winning projects will be featured at the 2010 AIA National Convention and Design Exposition in Miami, June 10-12, 2010. Winning projects can also be viewed on the AIAS Web site at www.aias.org/trespa. **C** 









# **KEVIEWS**

reviews

#### AIAS/KAWNEER STUDENT DESIGN COMPETITION: MUNICIPAL COURTHOUSE

The American Institute of Architecture Students (AIAS) and Kawneer Company, Inc. announced the winners of the fourth annual national student design competition. The competition, sponsored by Kawneer and administered by AIAS, challenged students to learn about building materials, specifically architectural aluminum building products and systems, in the design of a municipal courthouse. Ball State University's Eric Laine was awarded first place and \$2,500 for his design, "Justice Center".

The competition received submissions from 46 different schools and universities throughout the United States, with at least 11 universities adopting the competition as a class project. Participants were required to research, respond to and highlight the unique aspects of designing a municipal courthouse that embodied the surrounding community's history, religious and secular beliefs, and cultural differences. Additionally, participants were challenged to utilize green building principles throughout the design process, including consideration of the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental tives included developing knowledge about materials, products and installation, as well as creating a secure facility that looks to fulfill the civic, cultural and service needs of the community - today and in the future.

Submissions were evaluated based on ingenuity and originality, as well as appropriate use of sustainable products and design clarity. The designer (or team) was able to select any site from one of five metropolitan areas across the U.S.: Atlanta, Chicago, Portland, San Diego or Washington.

Prizes were awarded as follows:

#### First Place (\$2500)

Eric Laine – Ball State University, "Justice Center" Laine's intriguing design revealed a building that was not only iconic, but provided a real landmark feel for the City of Portland. His creative use of space and organization throughout the floorplan offered a combination of aesthetics and functionality. The courthouse incorporated Kawneer's 1600 Wall System® curtain wall, which was selected by Laine for its stability and flexibility. The curtain wall was modified to include horizontal louvers on all exposed southern glazing, designed to be deep enough to prohibit solar angles in the summer months yet shallow enough to allow the benefits of solar heat gain in the winter months.

#### Second Place (\$1500)

Hugh Bitzer – University of Oregon, "Visions of Justice" With a vision of transparency, this innovative and "mature" design was inspired by the desire to expose and understand the judicial system. Using a range of Kawneer curtain wall and sunshade systems, Bitzer was able to create a dynamic outer skin that incorporated daylighting and sustainability.

#### Third Place (\$750)

Greg Hittler - Ball State University,

"HeterogeneousStitching"

Non-traditional in its use of materials, this uniquely designed courthouse had a visual continuity that established its presence as a symbol of authority for the city. Hittler's design investigated the idea of curtain wall, combining heavy and light elements. Jurors commented on the mature feel of the space, as well as the circulation plan that demonstrated a level of creative investigation.

The jury awarded Honorable Mentions (\$500) to the following: Lauren Comes and James Moehring (Ball State University, "Portland Municipal Courthouse"), Kelly Goffiney (Ball State University, "Convergence") and Jessie Rabideau and Jonathon Meier (Ball State University, "Transformation").

The winning projects will be featured at the 2010 AIA National Convention and Design Exposition in Miami, June 10 - 12, 2010. Winning projects can also be viewed on the AIAS Web site at www.aias.org/kawneer. **C** 





**Second Prize** Hugh Bitzer *University of Oregon* 

**Third Prize** Greg Hittler *Ball State University* 





## **KEVIEWS**

reviews

Lauren Comes James Moehring Ball State University





Kelly Goffiney Ball State University

Jessie Rabideau Jonathon Meier Ball State University









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#### LAST WORD

#### RAIMUND ABRAHAM 1933-2010

I offer an alternative way of making architecture and accept the irreconcilable conflict between text and image, the spoken word and silence. I became part of a family of few who broke with the conventions dictated by the profession of architects, to pursue architecture as a discipline, of the arts, challenging known boundaries, working in solitude for a new architecture of solitude.

Today, these few have become fewer, or almost extinct. We are in the state of celebrities, engaging in an architecture of spectacles. Celebrity has become a new artform, and, as described by Daniel Boorstin in his book from 1962, *The Image*, celebrities are "well-known for their knowness," human pseudo-events, illuminated by publicity.

The architecture of spectacles has become an extreme face of capitalism; according to the philosopher Giorgio Agamben everything is exhibited in separation from itself. Spectacles and consumption are two sides of a single possibility of using. What cannot be used is given over to consumption, or to speculation, or to spectacular exhibition.

It is no coincidence that museum has become the overvalued program for this new architecture of spectacles. Everything today can become museum, because this term simply designates an exhibition of an impossibility of using. The museum occupies exactly the space and function once reserved for the temple as a place of sacrifice. The pilgrims who would travel across the earth from temple to temple, correspond to the tourists who restlessly travel in the world that has been abstracted into a museum.

This new architecture of spectacles seems to be void of a social mission, [unconcerned with] confronting the fate of human existence. It furthermore signifies the return to recognizable styles defined by pure formal manipulations: The twist, the hula-hoop, and creaturefeatures became dominant influences on this definitely new but unsubstantiated architecture. Space and time remain formal abstractions, untouched by the necessity to be transformed into place and event, the sacred thresholds of architecture. I believe that architecture can only be understood as a polarity between geometric and physiological space, or a collision between the ideal and matter. And while the ideal represents the notion of infinity, or let us say, the eternal, matter can be regarded as the symbolic representation of the body, its presence and its absence. To put it in other words, while man's conceptual powers aspire to the infinite, his body is essentially fragile, temporal, a corpse which would be laid waste like material itself by the unremitting action of time. If there remains any hope for recreating the iconic in the modern world then surely this will only come from the reinterpretation of the archetypical existence of man. That is to say, new icons cannot possibly be established on the basis of motives drawn or transported from technology.

A drawing for me oscillates between the idea and the physical built reality of architecture. It is not a step toward this reality, and in this respect is autonomous. However, there must be latent some anticipation of the physical reality and its cooperation with the idea. In this sense an architectural drawing can never be rendered. On the contrary, it has to be constructed.

What this means is that you don't have to be a slave in a corporate office or a groupie of a celebrity architect. All you need is a piece of paper, a pencil, and the desire to make architecture.

The remarks above are from "The Profanation of Solitude", a lecture given on March 4, 2010 at the Southern California Institute of Architecture. Abraham was killed in a car accident later that night. He was 76.





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