Breeding Architecture with Design

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The aesthetic lexicon of architecture and design has expanded substantially in the past decade. New technologies have resulted in methodologies and ideologies that now produce a more fluid dialogue between these discrete mediums, creating hyper-linked relationships that generate new aesthetic and social models for the design arts.

Architecture and industrial design are two mediums that were once very separate but today are almost inseparable in their shared methodologies and fabrication techniques. Today's innovative avant-garde and experimental makers are cross-platforming simultaneously on different projects that stretch boundaries of scale from buildings, furniture and tableware to visionary urban plans for cities. Except for the scale of the finished object, the ideology is the same. This would have been antithetical to the thinking of the early modern masters who believed the ideology of a typology could not migrate into other forms. This classic modernist view of "form follows function" is no longer viable for the makers of today. This emerging generation of architects and designers has recalibrated what it means to be avant-garde and experimental in the 21st century. The emergence of digital literacy in the design arts has also fostered numerous new fabricating techniques that have led to new solutions to historical aesthetic issues. As makers and educators, this generation has made it possible for future generations of young designers to move freely from one typology to another without losing any sense of aesthetic integrity. The hyper-linked ideologies of these emerging architects and designers are exploring notions of sustainability, mobility, narration, functionality, performative connectivity, social histories, synthetic craft, and other aesthetics beyond their professional realms to create contemporary designs that are informed by the historical avant-garde and experimental past but not derivative of it. The disciplines of architecture and design have also, it seems, reclaimed their social and environmental responsibilities that are essential to their ideologies. From the community groups that help reconstruct the urban fabrics of neighborhoods, to each individual action that collectively assists in changing our world for the better, the design arts have emerged more socially responsible with aesthetic ideals that make good design a social concern for everyone.

Transpositional Constructions

The transposition of architectural elements—vis-à-vis scale and materials—has become more prevalent among today's designers that are changing the way industrial design objects are intellectualized and produced. Nacho Carbonell's 2008 *Lover's Bench* **(Figure 1)** is a perfect example of the breadth of thinking that is taking place in the field. While the *Lover's Bench* visually draws from earlier aspects of architectural works equated with a leading figure in the field, it reintroduces historically significant avant-garde architectural ideologies into a much larger public design realm, broadening the arena for future cross-platforming between architecture and design. Carbonell's *Lover's Bench* is conceptually beautiful and designed with the intent of privacy and intimacy that is sometimes desired in a public setting. It is a hybrid that morphs together Cartesian and non-Cartesian forms. Its aesthetic questions normative

notions of beauty as well as public decorum, proportion, scale and temporality—through the use of materials such as papier-mâché for constructing the non-Cartesian form. For Carbonell, the chair acts like a cocoon—a place to recede from the media. He has also designed a single *Lover's Chair* with an asymmetrically placed blob-like form that one can climb into to get away from everything without actually leaving the physical space. The non-Cartesian, blob-like forms of these chairs draw a close visual association with Frederick Kiesler's 1950s *Endless House* series–specifically the architectural models. Interestingly, these models and Carbonell's cocoon-like forms are very similar in scale. Kiesler designed numerous *Endless Houses* during his career, none of which were realized. However, his drawings and large-scale models of these blob-like domestic dwellings captured the imagination of many architects, decades later, and made him a significant figure in the ideological trajectory that propels architecture today. These models ranged in size from three to ten feet. One particularly compelling aspect of these models was that you could partially occupy them by placing your head in them and visually get a sense of the spatial conditions Kiesler was proposing. The non-Cartesian, blob-like forms of these models were made either of papier-mâché or concrete and wire mesh. The Endless House reflected Kiesler's theory of Correalism—a contiguous space where surfaces (walls, floor and ceiling) fold into each other to produce sinuous spaces to inhabit. In many ways, Kiesler was critiquing what the modern house had become—a place that was devoid of emotion and passion and—a by-product of *Taylorism*. While Carbonell never refers directly to Kiesler, their ideologies share a similar timeless sensibility that is refreshing and serendipitous.

Surface Narrations

The 2009 *PARALing* **(Figure 2)** by Sulan Kolatan and William MacDonald, principals of the New York City-based studio KOL/MAC is designed to operate at the perimeter surface—walls and ceiling—of an interior space and engulf a variety of normative architectural systems.[1] It unfolds into one visually cohesive surface that wraps the space. Conceptually, *PARALing* is analogous to kudzu—a ground covering plant found in nature that grows rapidly over existing growth and engulfs it. Contrary to the actual plant, anything that penetrates the *PARALing* surface becomes a designed element. Hence, all light fixtures, sprinkler caps, mechanical and electrical systems become unexpected aesthetic solutions rather than conventional items found in interior architectural spaces. While it can produce a sense of beauty within an already existing industrial space, this prototype wall/ceiling system was designed for deployment in a large New York City residential loft space, allowing the mundane yet essential aspects of the industrial loft to be reconfigured and concealed behind a beautiful figuratively abstract perforated surface. The deployment of *PARALing* in this interior space or any other one allows for a coherent parametric system that can be expanded or reduced to fit into any size space. The system visually pulls together disparate conditions within the industrial space, creating a coherent aesthetic solution. Just as *PARALing* operates as a metric that can expand or contract to fit its context, the same methodology can be seen in Kolatan and MacDonald's 2010 *Root Chair Prototype*. Conceptually, the chair is designed to literally fit its owner's proportions—to the height and width of each torso—similar to the notion of a made-to-order suit.[2] Their *Root Chair* is influenced by Asian root furniture that is made from tree roots and is part of a larger family of furniture produced through digital parametrics. KOL/MAC studio's design approach takes clues found in nature and folds them into their ideology, producing a unique lexicon of forms that are digitally "grown."

Reverse Logic

An emerging group of architects and designers are starting to produce proposals for reverse contextual building typologies that say more about context than what is contained within. The juxtaposition between what is desired by a client or required of a program in relationship to external forces such as environment and typography, produce designs that reveal this inherent ideological divide. Visionaries like François Roche—principal at R&Sie—are capitalizing on this undercurrent to generate an architecture that folds in local and indigenous conditions while simultaneously employing the newest technology available to the industry such as renewable energy or professional standards in the global art world.

Roche's 2008 *Dust Relief*—design for a Contemporary Art Museum in Bangkok, Thailand identifies and heightens the schizophrenic aspects of the city's local context fused with global aspirations. Almost all of Roche's designs have an underlying thread of Freudian psycho-

Fig. 1

Fig. 2

Figure 1. *Nacho Carbonell, Lover's Chair*

Figure 2. *Sulan Kolatan, William MacDonald - PARALing*

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Fig. 3

Fig. 4

Fig. 5

analytics that produces a solution. The typology of the Art Museum requires an internal program that embodies the use of clean Euclidean-like spaces to publicly show art. These public spaces—as well as art storage—are climate controlled to universal standards that will allow the museum to borrow art from institutions around the world as well as acquire its own art for posterity. The interior plans and sectional aspects of Roche's design adhere to all these needs and requirements **(Figures 3, 4)**. At the exterior, the building's contained climate controlled rectangular stacked forms become contextual to the environmental conditions of Bangkok—producing this reverse typology. The air quality in Bangkok is marginal due to all the pollutants resulting from rapid growth that is not regulated by international standards. The city's sky is a dusty grey, filled with pollutants; hence the quality of light is heavily masked by the air quality. Dust and carbon monoxide particles are growing issues in Bangkok that are visually changing how the city is experienced and culturally perceived. As with all architecture conceived by R&Sie, instead of working around these real issues or negating them, Roche embraces the situation and produces a typology that is specific to this congested city; that would conceptually clean the air of some of its pollutant dust and could be used to create the exterior cladding of the Art Museum. This would be achieved by wrapping the exterior of the building with an aluminum latticework that employs an electrostatic system that literally collects the city dust from the air **(Figure 5)**. Over the years—if Thailand does not revise its environmental guidelines— the building perimeter dust-cladding would grow denser and thicker and act as a visual barometer to the city's growth. Other buildings in the city could also employ this methodology and the growing urban scale of the city could require other buildings—new and existing ones—to act as physical cleansers for the city. Roche's *Dust Relief* embodies a global/local contextual framework that addresses methodology that could easily be explored with other new and existing buildings in densely polluted urban cities.[3]

Morphing Genealogies

Works by Hernán Diaz Alonso—principal of Xefirotarch—share certain genealogical characteristics, producing a unique architectural vocabulary. He heightens characteristics from one project to the next—like genetic mutations—traits that evolve in form and substance as they migrate from design to design. Viewed collectively, the ensuing groups become "family portraits" of sorts. Diaz Alonso's methodology looks outside mainstream architecture and draws from works by contemporary artists such as Matthew Barney and Francis Bacon, as well as sci-fi films to produce a lexicon that explores notions of monstrous and grotesque through ambiguous figurative qualities evident in all of his forms and hybrid works.[4]

Diaz Alonso's *2010 Eam-Mess (Chaise)* shows that he is expanding this lexicon beyond his "family portraits" to usurp other genealogies. Like a rap artist that builds rhythm and tonality by lifting riffs of music from other artists, Diaz Alonso visually paraphrases the iconic mass-produced 1948 *La Chaise* by Ray and Charles Eames **(Figure 6)** and morphs it into his own vocabulary for *Eam-Mess (Chaise)*—a one-off custom prototype **(Figure 7)**. This is achieved through digital computations and augmentation of *La Chaise's* parametrics on the computer. Diaz Alonso accentuates and morphs the iconic gently folded form into a much more elongated sinuously splayed one that emerges from his own vocabulary and can be physically realized at many different scales—from a chaise, to a building, or even serving utensils for a dining table. Maintaining a void at the base of the seat of the *Eam-Mess (Chaise)* allows the object to visually reference its family heritage. Diaz Alonso looked to Chaise for inspiration and pays homage to the Eameses in his title that references his "messing it up." The appearance of Diaz Alonso's chaise is also transformed through color and sprayed with a high reflective black automotive paint. The original La Chaise only came in white, a color that was integral to its molded plastic form. Diaz Alonso's use of a highly reflective black automotive paint on this sinuous form references another visual/iconic pedigree— the 1966 *Batmobile* car customized by George Barris for the Batman and Robin television series.[5]

Interestingly, the conception of the original 1966 *Batmobile* **(Figure 8)** is also a meta-narrative to the *Eam-Mess (Chaise)*. The *Batmobile* car used for the launch of the series was actually a 1954 *Lincoln Futura Concept Car*. Formally inspired by a Mako Shark and Manta Ray, this two-seater prototype was created by William Schmidt and his design team at the Lincoln Styling Department. The car was unveiled at the 1954 Chicago Auto Show, then used in a Hollywood film, and then sold to the legendary Hollywood custom car designer George Barris. Barris held onto the concept car for almost a decade when he was hired last minute

Figure 3. *François Roche - Dust Relief Section Diagram*

Figure 4. *François Roche - Dust Relief Interior Perspective*

Figure 5. *François Roche - Dust Relief Electrostatic Dust Model*

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with only three weeks to create the *Batmobile* for the television series. He took his 1954 *Lincoln Futura Concept Car* out of storage and slightly reclad the front and rear of the car and sculpted the side body panels a little. He also repainted the car to be high gloss black with red pin striping around the perimeter of the body—the original 1954 *Lincoln Futura Concept Car* was actually white.[6]

The methodologies employed by these architects and designers are emblematic of this hyper-linking that is taking place in the design arts today—whether digitally informed or manually produced. From iconic furniture to concept cars and jigsaw puzzles, mapping the migration patterns of influences on emerging designers is a matrix that cross-platforms many disciplines and is non-linear in nature. The cross-pollination of thinking has also reactivated aspects that address the historical past as well as pioneering new ways of envisioning future productions in the design realm. This has resulted in some of the most innovative and original thinking taking place in the design arts in the last decade. The folding together of architecture and design ideologies has opened the disciplines to endless possibilities that can be conceived and produced intellectually as well as physically.

Notes

1. Conversation with Sulan Kolatan and William MacDonald, 18 December 2009.

2. Conversation with Sulan Kolatan, 20 March 2010.

3. Giovanni Corbellini, "BIO[re]-BO[o]T/Architecture of R&Sie" (New York: Princeton Architecture Press/Publisher 22, 2009).

4. Joseph Rosa, "Xefirotarch/Design Series 4" (San Francisco: San Francisco Museum of Modern Art, 2006).

5. Conversation with Hernàn Diaz Alonso, 5 September 2009

6. David Fetherston and George Barris, "Barris TV and Movie Cars" (Wisconsin: MBI Publishing Company, 1996); and John Marchese, "Half a Century of Making Cars into Stars," The New York Times, 13 August 2010.

Fig. 6

Fig. 7

Fig. 8

Figure 6. *La Chaise by Ray and Charles Eames*

Figure 7. *Hernán Diaz Alonso - Eam-Mess (Chaise)*

Figure 8. *Batmobile circa 1966*

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