The Art of Architecture as Mediating Vessel

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"The task of making a home in nature is what Wendell Berry has called "the forever unfinished lifework of our species."¹

I. THE ART OF ECOLOGICAL DESIGN

Ecological design is often characterized as a onedimensional form of practice that in its single mindedness excludes a host of complex design issues in favor of isolated technical strategies. In many ways, the sustainability movement has earned this reputation by espousing a simplistic, quantifiable set of "best practices." As explained by Brian Edwards," "the Enlightenment in Europe promulgated a scientific rationalist view of the world. It has survived to the present in the mechanistic perception of sustainability shared by most architects and engineers in the West. This finds expression in the focus upon energy, fossil fuels, indications and definitions."² Subsequently, many have come to view ecological design as a form of pragmatism that, when raised to the level of raison d'etre, represses a host of cultural, social, political, tectonic, and spatial areas of inquiry. Regardless of this misconception, ecological design is at its core a theoretical position that essentially questions the relationship between cultural and natural systems, with architecture occupying a pivot point between those two realms.

More specifically, this position, which influences many diverse contemporary architectural explorations (irrespective of the designer's articulation of this influence), attempts to erode the egocentric world view by calling into question the hierarchical relationship between humanity and nature. Once this interplay becomes destabilized, the relationship between cultural and natural systems becomes open to interrogation.

It could be argued that the basic task of the architect is simply to make place. Architects are called upon to create spatial conditions in response to particular human needs and desires. Through the particularities of circumstance, we seek to create a real sense of place in the world. Place-making is never as completely free and open ended as the vellum might imply, but instead is influenced by a rich palimpsest of historical, cultural, political, geological, atmospheric, and ecological conditions that articulate an understanding of place. The architect brings to bear a new sense of intention to this dynamic cultural / natural system, but whatever the intentions may be, they are always qualified by the given condition. Inevitably then the making of place is never an original act, but is always an act of re-interpretation.

Working from this characterization of place-making, one might describe the art of ecological design as a position that requires the designer to question the relationships between humanity, the place of dwelling, and the given world into which a new project must be woven. In other words, it asks the question: can the architectural act serve as a liminal moment between the realm of culture and the realm of nature? If we accept the premise that (architectural) design is the act of interpreting and remaking a given environment, then ecological design conceives of this act as a form of mediation between humanity and our habitat. Although the ecological project is certainly served by scientific methods, it is not inherently grounded by technical concerns, but rather by a persistent search to renew the articulation of dwelling in the landscape.

II. THE THIRD LANDSCAPE

Our own habitat is not without examples of the attempt to create what has been referred to as a middle landscape. In fact, the built environment is dominated by spaces that owe their heritage to this goal, namely in the form of post-war suburbia. Although it is a gross over simplification, it could be argued that most of these landscapes grew out of either Wright's Broadacre City or Corbu's Radiant City paradigm. However, in both cases, the actual territories suffer from an egocentric worldview. Considering the status of the office or apartment building and the single family home in their suburban settings, a primacy is clearly given to the human formed object. The environment that surrounds these objects is typically an uninhabited facsimile of a natural condition, which rarely can legitimately claim to be a''garden'. These landscapes are clearly out of balance, and neither culture nor nature is able to flourish.

Turning to landscape painting for a moment as a way to access visions of a possible hybrid territory, there are several examples that approximate a more balanced condition. In Jasper Cropsey's Starracca Viaduct for example, we see a portrayal of a bucolic landscape in the pastoral tradition, including the requisite shepherd figure in the foreground (Figure 1). It is important to note that the subject of the railway was understood as a symbol of humanity's extension into the landscape. Although at the time the prevailing sentiment was much more suspicious, the painting clearly portrays an optimism that these two worlds can in fact merge to form a third condition, as the Viaduct is seamlessly blended into the natural setting. Examples that deal directly with architectural objects can be found in the landscapes of Paul Cezanne, many of which are characterized by a profound neutrality in the depiction of our dwelling in the landscape (Figure 2). Cezanne is famous for saying very little about his work beyond (something to the effect of), "I paint what I see." What is 'seen' in these settings is an equivalence of the cultural and the natural, which begins to erode the centrality of the human position, and anticipates a worldview that attempts to merge the natural and constructed landscapes.

If the egocentric worldview always considers the human-made object to be the dominant figure in

any landscape, then this alternative vision tends to give primacy to the landscape as a generator of human made form. There are in fact many contemporary architectural examples that follow this trajectory by attempting to develop strong relationships between site and structure. (In some examples, this strategy can be seen operating in the reverse: human-made form is seen as the generator for a constructed landscape.) Many recent projects, which can be represented by Kolatan & MacDonald's Raybould House, illustrate a fascination with a spatial condition whereby the end of the garden and the beginning of the house become indistinguishable (Figure 3). Although these projects have not adopted the rhetoric of sustainability, they do illustrate a very literal interpretation of the larger objective of reconciling the spaces of culture and nature.

However, in these examples the objective of a hybrid condition is achieved primarily through formal devices of mimicry, overlap, and reciprocity, which tends to limit the connective relationship to one of symbolic resemblance. Although the buildings theoretically blend into and become part of a hybrid, harmonious landscape, they do not necessarily make real phenomenological connections between the human and natural worlds. (In fact, in some cases the landscape/building blur is primarily a representational sleight of hand that inevitably dissolves when the projects are actually constructed.) This same tendency towards formal resemblance can also be seen in the design of buildings themselves. Similar strategies are present in works spanning many decades including Gaudi, Bruce Goff (Figure 4) and Eugene Tsui or the more recent Museum of Sex proposal by SHoP (Figure 5). The work of these designers creates complex spatial conditions that are inspired by specific natural forms, but again this similarity in formal structure does not necessarily result in a significant connection between inhabitant and the larger world.

Many contemporary examples that one might include in this category of resemblance are in fact rooted in morphological principles derived from natural systems, rather than simple formal relationships. Processes of metamorphosis and dynamic forces have been translated in remarkable ways into architectural "organisms" via digital modeling environments as illustrated by Greg Lynn's Embryological House (Figure 6). However, many projects operating in this realm continue to translate these processes of dynamic transformation primarily as a means to generate form, rather than as a paradigm for the actual transformational capacity of the building as a finished product. There are examples, such as the City Hall Project in London by Foster, in which the modeling environment does actually set up interactive conditions between form making and simulated building performance (Figure 7). When the performance side of the equation is emphasized, however, there is a danger that the process will again move into a method of design based directly on measurable climate based criteria. Human desire may be all but eliminated by a one-dimensional method that overwhelms metaphysical concerns with physical determinism.

Certainly, one could argue that the works referenced and alluded to here are misrepresented by taking them out of their conceptual framework, but in the context of this essay these methods underscore two major fault lines that often appear in the logic of what one might call 'the art of ecology'. If the creation of a middle landscape relies primarily on a formal or diagrammatic means of connection, then there is a danger that these formal connections will supplant any real and meaningful hybrid condition. If the middle landscape becomes a machine that is only understood as a climatic mediator, then the un-measurable nuances of human circumstance may be ignored.

III. ARCHITECTURE AS MEDIATOR

Re-making place in a way that makes architecture the pivot-point between humanity and the natural world in both a figurative and a literal sense ideally requires a balance between two conditions. First, one must allow the principles rather than the appearance of natural systems to be instrumental in the making of architecture, and secondly, the building itself must on some level recognize its role as mediator between culture and nature in the making of place. It is primarily in the making of the building itself rather than in its formal connection to its surroundings that architecture achieves this state. If the making of place itself is seen as the mediator, rather than the locus of mediation, then a broad range of strategies that involve the crafting of architectural conditions can be seen as ecological in the sense that in some form or another they attempt to reconcile technical and natural systems. If our work can be grounded conceptually by qualitative mediations between humanity and nature, and also recognize technical tactics as tools that should be employed in service of this goal, we may be able to achieve both conceptual and instrumental hybrids simultaneously.

IV. IMPERFECT IMAGES

The work of four designers working in completely different realms may serve as imperfect illustrations of this ideal. First, the Natatorium at Cranbrook Educational Community by Tod Williams and Billie Tsien serves as an excellent example of building as phenomenological mediator. The positioning of the building in the landscape carefully balances a range of issues. On one level, the building is used to complete a series of courtyard spaces and axial relationships both actual and implied in Sarrinen's plan (Figure 8). In this way the building is used to create another exterior room in a campus that is relatively pastoral, but approaches urbanity in its treatment of positive and negative space. At the same time, the building is tucked carefully into a wooded hillside that ultimately provides an opportunity to create powerful relationships between its inhabitants and its setting. The development of the building form and fenestration simultaneously addresses both technical and phenomenological issues. A variety of openings, including the dramatic oculi, are carefully planned, and in many cases automatically controlled, to respond to the intense internal conditions of heat and humidity. Each opening provides a unique experience, linking swimmer to the external landscape in ways both unexpected and profound (Figure 9). Overall, the building'" combines the sensuous, physical and intellectual to create a space in which it is possible to be reflective or active; to be close to nature and cultivate human society, and to develop in mind and spirit as well as in body."3

A second example also creates a powerful relationship between landscape and inhabitant. A proposal for an urban library in Sittingbourne, Kent by C.J. Lim demonstrates an unusual reversal of landscape and building strategies (Figure 10). In this case, the building is literally turned inside out with the typical civic forecourt being replaced by a central courtyard meant to suggest a secret garden, which in this case is enclosed by books. The courtyard sits beneath a semi-enclosed glass roof and includes picnic areas, gravel surfaces with deck-chair seating, flowerbeds, and "grassy hillocks." This hybrid zone is shaded by a field of mechanical petals that open and close in response to light conditions in order to shade the court when necessary (Figure 11). In this case, nature is internalized and the repository of the cultural world forms a barrier to the urban landscape.

Again working in an urban context, the skyscraper proposals of Ken Yeang offer a similar merger of built and natural environments in a vertical orientation. For example, the" EDITT Tower in Singapore proposes the integration of vegetation from surrounding landscapes to create ecological continuity (Figure 12). The vegetation which is used throughout the building improves air quality, temperature control, and creates a living machine that recycles water (which the building also collects) and processes sewage. Of course, it also creates a direct explicit connection between its inhabitants and a variety of biological processes in the unlikeliest of sites. In many of Yeang's proposals, the building envelope itself is thought of as a kind of organism that is able to adapt to changes in internal and external conditions (Figure 13). Unlike other recent examples of dynamic double skin building envelopes, which at times seem to be conceived purely as uninhabited machines, Yeang's work is clearly driven by an attempt to humanize the vertical city. The presence of the "vertical landscaping," the role of the territory of skin as hydrological system, and the attempt to create programmatic interactions that are lost with the detachment from the street all speak to a metaphysical influence that places technology in service of humanity.

Finally, returning to a built example, and addressing the scale implied by the concept of "articulating" 'dwelling' in the landscape," the houses of Glen Murcutt demonstrate a rich blending of technical and qualitative mediations. The" *Magney House*, which sits on a bare, treeless seaside hill, avoids any obvious connection to the surrounding landscape (Figure 14). Although some of Murcutt's projects are nestled into picturesque landscapes, this project is placed in the landscape as a'"counter-point to the forms of nature but in harmony with its constraints"– the embodiment of the ideals of continuity and unity that he attributes

to the orders of nature and architecture."4 It would be impossible in this case to claim that the project employs a strategy of resemblance. Instead, it balances the poetic and the pragmatic by making significant connections to its surroundings. In much of Murcutt's work, "air, water and light are essential and universal but vary in character from place to place. He integrates their qualities and perenniality into his architecture to inscribe their cyclical characteristics on it, to make them palpable and comprehensible."5 In this case, the connections are made by carefully integrating light and shadow, wind and rain simultaneously in every detail of the building (Figure 15). The precision with which each element reinforces the next expresses the idea that dwelling provides both protection and connection to the complexities of the natural environment. Ultimately, it is in the graceful roof form, the primal element of shelter, where this symbiosis is manifested as the "third landscape" imbedded directly in the vessel of inhabitation (Figure 16).

IV. CODA

The act of building attempts to make a vessel that can potentially become a threshold that both guards and connects us to the other. In the words of Williams and Tsien, "Our project attempts to integrate and embed itself: to approach the building is to pass through and be part of the larger landscape."66 To reach this potential, the vessel must respond to all aspects of the human body as well as the collective spirit that is represented by our imagination, our desires, and our dreams. One simple characteristic shared by these representative projects (that perhaps together suggest an unknown project concealed between them) is that they can be seen as thresholds to both worlds. Each proposal makes powerful connections to the landscape and demonstrates a lifelike adaptability to changing conditions, yet none is reducible to quantifiable measures. The buildings themselves, in each case, are vessels of an instrumental as well as a figurative middle landscape.

BIBLIOGRAPHY

Berry, Wendell. *Home Economics: Fourteen Essays.* San Francisco: North Point Press, 1987.

Cronon, William, ed. Uncommon Ground: Toward Reinventing Nature. New York: W.W. Norton & Co., 1995.

Edwards, Brian, 2001. "Snakes in Utopia: A Brief History

of Sustainability." Architectural Design. v.71, no.4: 9-19.

Fromonot, Francoise. Glen Murcutt: Buildings and Projects. New York: Whitney Library of Design, 1995.

Hunt, John Dixon, ed. *The Pastoral Landscape*. Washington: Trustees of the National Gallery of Art, 1992.

Gissen, David, ed. *Big & Green: Toward Sustainable Architecture in the 21st Century.* New York: Princeton Architectural Press, 2002.

Kolarevic, Branko, ed. *Architecture in the Digital Age: Design and Manufacturing*. New York: Spoon Press, 2003.

LeCuyer, Annette, 2001. "Cranbrook Complexities."" *The Architectural Review*. v.209, no.1251: 46-52.

Lim, C.J. & Ed Liu, ed. *How Green is Your Garden?* West Sussex: Wiley-Academy, 2003.

Marx, Leo. *The Machine in the Garden*. London: Oxford University Press, 1964.

Senosiain, Javier. *Bio-Architecture*. Amsterdam: Architectural Press, 2003.

Waters, John K. *Blobitecture: Wavefront Architecture and Digital Design*. Gloucester: Rockport Publishers Inc., 2003.

Williams, Tod & Billie Tsien, 2001. "Cranbrook Natatorium." Architecture and Urbanism no.374: 18-23.

Wrede, Stuart and Adams, Howard, ed. Denatured Vi-

sions: Landscape and Culture in the Twentieth Century. New York: The Museum of Modern Art, 1991.

Yeang, Ken. *The Green Skyscraper*. Munich: Prestel Verlag, 1999.

Yeang, Ken. *Reinventing the Skyscraper*. West Sussex: Wiley-Academy, 2002.

NOTES

¹ William Cronon, "The Trouble with Wilderness: or, Getting back to the Wrong Nature," *Uncommon Ground* (New York: W.W. Norton, 1995.), p. 89. The Berry quote is from *Home Economics*.

² Brian Edwards, "Snakes in Utopia: A Brief History of Sustainability" Architectural Design (July 2001) v.71, no.4, p.10.

³ Annette LeCuyer, "Cranbrook Complexities," The Architectural Review (May 2001) v. 209, no.1251, p.52.

⁴ Francoise Fromonot, Glen Murcutt: Buildings and Projects, (New York: Whitney Library of Design, 1995.), p. 96.

⁵ Ibid, p. 44.

⁶ Tod Williams & Billie Tsien, "Cranbrook Natatorium," Architecture and Urbanism (Nov. 2001) no. 374, p. 20.