Case Study: Richard Neutra’s Lovell Health House

Form Body Technique Space

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Neutra’s Lovell Health House is often cited as the launch point for his career in addition to an influential contribution to modern architecture. In the 1920s, Neutra was practising in Los Angeles, a city that had become a hub for prominent architectural commissions. In fact, the house was located around the corner from Frank Lloyd Wright’s Ennis House and Barnsdall Hollyhock House (Hines, 1982). In a sea of undecorated white and glass houses, one could get lost amongst the rest. However, the Lovell Health House differentiated itself from all other modernist structures in the area: it was the first completely steel-framed residence in America (Hines, 1982). In line with classic Modernist machine driven technology had a strong
influence on the design and its resulting form. Technological advancements in the use of an entirely pre-fabricated steel frame construction allowed the structure to be constructed in a mere 40 hours (Neutra, 1998). The frame became the essence of the house: the frame was the house, and the house was the frame (Hines, 1982). Apart from the concrete foundation, steel served as the only supporting structure for the house. A thin layer of concrete was applied to the frame by spraying it ‘gunite’ style into forms (McCoy, 1960). Standard-sized windows were also applied onto the frame, heightening the effect of industrial assemblage (Neutra, 1992). This revolutionary structural method led Neutra to depart from the structure being the dominant feature of the exterior form. Following Colquoun (1981), technology allowed a separation of the means from the end so that the form created was no longer a logical result of the techniques employed to create it. To look at the building, one would not automatically differentiate it from other modernist constructions. It appears as if the structure is supported by
the dominant concrete planes, complimented by steel encased glazing. In reality, underneath the superficial concrete blocks is a systematic conglomeration of steel beams, columns and joists which serve as the structure for the building. What appears at first as simply metal window frames and mullions is actually the structure of the building, only slightly revealing itself to the viewer. The aesthetic nature of the building is no longer a function of its formal strategy. Such a representation of skin as different from the structure is a break from the traditional modernist ideals of form following function. Modernist building most often wear their structure on the outside: it is what it is, and components of the architectural design are not often hidden or disguised.

The program of the house was an important consideration for the design. The client, Phillip Lovell, was a practicing naturopath: an anti-drug physician who advocated natural methods of healing and preventative healthcare with an emphasis on exercise, massage, heat and water cures, open-air
sleeping, regular nude sunbathing and reliance on a natural fresh-food vegetarian diet. He had long argued that houses should operate in a way that its occupants are able to derive the maximum degree of health and beauty from it. In Richard Neutra, he finally found an architect that would be able to give him a house premised on the fundamental health principles and construction ideas he preached. Neutra agreed with Lovell about the connection between health and architecture and he was commissioned to build a house that would enhance, by its design, the health of its inhabitants (Neutra, 1992). Neutra spent copious amounts of time in understanding the client wholly in their personality, lifestyle, activities and desires (Hines, 1982). The result was a house whose form directly reflected its program. Nature was brought directly into the home through the design. Extensive
glazing enhanced the connection with the outdoors while open-air terraces and sleeping porches promoted exposure to fresh air. Double height spaces also enhanced the quality of the spaces. Natural elements were incorporated throughout the site including an extensive landscaping agenda and a large therapeutic pool.

The challenging, sloping site was a great challenge for Neutra. The site overlooked a beautiful and natural city-owned park with views of the city and the ocean beyond (Hines, 1982). Neutra kept the essence of the site intact, choosing instead to manipulate the structure to cascade down the slope. The main entrance from the roadway is incorporated into the top floor of the house. From there, the structure gradually reveals itself further as it effortlessly trickles down the hill, following the form of the natural landscape. Only the top two levels of the house are clearly defined in elevation, allowing the third foundation floor to be absorbed back into the landscape at the bottom. This also gives the illusion of weightlessness as the house appears to be floating above the ground (Drexler & Hines, 1982). The difficult nature of the site was also influential in the materiality of the form. Access from the road was extremely limited which posed a substantial problem for getting materials to the site. The prefabricated
steel elements were lightweight in nature, making it easier to transport them for the structure. The gunite method of concrete application also alleviated this problem: the concrete could be piped through long hoses from the road in order to be applied to the structure. This allowed faster transport of the concrete from the road to the site rather than the traditional wheelbarrow transport method. The selection of materials well suited to the site follows Rudolph’s fourth determinate of form: the particular materials one uses. As Rudolph (2006) argues, each material has its own potential and one seeks the most eloquent expression possible. Neutra recognized that he could achieve the same residential modernist effect in a way that was much easier in the construction process.
In our largely self-centred society, the human body plays an integral role in many aspects of the design process. Idealized human representation in architecture began with Vitruvius and continued throughout the Renaissance. In the modern period, an extended bodily projection emerged, one in which the building began to objectify various states of the body, both physical and mental (Vidler, n.d.). Feher (1989) argues that certain body organs have been used as models for the functioning of human societies. The same can be said for architecture. Parallels can easily be made between the systems of a building and the systems of the human body. This connection is inherent as the human body is a highly complex and efficient system which exemplifies a strong model for design.
Modern architecture became concerned with medical thought, and as a result, domestic dwellings began to be understood as a kind of medical equipment, one which could protect and enhance the human body (Colomina, 1997). This type of medical design was important to Neutra as he believed that “quite simply, our habits, moods, efficiency and health are intimately related to our habitations” (Neutra, 1989, p. 5). This was especially important for the design of the Lovell Health House. The client, Phillip Lovell, had always desired a house that was able to enhance the lives of its occupants through its design. Neutra incorporated a number of “healthy” characteristics (including sunlight integration, ventilation, outdoor sleeping porches, special diet provisions, a therapeutic pool and exercise areas) in order to achieve his client’s desires for the house (Hines, 1982). Considering the behaviour of the clients, a design was realized which enabled the bettering of their lives. This created an inherent play between the human body and the space within which it resides. When taken further, a constant feedback loop of
informed change develops, and after multiple iterations, the original state is no longer discernable. Cyborg technology would be another step forward in the design’s evolution: the idea of the house as a reflection of its occupants is taken to the extreme if the architecture begins to adapt the qualities of its human residents. Such a dynamic is proposed in Bratton (2006) in his discussion of recombinant architecture, where the architecture and the bodies that inhabit them are of the same nature.

The Lovell Health House is an attempt to seamlessly integrate nature into the dwelling through the use of sunlight, open-air spaces and landscaping considerations. For Neutra, humans were inextricably linked with nature. He goes even further to imply that we are defined by our environment: “Man is always in the middle of something – this ineluctable presence, enveloping
and permeating our lives, called the environment. It ties us together. It determines who we are, how we feel, and what our outlook is” (Neutra, 1989, p. 5). As a result of Neutra’s beliefs, nature, as a body, had as much of an interest in his architecture as that of the human body. The idea of nature could ever be considered completely separate from humans is something inconceivable for Neutra: “The old dualistic notion that the interior and exterior forces of the world are segregated is perilous nonsense. There never was any dualism in nature” (Neutra, 1989, 6).

This integration of human life with the larger natural system parallels with Agrest’s (1993) discussion of the architecture from without. Similar to the conflict between equating and linking the male and female genders, it is also difficult to intrinsically combine nature and architecture. How is one to create a defined space which is not separate from its surroundings? Though the two are inherently not the same, we are attempting to equate them on the same level and from the same perspective.

Though nature as a part of the dwelling is a romantic notion, it is important to first consider what we are really incorporating as far as the quality of our surroundings. Neutra was first drawn to Los Angeles for its inherent freshness, one not yet soiled by smog and unabated sprawl (Neutra, 1989). In designing the Lovell Health House, he incorporated the surrounding environment into the dwelling for the benefit of the occupants. However, with the present levels of environmental degradation and pollution, such an idea
may be detrimental. Instead of enhancing quality of life, the building may actually be rendering the occupant unhealthy (Colomina, 1997).
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Technique

In the Lovell Health House, Neutra was revolutionary in both his thinking about residence and the techniques employed in reaching his end product. Neutra designed the Lovell Health House as a completely steel-framed structure; though steel technology was being used in high-rise construction at the time, this was the first instance of its use within a single-family residential structure in America (Hines, 1982). Similar modernist houses had previously been constructed of cast-in-place concrete, a method which would have been problematic for the difficult site that Neutra was negotiating with this project. Within such conditions, Neutra evoked a revolution similar to those discussed by Kuhn (1996), one in which older paradigms are replaced to some degree by an incompatible new one.

At the time of the design’s conception, prominent technological thinking concerned itself primarily with mechanization and standardization, creating a perfect climate for Neutra’s experimental techniques. Tafuri (n.d.) explains how architecture culture defines itself technically by stating that: “the very method of design to the idealized structure of the assembly line, the forms and methods of industrial labour became part of the organization of design are were reflected in the proposed use of the object” (p.21). Assembly-line
methods allowed for the efficient production of standardized parts in a new and wonderful way. Such technology contributed to the development of components for construction: standardized elements which could be used throughout a structural system. This technique allowed for combinations of steel structural components in simple arrangements which were able to be rapidly erected on the construction site. The components formed the frame of the structure and therefore had a strong influence over the form of the building (Grosz, 2008).
The idea of components can be taken a step further out into the urban scale. Individual components or cells combine to create a unit in the form of the structure of a residence. When expanded to the urban level, the same ideal is true as numerous units combined to form an inherent urban structure. The form and combination of these units establishes the pattern of the city, similar to how the component was able to influence the form of the structure. This illustrates how technique is able to span outward to the realm of the urban collective, rather than simply within that of the architect.

Neutra’s move to use structural steel in a completely new way is comparable to the way new technologies are constantly being incorporated into the realm of design today in an attempt to create unique methods of formulation. As a result of these techniques, complexity has become a staple in architectural design, where straightness is treated as a negative, one lacking in the inherent bendability, looping and feedback of a curve (Spuybroek, 2004).
straight line: infinite simplicity

straight line: extent of transformation

curved line: infinite complexity

curved line: extent of transformation
However, the simplicity and linearity of the components and the system are what made them some valuable in early industrialization. The components were able to be readily produced for numerous applications, a very efficient system. We have now moved far past this into an era where numerous structural materials have been mastered and, with incredible feats possible, we are able to be much more free in our design process. If Neutra were to design the Lovell Health House in the present, it would likely encapsulate cutting-edge design technology of the times, becoming equally as forward and influential as it was in the 1920s.
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Space

Space is an extremely broad term that encompasses a number of understandings. It is an essential component of architecture: it is what we deal with. Through the use of walls, floors, roofs and structural elements, we create space, whether open or closed, subtle or articulated. It is the core principle of the profession, the element that all others stem out of, whether form, body, technique or beyond.

Narrative is an essential component in understanding space. Architects, whether intentionally or not, infuse their designs with their own internal narrative, one which can never be separated from the built form. Regardless of the architect, users of the space develop their own, highly personal narratives. This infusion of narratives is an intriguing quality of space, as no two experiences of the one space will ever be the same (McDonough, 2004). Neutra’s narrative for the design was likely well integrated with the Lovells’ narrative of their home as there was much cohesion in their beliefs.
and collaboration in the design progress. This narrative, however, would differ strongly from that of an outsider experiencing the space.

Neutra’s intentions for the Lovell Health House are perpetuated and made explicit throughout his design. The interior space has been created and manipulated in a way that it articulates the qualities essential to good health: light, air, connection with nature, etc. These elements play off of one another to create an inherent quality to the space that changes as one progresses through the space and experiences its different perspectives. Though the programmatic layout of the house may at first appear quite traditional, it is laced with innovative integrations of these core concepts that would have produced an element of surprise, intensifying the effect of the space.
program by floor plans

Living
Outdoor Living
Sleeping
Outdoor Sleeping
Guest
Services

generalized program by floor
Cultural understanding and logic play an integral role in this effect as they serve for a backdrop of general understanding of a space. That being said, similar to spatial narratives there are always varying understandings between individuals. For example, the semantics of a single word could induce a number of understandings of what that word is actually defining (Heidegger, 1992).

Light and nature were important components in Neutra’s design and they showcase prominently within the house. The sensations that these qualities evoked within the design were strong, which was integral to the concept. Though light and nature are still essential to the design process today, the Lovell Health House’s treatment of these elements becomes increasingly less effective as time progresses beyond when it was designed. We are constantly becoming desensitized to our surroundings; we now live in a world of what Baudrillard (1983) calls the “hyperrealism of simulation” where
entities that use to affect us are no longer successful as they have been replaced by increasingly more stimulating versions of themselves. The shock value of new innovations soon wears off and the process begins again. In this regard, architecture, once built, soon becomes obsolete. In order to keep up, constant production of newer and more stimulating entities must be maintained. This concept is echoed in discussions of the constant shifting nature of our society, such as Varnelis’ (2007) concept of the rise in “network culture”. In recent years especially, technology has become impossible to disregard in any realm of our culture. Similar to how Neutra formulated a project that meshed well with its Californian surroundings and lifestyle at the time, so too do we now need to design in a way to acknowledge and embrace the various technologies budding around us. That being said, Neutra’s task was likely much easier than the one facing us: designing buildings to fit in to an increasingly electronic and virtual world.
References:


