

# In Search of Ideal Forms: The Space Between Architecture and Sculpture

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## The Lamppost, the Lighthouse, and the Question

Recently, I was sharing a cigarette break with a professor. As we smoked and talked about architecture, he paused; inhaled; exhaled; and then, pointing at a lamppost, asked me, "Is that architecture?" I looked at him with a certain amount of disdain, and with a hint of sarcasm in my voice I replied. "Well, of course not." Trying to help me defend my stance. He asked, "Why?" The "Why?" is what stuck in my mind. I pondered this question, inhale and exhaled. "Well, the fact is architecture—", I paused, "well you see architecture is defined by three main factors: an object's scale, form, and function. A lamppost just doesn't fit into this equation".

I justified my position, explaining that the lamppost, being uninhabitable, cannot be architecture. The response waited on the tip of his tongue. "Well then, what if we increased the scale of the lamppost, creating an inhabitable space? Would you then consider a lamppost architecture?"

On another night, in another conversation, I was sitting outside a local diner waiting for my late night order. A friend called to apologize for tearing apart an earlier draft of this paper. After which, I told him of the previous conversation concerning the lamppost, and the question of "Why?". I tried to explain to him why I felt that a large-scale lamppost could not fit into the category of architecture. My friend asked me, "So, if a lamppost is not architecture, then what about the lighthouse? Would we consider a lighthouse architecture?"

He continued, "The thing is, in the most rudimentary view a lighthouse could be seen as a large-scale lamppost." I interrupted, "However, there is still a missing element in order to span the space between the lighthouse and architecture. We could install plumbing, or post a cot, or hang a painting, but there is still something wrong with categorizing a lighthouse, and certainly a lamppost as architecture. The debate really is whether or not we define architecture by its internal function or by something external."

This is an investigation of the characteristics that define and blur objects. When does sculpture become architecture and architecture sculpture? This is an exploration of the split in design theory, the search for ideal forms, and how these factors have influenced the work of contemporary artists and architects practicing in the space between sculpture and architecture.

## The Duality Within Design Theory

There is a split in design theory and methodology; a duality of subject versus object. This division affects not only design, but also philosophy psychology, sociology, and beyond. Subject versus object refers to the relationship of individuals and of objects exhibiting either interactive or independent relationship to their environments. This relationship forms a divide within design between artistic and scientific process; Romanticism and Positivism; and *Formlehre* versus *Werklehre* (form versus function).<sup>1</sup> These dichotomies, narrowed-down, create the conflicting design methods of creative

expressionism and functional determinism, internal versus external design sources. Functional determinism derives its forms on external, programmatically driven forces. In contrast, creative expressionism utilizes the internal, romantic process of subjective reality. This split thus obscures the appropriate design methodology by which to generate architectural forms. This duality in formal experimentations, between the subjective and objective, is seen throughout previous design eras.

Modernism, for example, was a push closer to functional determinism, creating "machines for living". Some modernist ideas conceived that there is a solution, set formal rules, for architectural structures. Although these function driven forms, through their use of steel, allowed for some functional fluidity and building reuse. However, as seen in some cases, the lack of formal concerns resulted in their imminent demise paralleling an outdated program. These destructions are the result of a narrowing view of the role of architecture; as serving only the physical, external, and not the spiritual, internal, needs of society. The best known result of these failed experiments is Pruitt Igoe. The demolition of which is now commonly known as the beginning of the end of modernism.<sup>1</sup>

Movements such as structuralism and postmodernism created new experimentations in architectural form making, moving away from the base of functional determinism and returned to a focus on classical examples of previous eras. Early postmodernism, although moving away from the idea of building purely objective structures, lacked experimentations of new forms through intuitive forces, creative expressionism.

Form making, using creative expressionism, presents a specific ideology to create structures that can live beyond programmatic fluctuations. This design methodology of form over function is unsettling at the present time due to the fact that it greatly contrasts the Modernist ideas that the majority of current designers were taught in their academic careers. The nature of creative expressionism contains the possibility to alter not only our built environments but also the perceptions of our world and our place within it.

How we view architecture is approaching a new place, facing new environmental, sociological,

and philosophical challenges; Robert Irwin, in his article *Being and Circumstance; Notes Towards a Conditional Art*, sees opportunity in these times of change; "...in a place where there is no more likeness of reality, no idealistic images, no more things, nothing but a bare-bones desert. But here, in this desert, we can now begin to question how it might be otherwise."<sup>2</sup> A formal based methodology of creative expressionism responds to contemporary challenges by creating expressive structural shells, strongly sculptural, resulting in the idea of structures with functional, programmatic, fluidity.

### **The Misplaced Idea of Functionality**

Karsten Harries, in his article, *The Dream of the Complete Building*, writes regarding to the current state of form making in architecture, referring to these structures as "impure". The impurity in architecture that Harries addresses is its focus on function at the expense of aesthetics. The term functionalism, according to Walter Gropius, is an idea that has been commonly narrowing in its interpretation. "The word "functionalism" has been taken too materially... It meant for us embracing the psychological problems as well as the material ones... Emphasis was not so much on the machine itself as on the greater use of the machine in the service for human life".<sup>3</sup> The idea of architecture's function can thus be thought of as the necessity of form to address the physical without neglecting the spiritual needs of society. Harries notes that Hans Hollien, Le Corbusier, and Andre' Leroi-Gourhan stood by the philosophy that "...it was not so much the need for shelter that led man to architecture as the need for spiritual order. More important than the need for architecture protect us from the weather is that it defend us against the void."<sup>4</sup> Moving past programmatically based design methodologies forms are free to move closer to an experimental nature and the formal purity found in sculpture.

### **In Search of Ideal Forms**

Throughout history, from our primitive huts to our temples, humanity has been in search of ideal forms in which to house our lives and to worship our idols. From Plato, Le Corbsier, to contemporary minimalist, revolutionary philosophers and designers have developed obsessive investigations in search of ideal forms. Leonardo DiVinci's dissections to Frank

Gehry's fish explorations, obsession drives the search for ideal forms. All of these methodologies are reflective of revolutionary ways of viewing our world, by observing and mimicking nature. As either rigid mathematical forms or organic shapes, the method of mimicking nature is utilized in order to move closer to the sublime.

For Plato and Le Corbusier these ideal forms were extracted from the very source of nature's design, pure geometric shapes. In a search for the space between the physical and metaphysical realms, Plato defined the 'basic elements' of the world into four geometric solids: The cube, the tetrahedron, the icosahedron, and the octahedron. Plato believed that designing after the forms discovered within nature, such as the pattern of a crystal or the bark of the tree, one moves closer to nature and thus the metaphysical realm. The goal of this search was to find a universal transcendent form within the metaphysical realm. "Plato proposed to find this connection between the mind and the forms in the human soul"<sup>5</sup> The idea was that the soul, being immortal, has seen the transcendental realm. However, when the soul returns to a body, these visions of the ideal forms become obscured. According to Plato, it is only through concentrating inward that one can obtain a glimpse into the metaphysical containing these ideal forms, a glimpse into the sublime.<sup>6</sup>

Thousands of years later, architects altered Plato's basic elements into the sphere, the cylinder, the cone, the pyramid, and the cube. Modernist architects, such as Le Corbusier, based their guiding design principles upon these geometric elements. Explored in both sculpture and architecture, Modernism built off of these ideal geometric forms to generate what they considered ideal forms.

Henry Moore, a prolific sculptor in the 1930's through the 1970's, brought to light a new form of Modernism. His use and abstraction of movement found in nature generated supple and organic sculptures in sharp contrast to forms found in earlier periods of Modernism and De Stijl. Through his abstract sculptures and drawings, Moore's aim was to reach and portray the essence of people. Moore took his designs out of a purely objective design methodology, into what only the souls can see, the essence and energy within people; the ideal forms in the metaphysical realm. In

Moore's mind, to understand the transcendental it is necessary to first understand nature, in particular the human form.<sup>7</sup> Richard Serra, Bart Prince, and Frank Gehry all list movement, nature, and in particular the human body as inspiration for ideal forms.

### **Architecture as Sculpture, and Sculpture as Architecture**

"This consequence brings us, in a future perhaps remote, towards the end of art as a thing separated from our surrounding environment, which is the actual plastic reality. But this end is at the same time a new beginning. Art will not only continue but will realize itself more and more. By the unification of architecture, sculpture and painting, a new plastic reality will be created. Painting and sculpture will not manifest themselves as separate objects, nor as 'mural art' which destroys architecture itself, not as 'applied' art, but being purely constructive will aid the creation of a surrounding not merely utilitarian or rational but also pure and complete in its beauty."<sup>8</sup>--Piet Mondrian

An investigation into the precedents of current designers is necessary for an analysis of contemporary structures that attempt to move closer to ideal forms through designing within the borderland between sculpture and architecture.

One major precedent is the work of Le Corbusier. In the search for ideal forms, Le Corbusier drew inspiration from his travels as well as classical topology. The Villa Savoye, completed at the height of his Modernist ideas, sets the standard for the theory of architecture as a "machine for living". This form was generated as a machine for programmatic function. At this point in Le Corbusier's career he embodied a more technical attitude towards ideal forms. Influenced by the industrial revolution and the mass-production of cars and airplanes, we were now seeing mass-produced architecture. In his later structures, however, there was a change in his elements of ideal forms; towards a design methodology closer to that of creative expressionism. "The human form began to replace still life and machine parts...The rather strict, stereometric world of Purism was eased open to reveal a more complex and primordial subject matter

related to the contents of the unconscious."<sup>9</sup> What led Le Corbusier to move from his objective design formula a form based intuitive design methodology? Perhaps he saw a potential with Ronchamp (1950-1955) for a unification between his architecture and his paintings.

Another precedent for form making that lies between sculpture and architecture is the work of Louis Kahn. The pursuit of ideal forms led Kahn to investigate ancient cultures and historical precedents. Kahn was thus influenced in his work by the ancient principles of form and topology from Greek and Roman ruins as well as Mesopotamian and African cultures. Although it took Kahn most of his career to discover what he believed were the key elements to ideal forms, his structures still stand as powerful, sculptural architecture.

### Follies

Follies are extravagant architectural explorations. The space between architecture and sculpture contains follies. These structures speak of a metaphysical time and space. "They are not of human time and never have been."<sup>10</sup> These structures exhibit a combination of architecture and sculpture, expressing ideas of space and experimentation with intuitive driven form making. Follies, generated from emotion and based on formal concerns, create a tension between sculpture and architecture. The folly, once more, challenges our definition of architecture.

During a roundtable discussion led by Arata Isozaki, Daniel Libeskind commented on follies:

"Someone said that the folly is not a real architectural problem because it does not have a program. I would completely disagree with that. Another word for folly is 'madness' and another term for madness is 'out of control'... This is because nature is out of our control: we have to power to eliminate it, but not to bring it back."<sup>11</sup>

Daniel Libeskind's comment suggests that, in this debate, architects need to keep in mind factors beyond the presence or absence of a program when considering a structure as an architectural problem. The factor of scale and function also play major roles in the debate of whether these forms should be considered architecture or sculpture.

It would be irrational to suggest that every structure society desires should turn into a folly. Hans Hollein suggests that architecture should be thought of as "...an idea built into infinite space, manifesting man's spiritual order, realized through building."<sup>12</sup> The purpose of the folly is to explore ideal forms; not to give people programmed space, but to give them ideas. The aim is by utilizing the scale of the folly, architects can freely experiment in form making later applying their new guiding principles to their architectural structures.

In 1990, The Osaka Follies was held outside of Paris, in the Le Parc de la Villette. Its purpose was to allow architects such as Zaha Hadid, Daniel Libeskind, Frank Gehry, and Morphosis to explore architectural ideas and even architectural fantasies through the medium of the folly. Freed from functional necessity, these architectural experimentations became pure ideas translated into pure form. These architects' later architectural works reflect many of these early experimentations.

Follies, disconnected from the physical world around them, can also be seen as metaphors of human relationships, communities, and cities. These structures should be viewed as individuals, each one having its own unique personalities. Each structure, each idea, has a dialogue with the next, a liminal language and creation of active space between the structures.

### Separation from the Context

"Such a pure architecture cannot stand in a direct relationship to its environment. It is an idea, built into space."<sup>13</sup> --Karsten Harries

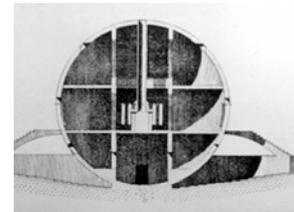


Fig. 1. Claude Nicholas Ledoux *Monument to Issac Newton*



Fig.2. Buckminster Fuller's *Geodesic Dome*

In the most primitive sense, architecture can be seen as the practice of creating either subjective or objective objects. According to Harries's description of purity, it is necessary to remove the constraints of program and site in order to make an object pure. Buckminster Fuller's geodesic domes, Le Corbusier's Villa la Savoy, and Claude-Nicholas Ledoux's Maison des Gardes Agricoles, are in a sense, examples of this disconnection, pure forms. Seemingly created in a black hole or on a blank canvas, standing as pure objects in the landscape, these structures rise above the plane of the physical.

Complete separation from context and social reality is, however, a characteristic not generally explored within architecture. The need in architecture for practical utility results in a tension between purity and objective design solutions. Architecture needs to address the context of its surroundings. However, when proceeding from sculptural experimentations to architectural forms social reality and site can be positive influences; those that add layers of depth to the essence of a structure and significance to its presence. In relation to Plato's theory on the need to turn inward in the search for ideal forms, this internal character, separation, cannot truly separate itself from all context. According to Martin Heidegger, even when creators of form look inwards, "...they do not leave behind their belonging to the fourfold (earth and sky, divinities and mortals)."<sup>14</sup> In other words to design in the complete sense is to address the context of physical components of site and social issues, as well as the internal, spiritual necessities of society.

#### Four Case Studies

##### *Gordon-Matta Clark*

Formally trained as an architect, Gordon Matta-Clark, was one of the most influential sculptors of the 1970's. Labeled as an "antifunctionalist", Matta-Clark, created "anarchitecture", sculptures derived from architecture.

Commenting on the role of functionalism in architecture, Matta-Clark said the,

"...very real nature of my work with buildings takes issue with the functionalist attitude to the extent that this kind of self-righteous vocational responsibility that has failed to question or re-examine the quality of life being served".<sup>15</sup>

The only difference between sculpture and architecture is simply "whether there is plumbing or not". In order to reach this social reality thus negated by architecture, Matta-Clark removed structure's basic functional aspects, turning architecture into sculpture. Rendering aspects of 'architecture' useless, Matta-Clark drew attention to the manipulation of space and our present ideology concerning states of impermanence.

The turning point, the moment of revelation, came to Matta-Clark in his work, *Splitting*. *Splitting*, an abandoned house, sawed, split, in half was stripping the structure of its programmatic function. From the front and back of the house, this move created the illusion of the structure being unscathed. However, moving from side to side, one could see a one-inch gap, one could see that the structure was no longer architecture; it was now sculpture. Matta-Clark created a disassociation of architecture and its function, a metamorphosis from architecture into sculpture; in his view moving the remaining object closer to social reality. Just as *Splitting* shed light on the lonely rooms of a long abandoned house, this change in ideology reaches towards the under-explored area between sculpture and architecture.

Matta-Clark commented on his views towards his work noting,

"If the alliance between sculpture and photography offers the viewer an experience of this ambition, it can do so only by turning the house into a quasi-body that, though rid of its usual organs, retains the power to replicate its forms. What it loses is the specificity of site. In such images both architecture and sculpture are stranded in a pictorial nowhere, surrounded by an empty field of white. The terrain, we might say, is that of art, or of fantasy, or both."<sup>16</sup>

## Frank Gehry

Frank Gehry can be viewed as a sculptor, creating architectural forms whose designs are sculptural external shells in a disconnection to its internal functions. Gehry came to this point in his designs in order to separate the external form from the internal program. In the Davis studio and residence, for example, Gehry created an external sculptural shell and pushed the orthogonal internal walls away from the shell and skin of the structure.<sup>17</sup> Gehry, who was initially trained as a sculptor, views architecture as an art. When addressing the relationship of architecture to art, Gehry's said, "...architecture is like art, it is just another kind of commentary."<sup>18</sup>

## Arata Isozaki

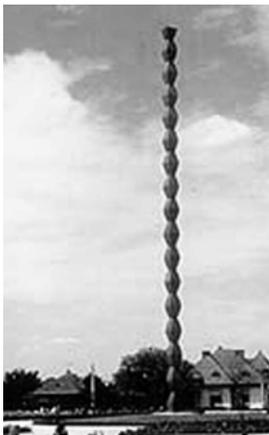


Fig. 3. Constantine Brancusi *Endless Column*



Fig. 4. Arata Isozaki *Art Tower Mito*

In order to perpetuate his architecture Isozaki's buildings do address programmatic needs. However, through his unique design

methodology, these structures have become bold, expressive forms of art.

Approaching architecture with an aesthetic and intuitive design methodology, his buildings approach the boundary of sculpture, in particular, Isozaki's Art Tower Mito located in Ibaragi, Japan. This structure exemplifies the influence of sculpture in his form making. For example, Isozaki's inspiration for the Art Tower was Constantine Brancusi's *Endless Column*. By using the influence of the *Endless Column*, the Art Tower Mito became an architectural reality of a sculptural exploration of space and form.<sup>19</sup>

## The Snow Show



Fig. 5. Labyrinth by Yoko Ono and Arata Isozaki

The last case study is not of a single artist or architect, but of a contemporary exhibition, a contemporary movement, that combines the principles and explorations within sculpture and architecture. For the last three years, seventeen teams consisting of sixty of the top icons in an artist and architecture, from over two dozen countries, have teamed up to create structures in the frozen tundra of Finland. Using eighty percent snow and ice and twenty percent outside materials, for structural or aesthetic purposes. These teams compete in collaborative experimentations, pushing current boundaries in form.

Lance Fung, curator of The Snow Show, addressed the formation of this exhibit as a response to current movements he observed within sculpture and architecture.

"Historically, there has existed a division between the practices of art and architecture, but a great shift is

currently taking place, particularly in the latter profession. Architects today are just as likely to be influenced by Richard Serra or James Turrell as by Mies Van der Rohe, and artists, who rarely address themselves to experimental architecture, are increasingly being exposed to experimentally architected work. It is this very overlap of practices that forms the heart of 'The Snow Show'.<sup>20</sup>

Photo documentation, videos of the construction of these forms, and interviews with the participants are the only remnants of this exhibition. Only six weeks after their construction, the melting ice and snow became the end of the physical presence of these structures. However, the ideologies within this show, that of form making as a collaboration of between the artist and the architect, is now starting to flow throughout the design world.

### **Potentials of Space; the Shell, the Skin, and the Sublime**

After years of lectures on architecture and art theory, I have arrived at a point where my aim is to create forms within the realm between fantasy and reality; form and function; sculpture and architecture. The question is, is it advantageous for designers to practice within this borderland?

Ann Cline describes the outer ring of architecture as a blurry zone, miles long, but "teeming with life."<sup>21</sup> Although blurry, it is a rich ground for contemporary designers in which to explore form, and the relationship between form and function. Such an ideology requires visionary architects. The visionary architect must peer through the looking glass to what lies beyond. We must be willing to encounter the universes of possibility in these outermost boundaries, only designing a more flexible future. The ideas represented by this space between sculpture and architecture will not provide the ultimate solutions to design problems, but will open our eyes to this area teeming with life. Within this area we may find ourselves no longer able to draw lines between art and architecture, and no longer wanting to.

The experiment of envisioning space acts an introduction into the sublime realm of architecture, into follies and sculptural structural shells. The space between

architecture and sculpture promotes structures not reliant on program as a catalyst for design, and instead implores a formal based definition of architecture.

### **Endnotes**

<sup>1</sup> Frampton, Kenneth. *A New Paradigm For Architecture*.

<sup>2</sup> Irwin, Robert. "Being and Circumstance; Notes Towards a Conditional Art." The Lapis Press, 1985. Paraphrasing Kasimar Malevich.

<sup>3</sup> Harries, Karsten (1980). "The Dream of the Complete Building." *Perspecta*. (17), 36-43.

<sup>4</sup> Harries, Karsten (1980). "The Dream of the Complete Building." *Perspecta*. (17), 36-43.

<sup>5</sup> Gelernter, Mark. *Sources of Architectural Form: A Critical History of Western Design Theory*. Manchester University Press. New York: 1995. -pg. 5

<sup>6</sup> Gelernter, Mark. *Sources of Architectural Form: A Critical History of Western*. Manchester University Press. New York: 1995.

<sup>7</sup> Beckett, Jane, Fiona Russell. "Henry Moore: Critical Essays." Vermont. Ashgate Publishing Limited, 2003

<sup>8</sup> Irwin, Robert. "Being and Circumstance; Notes Towards a Conditional Art." The Lapis Press, 1985. Opening quote for his section on the Conditional.

<sup>9</sup> Curtis, William J. R.. *Modern Architecture Since 1900*. Phaidon Press Limited. London: 1996.

<sup>10</sup> Isozaki, Arata. *Osaka Follies*. London: Architectural Association. E. G. Bond Ltd, 1991.

<sup>11</sup> Ibid

<sup>12</sup> Harries, Karsten (1980). "The Dream of the Complete Building." *Perspecta*. (17), 36-43.

<sup>13</sup> Ibid

<sup>14</sup> Heidegger, Martin. *Poetry, Language, Thought*. Harper & Row Publishers. New York: 1971.

<sup>15</sup> Wagner, Anne. "Splitting and Doubling: Gordon Matta-Clark and the Body of Sculpture." Grey Room 14, Winter 2004.

<sup>16</sup> Ibid

<sup>17</sup> Hartoonian, Gevork (2002). "Frank Gehry: Roofing, Wrapping, and Wrapping the Roof." *The Journal of Architecture* (7).

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<sup>18</sup> Princeton, N.J.: Films for the Humanities & Sciences, c1999. Frank Gehry uncensored [videorecording] / a co-production between Beyond Productions and the Australian Broadcasting Corporation ; producers, Alan Hall, Jana Wendt ; director, Gary Deans.

<sup>19</sup> Marcoci, Roxana. (2000). "The Anti-Historicist Approach: Brancusi, "Our Contemporary"." *Art Journal*, (59)2, 18-35.

<sup>20</sup> Fung, Lance. *The Snow Show*. Thames & Hudson. New York: 2005

<sup>21</sup> Cline, Ann. *A Hut of One's Own; Life Outside the Circle of Architecture*. Massachusetts Institute of Technology: 1998.