

# The role of metaphors in the formation of architectural identity

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## **Abstract:**

As is the case in every other field of art, the purpose of architecture is to reveal a unique situation which has never been experienced before and broaden the feelings, thoughts and imagination of human beings. Considering that the concepts of identity and uniqueness are close enough to be used for the same meaning, the main purpose of architecture can be defined as designing a building which has a certain identity. Metaphors seem to be quite beneficial instruments compared to several other methods and approaches applied by architects in order to achieve this purpose. Design problems are defined as “wicked” problems which are too complex to be solved with completely linear, rational, logical methods and with a certain algorithm and require considering both objective and subjective aspects of the problem at the same time and with creativity. Metaphors, defined as “imaginative rationality” appear to be quite appropriate tools for solving such problems since they unite rationality and imagination.

This paper has two interconnected purposes. The primary purpose is to determine the effective role played by metaphors during the design processes of distinguished and referred buildings which have strong identities both in the past and in recent architecture. The secondary purpose is to indicate the capability of a design approach based on metaphors to meet the demand for architecture with identity and overcome the increasing monotonousness in the man-made environment.

**Keywords:** *Architectural identity, metaphor, homospatial thinking, identity formation, metamorphosis*

## **1. Metaphors, creativity and architectural identity**

Aristotle was the first philosopher known in history who pointed out the effective role played by metaphors in creative processes. He briefly defines a metaphor as, “...consists in giving the name that belongs to something else” (Poetics, 1457b). And he explains the importance of metaphors: “...ordinary words convey only what we know already: it is from metaphor that we best get hold of something fresh... It is a great thing by far to be master of metaphor” (Rhetoric, 1410b). One of the aspects of imagination is seeing something in terms of another thing as claimed by Lakoff and

Johnson (2003) who clarify the reason for this importance. If this idea is true, it can be concluded that the effectiveness of imagination and thus, creativity, can be increased through metaphorical thinking. According to Lakoff and Johnson (2003), "The essence of metaphor is understanding and experiencing one kind of thing in terms of another" (p. 5), and "...principally a way of conceiving one thing in terms of another" (p. 36). Johnson (1987: 168) asserts that "Metaphorical projection is one fundamental means by which we project structure, make new connections, and remold our experience". "A metaphor can often create novel features in an object or a situation", writes Indurkha (1999: 621). From the perspective of Lakoff (1987), new metaphors create the entire conceptual system that human activities depend on. In a similar vein, Ricoeur (1991) underlines that metaphors increase our perception of reality by shattering our sense of reality, and that reality goes through phases of metamorphosis through metaphors. It is ideal to reach a new design reality never before having existed by the end of the design process. In order to achieve this reality, it is a must that our current sense of reality goes through several phases of metamorphosis. Otherwise, we can never find the opportunity to add new "architectural realities" to the existing environments. The examples which were designed based on the metaphorical approach investigated within the framework of this article verify this idea. Since Aristotle, the ideas about the role of metaphors in creative processes and their definition have not changed much. In this respect, the most remarkable change is that the role of metaphors in creativity is not just limited to art works; their importance is continuously increasing in science and other creative studies. It should be pointed out that metaphors play important roles in theoretical realms of physics which cause paradigmatic shifts. Einstein's own statements reveal that he conceptualized his own theory in the form of visual images and used them in his thoughts (Holton, 1993). However, according to current operational procedures in science, solutions for characteristically "tame" scientific problems are sought generally by means of analytic, logical and linear methods. On the other hand, design problems are inherently complex; their alternative solutions are unpredictable beforehand, and they are defined as "wicked" (Rittel and Webber, 1973) or "ill-structured" (Simon, 1973). Design can be characterized as an activity which has sometimes the mission of covering contradictory goals, is based on implicit theories, and the notions such as inexpressibility, vagueness, ambiguity, instability, contingency and interrelatedness (Ledewitz, 1985; Wakkary, 2005). As Norton (1999: 194) points out, "There is no single, accepted formulation of the problem; and answers are often more-or-less terms in which planners and managers at best can find reasonable, but shifting balances among competing interest and values... The correct formulation of the problem cannot be known until solution is accepted". Because of that, the architectural design process is a quite complex and non-linear progression. One aspect of this complexity in design is that it is an activity somehow related to almost all disciplines and fields. Another aspect of its complexity is that the design bears the responsibility of addressing a constantly changing and complex human social experience (Wakkary, 2005) and human behavior which is not easily predictable. The operational system of the human mind during such an activity still keeps its mystery to a large extent, and this increases its complexity. Although there is not much discussion about the complexity of this activity, there are contradictory and polarized ideas concerning its essence and, in connection with that, how to get better results by applying which approach and method. While one pole considers architectural design as a technical problem solving activity that should be

based on an objective reasoning method, another pole gives priority to the subjectivism assuming that the designer is a creative genius expressing her/him/self. The approach based on metaphors and defined as “experientialist” by Lakoff and Johnson (2003) embraces both imagination and rationality considering there is no contradiction between them, and thus has the potential to create better results. During architectural design processes, not only rational thinking and comprehension of external world, but also imagination and internal aspects of understanding are needed. In this context, Lakoff and Johnson (2003) claim that, “The myth of objectivism reflects the human need to understand the external world in order to be successful in it. The myth of subjectivism is focused on internal aspects of understanding. The experientialist myth suggests that these are not opposing concerns. It offers a perspective from which both concerns can be met at once” (p. 229) and “From the experientialist perspective, metaphor is a matter of *imaginative rationality*... New metaphors are capable of creating new understanding and, therefore, new realities” (p. 235). Within the framework of the ideas pointed out so far and particularly for their capability in creating new realities, metaphors appear to be very valuable and important tools for an architecture that searches for inexperienced, unique situations and, in this sense, a new reality and makes use of rational thinking and imagination at the same time for this end. Metaphorical thought is not a logical linear mode of thinking. Therefore, it can be seen as an appropriate instrument for understanding the “recursive aspect of complexity” (Bateson, 1988) in design and act accordingly.

Metaphors are not just a matter of language; they are also a matter of thought and action. They involve all natural dimensions of our sense experience such as color, shape, texture, sound (Lakoff and Johnson, 2003). The origins of verbal and visual metaphors are similar according to Rothenberg (2008). The concept of “visual metaphor” was first coined in scientific vocabulary by Aldrich (1968), but has been known and used by architects since ancient times. It is quite natural that visual metaphors prevail in architecture since it is a visual art. Designers’ creative ideas are usually in the form of objects or images in their minds, and they cannot be easily verbalized. However, in relation to concrete samples, it is seen that architects not only use visual metaphors directly, they also apply verbal and conceptual metaphors into visual images and by using different interpretations transform them into visual images. As a matter of fact, it is a much more intelligent attitude than using visual metaphors straightaway and has potential to create more sophisticated architectural designs because a concrete graphic image of an abstract concept changes from one architect to another and varies even according to different perspectives of the same architect at different times. Every image appearing as a result of this process would be superposed on previous images. Thus imagination would be activated and new images would emerge.

As is the case in painting, during architectural design processes, when the image in the mind of a designer which is the subject of design together with the images of other thing or things used as visual metaphors are overlapped, a stable situation is not created comparable to the light coming from superimposed glass plates of different colors. Mental activities between these images and the changing importance of the images in the mind during the design process keep the imagination of the designer constantly vivid. This situation metaphorically can resemble a kaleidoscope in which the

image constantly changes. Aiming at solving the mystery of the how human mind works creatively, Rothenberg (2008) states in his research that many artists can contemplate two or more discrete entities at the same time and thus create an art work with a new identity. He calls this situation “homospacial thinking” and defines it that it “consists of actively conceiving two or more discrete entities occupying the same space, a conception leading to the articulation of new identities” (p. 17) which corresponds to metaphorical thought. According to Rothenberg (1980), during creative processes in visual arts such as painting, sculpture and architecture, the role of visual metaphors is salient. Coyne (1995: 292) also underlines the same role: “Design can be characterized as generating action within a ‘play’ of metaphor”. Related to Rothenberg’s discovery, Schwartz (1987) has demonstrated that in the Mona Lisa painting by Leonardo Da Vinci, it is very likely that Leonardo’s or his father’s images are superimposed on the image of the woman depicted in this painting (Figure 1). Mona Lisa as an art work owes its very impressive identity to a notion that for centuries has been based on metaphors an argument strengthening the hypothesis of this article.

Contemporary prominent architects especially Libeskind, Calatrava, Correa and Holl abstain from direct analogy and use narratives, memories, historical events, characteristics related to project subjects or sites or natural structures as metaphors. It is seen that these architects reach generally multi-layered, sophisticated, effective meanings by constantly making mental shifts between the verbal and the visual metaphors. The significance of this meaning in relation to this article’s argument is that it has a very remarkable architectural identity. It should be noted that here it is not a completely new meaning, it is the metamorphosis or “reincarnation” of one or more existing meanings formed through “homospacial thinking”. It is presumed that architectural environments reached through such an approach do not cause alienation in people and solve the dilemma of creativity and identity. Waks (2001: 38) claims that the major achievement of Schön who is remarkable figure in design theory research has recognized the power of metaphor: “He discovered that generative metaphors permitted us to ‘construct meaning in our perpetually changing circumstances, providing continuity between our older experiences and our new situations by pointing at similarities or family resemblances between them’”. According to Fernandez (1974), metaphors play at major role in identity formation. Creative or generative metaphors enrich a certain cultural environment by adding new meanings (Tucker, 1994). The significance of representational space or discovery is never absolute; on the contrary, it is always a matter of transformation and interpretation (Foucault, 1986). As Tucker (1994: 138) points out, “Architecture, as in art and literature, can use metaphors to



**Figure 1.** *Mona Lisa Painting by Leonardo Da Vinci. Leonardo’s or his father’s face is superimposed on Mona Lisa by Schwartz (1987). Source: La Farge, (1996)*

convey specific philosophy. In some instances, an entire work of art or architecture itself becomes the metaphor". "Identity is people's source of meaning and experience" stated by Castells (1997: 6). However, counteracting the architectural deformation created by the uncontrolled power of globalization, without resorting to historical repertoire, there is a need for an architecture expressing societies' own realities. In order to accomplish this, Castell (1996) points out that we should turn to places, culture and people. In relation to this current need, architecture has become a cultural expression medium gaining importance in creating and developing a social identity (Delanty and Jones, 2002). Due to that, a design approach based on metaphors has recently become pervasive. Such a design approach has a capability of ensuring the "reincarnation" of the existing identity without completely rejecting the old identity and disintegrating with familiar meanings, experiences or shared codes of the society.

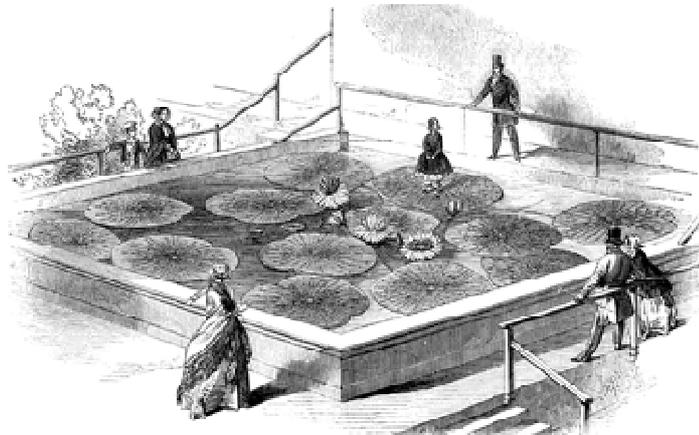
From the view point of Draaisma (1995), metaphors as literary and scientific structures are the reflections of a certain era, its culture and its environment. The same situation is valid for architecture as well. The new and different identity of each era employing the design approach based on metaphors is reflected in architecture through the metamorphosis of the existing culture. In addition to being a medium for creating new identities and thus enriching the existing culture, metaphors are transmission tools of cultural identity from one place to another. According to Fernandez (1986), this transmission in language or in architectural environment is negotiated through the interplay of contrasting or similar metaphors.

## **2. Examples based on metaphors prior to the modern movement**

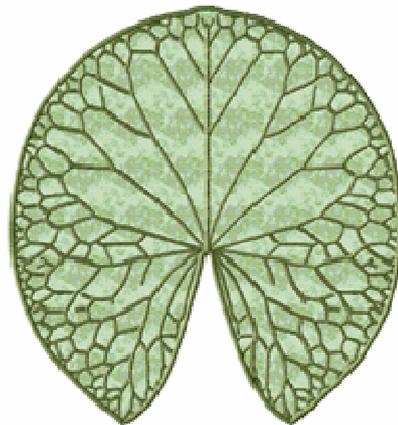
The ideas about the role of metaphors in architecture date back to ancient times. Vitruvius (1960) suggests the use of nature as metaphor and observation of things growing like a tree almost two millennia ago. He also points out that when people adopted a sedentary life, some build shelters for themselves resembling bird nests by getting inspiration from swallows. As nature designed the human body symmetrically, perfect buildings, particularly temples, were symmetrically designed by the ancients. The reason for the effective identity of Gothic architecture is associated with its use of natural entities' structures and natural processes as metaphors. Jan Rudolphe Perronet (1770: 39) described the metaphorical basis of Gothic architecture as follows: "The magic of these buildings explained largely by the fact that they were built in some degree, to imitate the structure of animals; the high, delicate columns, the tracery with transverse ribs, diagonal ribs and tiercerons, could be compared to the bones, and the small stones and voussoirs, only four or five inches thick, to the skins of these animals. These buildings could take on a life of their own like a skeleton or the ribs of a boat, which seem to be constructed using similar models". The constructive success and distinct identity of Gothic architecture could be attributed to the synchronization of its structural system with the "natural flow of forces" and in this sense the application of natural processes as metaphors (Schuyler, 1894).

The distinctive and effective identity of the Crystal Palace designed by Joseph Paxton in 1851 is the result of a design approach based on metaphors. Almost one-meter long, the large leaves of a water lily called as *Victoria Amazonica* are strong enough to carry Paxton's seven year old

daughter (Figures 2). This strength is the results of ribs' of water lily structural pattern (Figure 3). He clearly described his metaphoric inspiration in his lecture at the Royal Society of Arts during construction of Crystal Palace as follows: *"The underside of the leaf presents a beautiful example of natural engineering in the cantilevers which radiate from the center, where they are nearly two inches deep, with large bottom flanges and very thin middle ribs from buckling; their depth gradually decreases towards the circumference of the leaf, where they also ramify"* (Paxton, 1850-1: p. 6). This observation brings to his mind the idea of building a structure which has never been accomplished before with a light but strong roof. He has also applied to the metaphor of table cloth which covers this roof structure (Ufuk, 2007). After such inspirations, Paxton has used steel which represents the function of ribs and glass for the flat surface of the leaf. This building has become one of the major architectural symbols of the New Industrial Age (Figure 4).

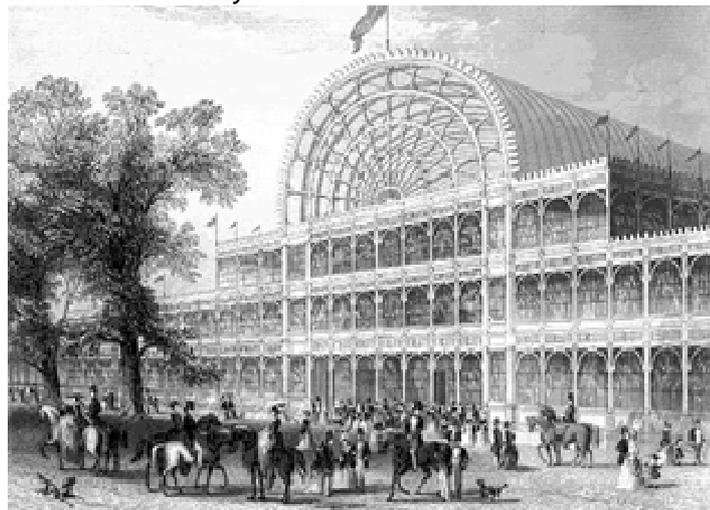


**Figure 2.** The picture depicting the strength of water lily leaves carrying Paxton's 7-year-old daughter Annie. Source: Wikipedia

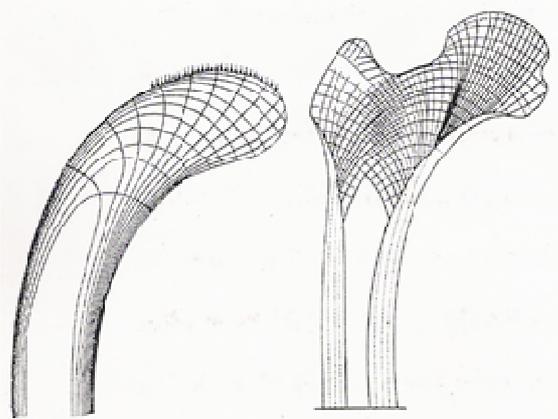


**Figure 3.** Structural pattern of water lily's leaf. Source: abc-machine-embroidery.com

In a similar way, the strong identity of the Eiffel Tower emerges from its metaphorical genes. The construction of this tower was completed in 1889. However, the preliminary thoughts of this scheme which was metaphorically tied to nature were started four decades before. During the early 1850's, Anatomist Herman Von Meyer observed that the internal structure of the top of femur was quite an important element of our skeletal system for transmitting the weight of the human upper body to the legs. He discovered that the structure in the top resembled lattice work. Thompson (1948: 976) describes



**Figure 4.** Crystal Palace by Joseph Paxton. Source: kathleen-duffy.suite101.com



**Figure 5.** Eiffel Tower. Texture pattern found by Von Meyer in the “femur”, which is used as a metaphor during Eiffel Tower’s design. Source: Thompson, (1948).



**Figure 6.** Eiffel Tower by Gustave Eiffel. Source: polylooks.wordpress.com

this structure called “trabeculae” as follows: “The trabeculae, as seen in a longitudinal section of the femur, spreads in beautiful curving lines from the head of hollow shaft of the bone; and that these linear bundles are crossed by others, with such a nice regularity of arrangement that each intercrossing is as nearly possible as an orthogonal one: that is to say, the one set of fibers or cancelli cross the other everywhere at right angles”. Karl Cullman, an engineer became interested in Meyer’s works for a crane design and gained information from him. Thompson (1948: 977) comments on this conversation as follows: “The engineer, who had been busy designing a new and powerful crane, saw in moment that the arrangement of the bony trabeculae was nothing more nor less than a diagram of lines of stress, or directions of tension and comprehension, in the loaded structure: In short, nature was strengthening the bone in precisely the manner and direction in which strength required”. Cullman solves the problem in the crane’s design inspiring Meyer’s research and utilizes the transmission of the trabeculae pattern to the feet of the construction’s load in the Eiffel Tower (Figure 5). Latticework in this tower similar to the curvilinear pattern on the top of the femur ensures the transmission of loads coming from the upper part to the ground (Figure 6). Although its function is similar, the pattern on the femur is reversed here.

### 3. Examples related to the modern movement in architecture

Conforming to transcendental philosophy’s principles, Frank Lloyd Wright, one of the leading figures of 20th century architecture, says nature and natural processes he observed are the guiding principles or the main metaphors of his design approach. Wright discovered the order and unity principle in nature. According to him “order gave life its form and unity gave form its life” (Bolon, Nelson and Seidel, 1988: 86). Wright admired humble weeds as they embody these principles and he would ride on his

horse to pick some of them. Moreover, natural objects occupied a great place in his Oak Park’s studio library and he probably benefited from them to find the main concept of his designs (Bolon, Nelson and Seidel, 1988). Wright tried to discover the natural pattern of structures and the secrets of nature’s order. He conceived nature as an organism and, similarly, he

suggested that within his concept of organic architecture a building is an organism. He considered construction as a living entity, a product of circumstance, a unified response to function, material and environmental forces and the architect as an “instrument of nature” (Stuart, 1992: 35). His statement, “A building dignified as a tree in the midst of nature” (Wright, 1954: 50) reflects such a perception. However, Wright’s usage of metaphors is not limited to nature. For instance, in the “Unitarian Community Meeting Center”, the trinity of the Father, Son and Holy Ghost is reflected metaphorically in his design (Figure 7). The capability of using metaphors during design processes in realization of buildings with apparent and strong identity is confirmed within the context of Wright’s design approach.



**Figure 7.** Unitarian Community Meeting Center by Frank L. Wright. Source: forconstructionpros.com

There are two metaphors in the Glass Pavilion designed by Bruno Taut for the Werkbund Exhibition in Cologne, Germany in 1914 (Figure 8). The first metaphor used by Taut in this design is the vision and propositions included in Paul Scheerbart’s book “Glassarchitectur” which was published in the same year. According to the poet, in a



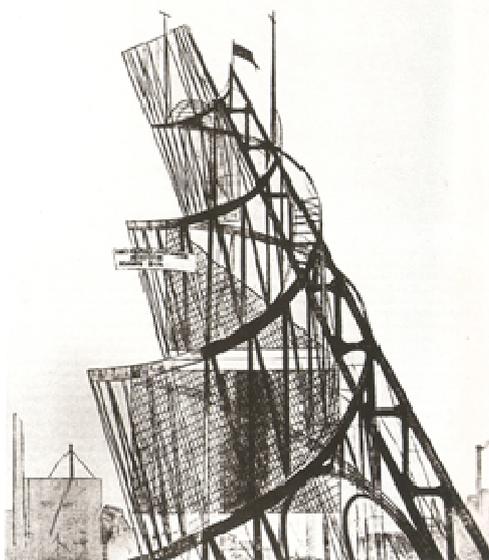
**Figure 8.** Glass Pavilion by Bruno Taut. Source: Curtis (2011)

transparent and splendid utopist world, where all architecture is composed of glass, the dichotomy of internal and external environments will be eliminated. And as a result, in such an environment, there will be no ethical problems. Taut is inspired by his aphorism “Light wants crystal”. In accordance with Scheerbart’s ideas, the dome of the Glass Pavilion was designed with double-glazed walls whose colored prism is inside and reflective glass is outside (Tucker, 1994). The second metaphor used in this building is Gothic architecture. According to Taut, this structure aims to reflect the spirit of Gothic cathedrals and the pyramidal shape of the crown is, in the words of Frampton (1980: 116), a “universal paradigm of all religious buildings, which together with the faith it would inspire was an essential urban element for the structuring of society”.

*One of the primary fields referred by architecture as a metaphor is science.* Einstein’s relativity theory especially has pervasive reflections in architecture. Mendelson is inspired by this theory believing that it reaffirms architects’ and engineers’ loyalty to nature. Mendelson uses the terms “nature” and cosmos to mean exchangeable nature of matter and energy. He has tended to explain his own architectural space in terms of light and mass corresponding to energy and matter in Einstein’s theory (Figure 9). His



**Figure 9.** *Einstein Tower by Eric Mendelson. Source: fotocommunity.de*



**Figure 10.** *Third International Monument by Vladimir Tatlin. Source: Curtis (2011)*

building called Einstein's Tower or the Potsdam Observatory, is associated with Einstein and his theory of relativity and a metaphorical expression of paradigm of reality and at the same time Taut's Glass Pavilion (Tucker, 1994).

Tatlin was also inspired by Einstein's theory of relativity in his design of the Monument to the Third International (Figure 10). This monument was designed as a double steel spiral skeleton surrounding three geometric forms revolving and creating a vertical stacking. The huge glass drum at the bottom is designed to slowly make revolution once a year; the next higher pyramidal form once a month and the highest cylinder once a day. This tower, considered a part of "real time and space" seems to be related to the dynamics of motion to represent the historical journey in space. Tatlin integrates time and the spatial position metaphorically and expresses space's relation to history. This means alienation from a psychological and transcendental time dimension of non-Euclidean geometry and fourth dimension philosophy. According to Krauss (1981: 56), this tower is the "externalization of the structural logic of sculpture". Getting inspiration from Einstein's relativity theory, in his design he expresses the idea that time and space are interconnected and interchangeable. Related to transitional understanding between the fourth dimension of non-Euclidian geometry and Einstein's relativity theory, Tatlin has used time only as the fourth dimension. He created a metaphor for interactive space reversing the interior and exterior space relationship incorporating the motion. Here interior and exterior can be

converted with each other. On the other hand, time represented with motion is identified with space. Tatlin used a skeletal structure as a metaphor on the external surface, it is beyond the interplay between interior and exterior because what is aimed to be expressed here is that internal and external space is dependent on the position of the observer (Tucker, 1994). This monument with its distinguished status in architectural history is another confirmation of metaphor's effective role in forming an architectural identity.

Another architect who is interested in time and space notion which gains a different and to some extent metaphysical meaning after Einstein is Buckminster Fuller. He explains that his primary source of inspiration is Einstein's relativity theory as follows: "Obviously, we must now abandon the unrealistic 'at rest' and refer all our affairs to the realistic yardstick of energy and its velocity aspect, as recently and universally adopted by science from Albert Einstein's work" (Fuller, 1963: 201). Fuller's architectural forms are metaphorical expressions related to his understanding of relativity theory. For Fuller, fourth dimension architecture should have been in a

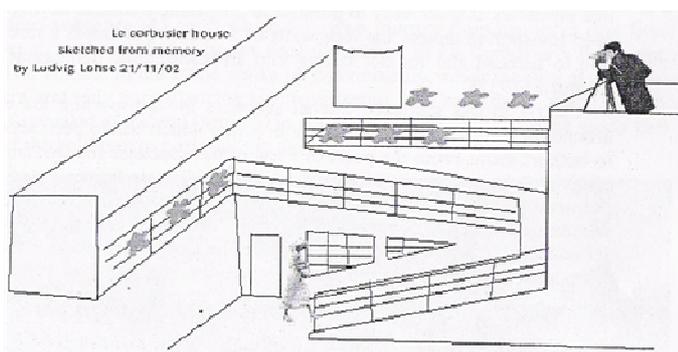
circular form symbolizing time by radius. Time is measured as the distance from the Center column (Henderson, 1983). It is observed that Bruno Taut's Glass Pavilion inspires Fuller as well and he used it as a metaphor in his impressive geodesic dome (Tucker, 1994) (Figure 11). At this point, bearing in mind that Gothic architecture is used as a metaphor in Glass Pavilion, it can be concluded that geodesic dome is in a sense indirect metamorphosis or "second reincarnation" of Gothic Architecture. This indicates that metaphors have capability of continuously ensuring the reinvigoration of old identity in accordance with the "zeitgeist" without completely breaking with the familiar meanings and experiences of people. Henderson (1983: 236) points out that Geodesic dome as "fundamental minimal structure of the universe" developed with Fuller's changing interest from circle to tetrahedron. Fuller relates his comprehension of geodesic dome's unique structural strength to the interchangeability of energy and matter according to Einstein's  $E=mc^2$  formulation and uses this formulation as a metaphor (Tucker, 1994). Fuller's distinct designs influentially reflected in the memories of architects and architectural students owe their identity to a design approach based on metaphors.



**Figure 11.** Geodesic Dome by Buckminster Fuller. Source: [xlili.wordpress.com](http://xlili.wordpress.com)



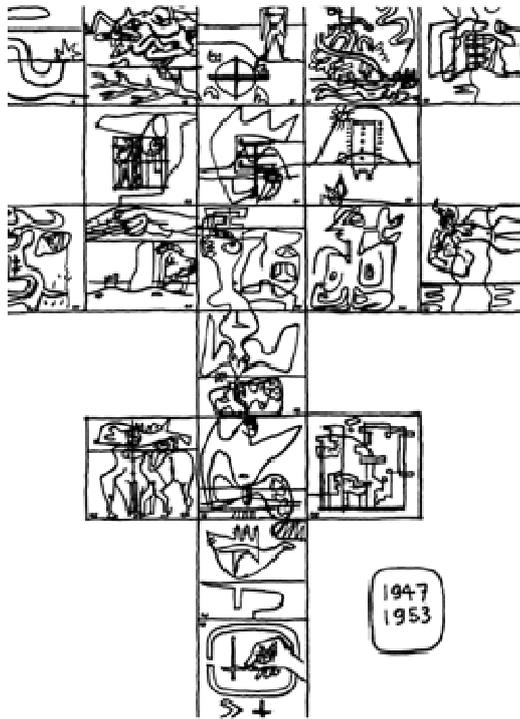
**Figure 12.** Villa Savoy by Le Corbusier. Source: [irene-ngocta.blogspot.com](http://irene-ngocta.blogspot.com)



**Figure 13.** Ludvig Lohse's drawing which indicates that cinema is used as a metaphor in Villa Savoy. Source: Penz, (2006)

Metaphors again play the primary role in creating the distinctive identity of Le Corbusier's Villa Savoy which is one of the most important and most frequently cited buildings of modern architecture. This metaphor is cinema which is a new medium and a technologically new invention at that time.

According to Colomina (1987), Le Corbusier's architecture is the result of his positioning himself behind the camera. Colomina (1994: 5-6), states that "Modern eyes move. Vision in Le Corbusier's architecture is always tied to movement: You follow an itinerary, a "promenade architecturale". The point of view of modern architecture is never fixed, as in baroque architecture, or



**Figure 14.** *Le Poème de l'Angle de Droit.* Le Corbusier's drawings indicating the mystic relationship between Mary's body and Ronchamp Chapel. Source: Samuel, (1999)



**Figure 15.** *Ronchamp Chapel.* Source: weareprivate.net

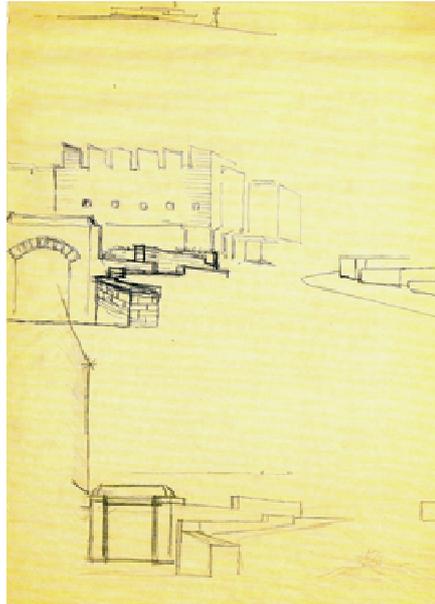
as in the model of vision of the camera obscura, but always in motion, as in film or in the city" (Figure 12, 13). Such an attitude is clearly observed in Villa Savoy. It is not possible to comprehend this building from a single point of view; however, a moving eye like the camera in cinema could perceive it. From Sarkis' (2002) perspective, Le Corbusier's interaction with cinema is beyond that. Because here the constants can be manipulated as it is the case in cinema. Emptying the space enables more continuity. From this respect, it is obvious that Le Corbusier is used as a metaphor deliberately and systematically with the influence of the cinema. Another design of him, Ronchamp Chapel built in 1955 which has strong identity is based on theological metaphors. Many sketches made by him clearly demonstrate that Le Corbusier is trying to establish a mystical relationship between Mary's body and the church (Figures 14, 15). In this chapel, there is another metaphorical layer. It is the interaction with mortuary sculptures in Brittany region of France (Samuel, 1999).

#### 4. Examples related to after modern movement

Turkish Historical Society Building of Turgut Cansever and Ertur Yener in Ankara emerged from the castle metaphor as indicated by Cansever's sketch on this matter as the main function of this building is to protect historical documents like a castle (Figures 16). Castle metaphor is expressed in the massive surfaces where the

columns on the ground floor of the building grasps the first floor cantilevers and upper ending profiles of these surfaces which are resembled to bastions (Ulusu, 1990). This statement by Cansever demonstrates that a second metaphor was also used in this building's plan scheme formation: "During my history of art studies, I was visiting monuments and buildings from Ottoman period such as madrasas etc. I was observing how people used to live in these buildings (Figure 17). There were rooms, porch... One or two people would use the same room to study, people use the porch to

communicate and discuss things... It was like an agora! First discussions made when walking in open spaces of Athens... In fact, if madrasa has the features of revealing the collective characteristics of scientific research, I thought that a place in the center together with such a meeting room, study rooms on the upper floors and library could represent freedom of collective study and a solution could be allowing for it. So madrasa plan played a role” (Tanyeli, Yücel, 2007: 174). It is seen that the use of castles and madrasas as metaphors give a strong identity to this building.



**Figure 16.** Turgut Cansever's sketch showing clearly that castle metaphor is used in the design processes of Turkish Historical Society Building. Source: Tanyeli and Yücel, (2007)

Correa's Jawahar Kala Kendra Art Center in Jaipur dedicated to Nehru is another example of the significant role played by a design approach based on metaphors in creating an architectural identity. There is coding which is the metaphor of the archaic Notion of Cosmos completely identical to Navgraha mandala (Correa, 1996). As a matter of fact, this coding is not a new attitude. In the arrangement Jaipur city plan which was designed in 17th century, 9 chequered Navgraha mandala used as a metaphor by Maharaja Jaisingh (Jadav, 1998). So the main arrangement plans of this city and this art center are the same. It is based on the division of a square evenly into 9 little squares representing 9 planets (Figures 18, 19). However, "Shukra" of these was moved to one side in a way that would be the

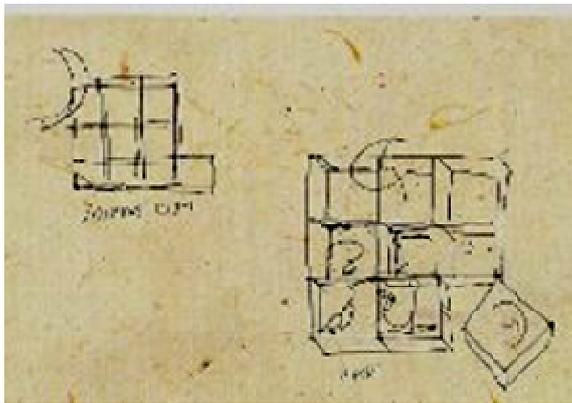


**Figure 17.** Turkish Historical Society Building by Turgut Cansever and Ertur Yener. Source: Tanyeli and Yücel, (2007)

reminiscent of the entrance place in the Jaipur city plan. It is also the same in the art center. Main functional groups of Jawahar Kala Kendra are placed in 9 squares according to the characteristics attributed to imaginary planets in the archaic era. For instance, while administration is in Mangal square which represents power, library is in Guru square which is believed to represent wisdom (Figures 20, 21). Metaphors play active role in detailed designs. This feature is interconnected in Rahu square which is the symbol of devourer and restorer at the same time and it is depicted as intercepting



**Figure 18.** Jaipur City Plan was based on 9 chequered Navagraha mandala. Source: boloji.com



**Figure 19.** Charles Correa's sketch indicating that Jawahar Kala Kendra based upon the Jaipur City Plan. Source: Correa (1996)



**Figure 20.** Plan of Jawahar Kala Kendra Cultural Center by Charles Correa. Source: jawaharkalakendra.rajasthan.gov.in

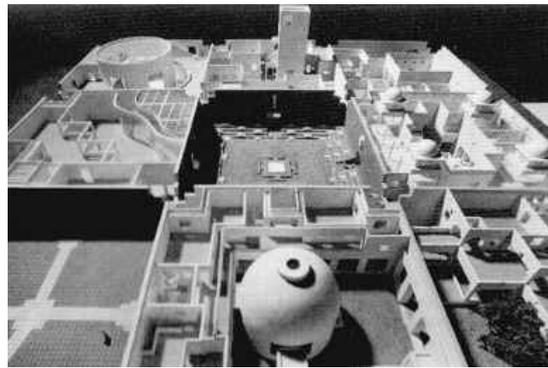
circular walls and contrast of black and white hues. In this section a column is also the metaphor of the axis of Universe (Correa, 1996). While adapting this mandala to the conditions of the contemporary era, on the one hand Correa attempted to express the roots of society, enliven the past in collective memory and on the other hand indicate the social change. Jadav (1998) interprets this approach as a search for identity by Indian architecture which is believed to be alienated from local and national identity during the period of colonization for 200 years. Here, metaphorical approach of Correa which is based on cosmology of Jaipur City plan is seen as an example which ensures historical continuity without losing the purpose of renewal and thus attempting towards the solution of creativity-identity dilemma.

Steven Holl's interaction area in his Stretto House is music which is traditionally considered to be close to architecture due to its abstract nature (Pallasmaa, 2005) and , but at the same time creates difficulty when used as a metaphor due to this abstractness. By overcoming this difficulty, Holl realized Stretto House which has become matter of researches because of its distinct identity. In relation to "homospatial thinking", there are two discrete images here; one is superposed and interacting musical composition, the other is existing water dams in the site. In the project site, the sound created by water flowing from the spring and overflowing from the water jumps associates Holl's mind to the Stretto partition in the fugues. Holl listens a piece from Bartok when he is working on this project, and according to him, this piece is compatible with golden section and has an architectonic structure. Holl (1996a: 7) writes, "In a fugue stretto, the imitation of the subject in close succession is answered before it is completed. This dovetailing musical concept could, I imagined, be an idea for a fluid connection of architectural spaces. A particular piece of music was chosen for its extensive use of stretto-Béla Bartok's Music for Strings, Percussion, and Celesta (Figure 22, 23). In four movements,

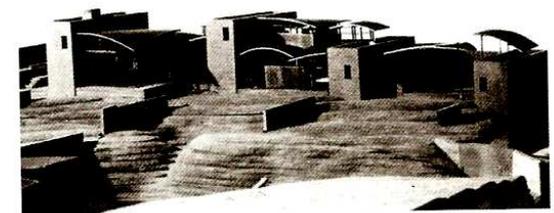
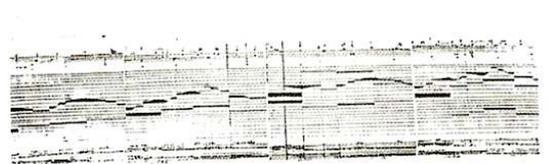
the piece has distinct division between heavy (percussion) and light (strings). Where music has a materiality in instrumentation and sound, this

architecture attempts an analog in light and space". As the piece has four parts, the house also has four parts which can be characterized as light and heavy ones. While the rectangular heavy parts have the massive concrete characteristics, the curvilinear light transparent sections are constructed with steel and glass. This arrangement of heavy and light parts is also metaphorical expression of solid water dams in the site and the flowing water over them (Holl, 1996b). In the main building, plan geometry is orthogonal while the section geometry is curvilinear. As the melody is played reversely in this kind of piece, it is reflected in the architecture of guest house as curvilinear plan geometry and orthogonal section geometry. Reflective and brilliant floor material is chosen because it expresses the watery characteristic of the site. Goethe's metaphorical definition as "architecture is frozen music" becomes literally concrete in this design.

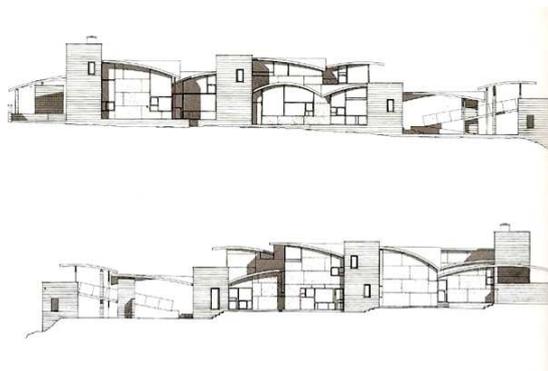
Parc de Villette which has distinct identity is another example related to the result of the interaction with other areas in a design. In this experiential project, cinema is used as a metaphor. Tschumi (1981) has proposed the idea that cinema theory can be applied in architectural design process in his book called "The Manhattan Transcripts" and then he has an opportunity to put this idea into practice in his "Parc de Villette" Project. According to Tschumi, cinema is based on discontinuous narratives. Discontinuity instruments are juxtaposition, frames, montage, cut etc. related to cinema techniques (Figure 24). Tschumi used the sequence technique in cinema to express movement. In the design of units having different functions of this park which is defined as "Cinematic Promenade of Gardens". Another remarkable aspect of this design is the metaphor of film strip. The main walkway, is the metaphor of sound track on the film strip, folies arranged sequentially to be seen in juxtaposition from different angles from above, below or any other viewpoint in the environment are the metaphors of image track on the film. Each "folie" displays a distinct image. In other words, they are arranged one after another without exposing any formal relationship to each other as it is the discontinuity case in cinema. Perteuset (1990: 11) points out, "In its built form, the park is experienced as dichotomized between, on the one hand, thematic units of experience each formalized as architectural objects of gardens, and on the other hand, the distance to be covered between each of these events analogous to the abstract time that connects photograms".



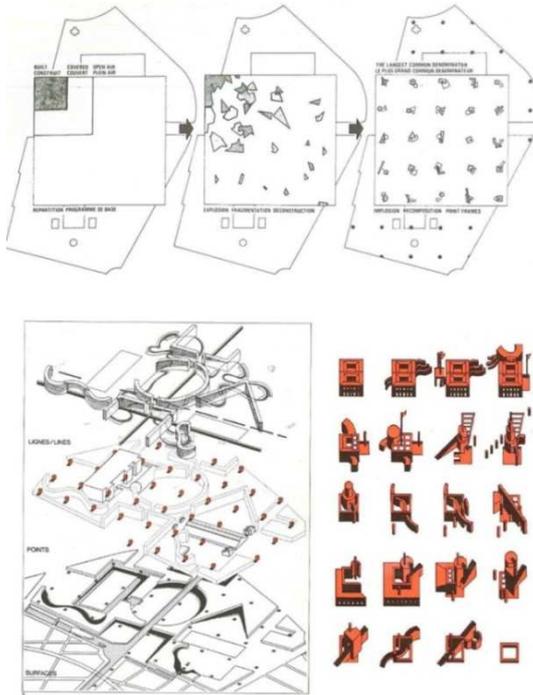
**Figure 21.** Jawahar Kala Kendra Cultural Center by Charles Correa. Source: caroun.com



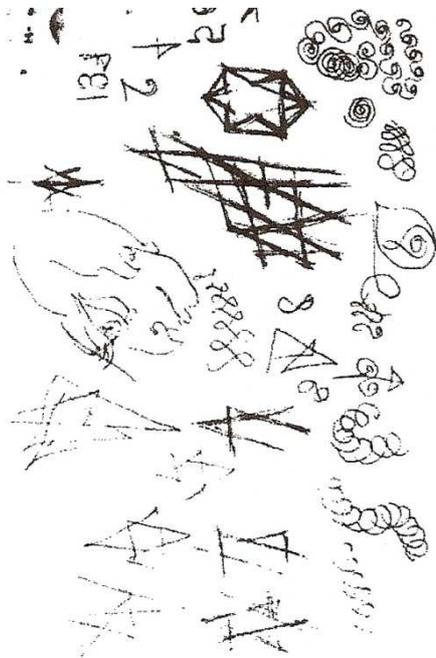
**Figure 22.** Stretto House by Steven Holl. The relationship between Bartok's musical piece which is used as a metaphor and the House's model. Source: Garofalo (2003)



**Figure 23.** Elevation of Stretto House. Source: Garofalo (2003)



**Figure 24.** Parc de la Villette by Tschumi. The use of juxtaposition, frames, cut and montage techniques in cinema as a metaphor in architecture. Source: paavo.tumblr.com



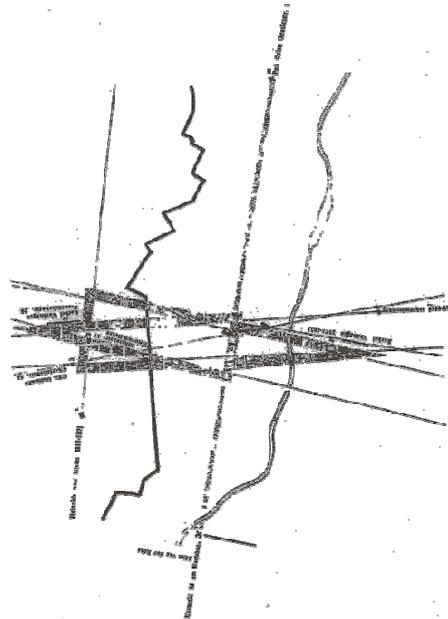
**Figure 25.** Daniel Libeskind's sketch for Jewish Museum expressing the cruel event during World War II. Source: Doğan (2003)

The disruption and distortion of David's Star in the plan geometry of Libeskind's Jewish Museum in Berlin, and deep crack formed on the façades of the building are the metaphors of the cruel things confronted by Jewish people during World War II (Figure 25). During the design processes, Libeskind also tended to express metaphorically, Berlin Wall with broken lines and Landwehr Channel with curvilinear lines (Figure 26). Within the framework of Libeskind's multilayered interpretation, the Star has more than one meaning here. In Libeskind's (1997: 113) words, one of them is "to integrate the German and Jewish histories of Berlin". Conceptually, Star is the embodiment of Jewish and German people and symbolizes their crisscross cultures. With a set of sketches, Libeskind initiates to establish a connection between the architecture and the city, and Star form in these sketches is the main tool relating the individual building to the city (Doğan, 2003). During the design generation processes here, it is obvious that the physical characteristic of site area's surroundings and the history of that place are interrelated. According to Frampton (1982), establishing a relation between project subject and place in this sense will result in a certain character and give a sense of identity to the society. Libeskind thinks that monuments are as necessary as history in order to ensure that people could live the moment by overcoming the traumas of the past. According to him, any Jewish monument in Berlin reflects the "permanent presence of absence" because even if it is not seen, it is there; it is a part of the space in which the city also carries its own absence (Delanty and Jones, 2002). According to Delanty and Jones (2002), Libeskind's notion of German 'non identity' can be interpreted as a desire for evolving a universal, post-national identity rather than a certain, national identity (Figure 27). However, there is no doubt that Berlin Jewish Museum has a very apparent and strong architectural identity. He also attributes this identity to the metaphorical approach used during design processes as it is the case in other examples.

## 5. Conclusions

The main purpose of architecture is to design unique architectural environments and consequently generate effective architectural identities which broaden the feelings, thoughts and imagination of human beings; in short, their

experiential realm. There is no extensive argument over this purpose, but it is a challenging and crucial task to generate this identity in architectural design processes since there are no commonly accepted formulas and methods be directly beneficial to the achievement of this critical task. Scientific methods and approaches have never been sufficient enough to solve architectural issues because scientific problems are characteristically different from architectural problems. However, ordinary science's problems are "tame" and thus generally can be solved with linear methods based on rationality. These linear methods and approaches are incapable of solving architectural design problems as these problems, defined as "wicked" or "ill-structured", are too complex to be solved through linear methods. Both rational and objective reasoning; and imaginative and subjective aspects are needed concurrently to solve these kinds of problems. The solution of this essential architectural problem seems to be dependent on the acquisition of an appropriate tool which would meet the demands of these two aspects at the same time during the design processes. The discussion so far about design processes of the examples having effective architectural identities indicates that this tool could be a design approach based on metaphor because metaphor defined as a matter of "imaginative rationality", is capable of reaching new realities, and embraces both objective and subjective aspects of a reality. By having this capacity, metaphor is seen as a very valuable tool for the designer who needs both rational thought and imagination at the same time and seeks a unique situation, in this sense, a new reality which has never been experienced before. As metaphorical thinking is not a logical linear way of thinking, it is presumed that architectural design which is essentially a "non-linear" progression, would allow for better comprehension and conduct in accordance with architectural design's "recursive aspect of complexity".



**Figure 26.** Daniel Libeskind's sketch. Metaphoric expression of Berlin Wall and Landwehr Channel. Source: Doğan (2003)



**Figure 27.** Jewish Museum by Daniel Libeskind. Source: wayfaring.info

that this tool could be a design approach based on metaphor because metaphor defined as a matter of "imaginative rationality", is capable of reaching new realities, and embraces both objective and subjective aspects of a reality. By having this capacity, metaphor is seen as a very valuable tool for the designer who needs both rational thought and imagination at the same time and seeks a unique situation, in this sense, a new reality which has never been experienced before. As metaphorical thinking is not a logical linear way of thinking, it is presumed that architectural design which is essentially a "non-linear" progression, would allow for better comprehension and conduct in accordance with architectural design's "recursive aspect of complexity".

Since Aristotle a large number of philosophers and researchers indicate the positive role played by metaphors on creativity, primarily in art;

subsequently, in science and other disciplines. It is seen that recently the interest in the relationship between metaphorical thinking and creativity in almost every field is progressively increasing. The essence of metaphor is understanding, experiencing, thinking and designing one kind of thing in terms of another. Research, initiated to solve the mystery of how the human mind works during the creative process, demonstrates that when human mental attention is constantly switching from one discrete image to another, these images overlap in the mind. This is exemplified in da Vinci's Mona Lisa. Successful results are attained, consequently leading to the formation of a new identity. This situation which is called as "homospacial thinking" by Rothenberg is the same as the metaphorical thinking.

The significant role of metaphors in the formation of architectural identity has been realized and applied by architects since Vitruvius. When architects implemented this tool, they created architectural works which have indelible reflections on human mind, some of which are discussed in this article. These are beyond being single examples. Apart from the examples pointed out in this article, there are many other architectural works which indicate a strong correlation between the design approach based on metaphors and effective architectural identity. It is seen that many architects have generated new images by triggering their imagination by overlapping two or more discrete images in their minds through homospacial thinking, particularly related to properties of a project topic or site area. Prominent architects such as Wright, Taut, Le Corbusier, Tatlin, Fuller, Cansever, Correa, Calatrava, Holl and Libeskind have been able to generate multilayered, sophisticated and significant meanings through this approach. The important point here is that these significant meanings are not entirely new; as a matter of fact these are the metamorphosed forms of one or more existing meaning through "homospacial thinking". In this sense, it is seen that existing meanings or images reincarnate and come into existence in a refreshed form. As a result, architectural environments which are generated with this approach have the capacity to meet the two apparently contradictory needs of societies: one is renewal; the other is not being alienated from the existing cultural identity. Under current circumstances, architecture has become a quite important medium in creating and developing social identity as people demand an architectural environment which is not unfamiliar to the existing material and nonmaterial culture and reflects their own reality and identity instead of boredom and monotony created by the uncontrolled power of globalization. As seen in the examples, a design approach based on metaphors gives architects the opportunity of metamorphosis in accordance with the "zeitgeist" without breaking with the familiar meanings, values and shared codes of society and also without ignoring the need for renewal.

### References

- Bateson, G. (1988), "Men are Grass: Metaphor and the World of Mental Process, in W.I. Thompson (Ed.), **Gaia, a Way of Knowing, Political Implications of the New Biology**, The Lindisfarne Press, New York, pp. 37–47
- Bolon, C. R., Nelson, R. S., Seidel, L. (1988), **The Nature of Frank Lloyd Wright**, University of Chicago Press, Chicago and London
- Castells, M. (1997), **The Power of Identity, the Information Age: Economy, Society and Culture. Vol. II.**, Blackwell, Cambridge,

- Massachusetts and Oxford, UK
- Castells, M. (1996), **The Rise of the Network Society: the Information Age, Vol. I.**, Blackwell. Oxford, UK
- Colomina, B. (1987), “**Le Corbusier and Photography**”, *Assemblage*, No: 4, pp. 6-24
- Colomina, B. (1994), **Publicity and Privacy, Modern Architecture as Mass Media**, MIT Press, Cambridge, Massachusetts
- Correa, C. (1996), **Charles Correa**, Thames and Hudson Ltd., London
- Coyne, R., Snodgrass, A. (1991), “Is Designing Mysterious? Challenging the Dual Knowledge Thesis”, **Design Studies**, Vol.12, No. 3, July, pp. 124-131.
- Coyne, R. (1995), **Designing Information Technology, From Method to Metaphor**, MIT Press, Cambridge, Massachusetts
- Delanty, G., Jones, P. R. (2002), “European Identity and Architecture”, **European Journal of Social Theory**, Vol. 5, No. 4, pp. 453–466
- Doğan, F. (2003), **The Role of Conceptual Diagrams in the Architectural Design Process**, Georgia Institute of Technology, unpublished Ph.D. Dissertation
- Draaisma, D. (1995), **Metaphors of Mind**, Cambridge University Press, Cambridge, Massachusetts
- Ersoy, U. (2008) **Seeing Through Glass: The Fictive Role of Glass in Shaping Architecture From Joseph Paxton’s Crystal Palaceto Bruno Taut’s Glass House**, unpublished Ph.D. Dissertation, University of Pennsylvania
- Ferguson, E. S. (1977), The Mind’s Eye: Nonverbal Thought in Technology, **Science**, Vol.197, No. 4306, pp. 827–836
- Fernandez, J. (1974), “The Mission of Metaphor in Expressive Culture”, **Current Anthropology**, Vol.15, No. 2, pp. 119–145
- Fernandez, J. (1986), **Persuasion and Performances: the Play of Tropes in Culture**, Indiana University Press, Bloomington
- Foucault, M. (1986), “Of Other Spaces”, **Diacritics**, Vol. 16, No. 1, pp. 22-27
- Frampton, K. (1980), **Modern Architecture: a Critical History**, Oxford University Press, New York
- Frampton, K. (1982), “Place, Production and Architecture: Towards a Critical Theory of Building”, in K. Frampton (Ed.), **Modern Architecture and the Critical Present**, Architectural Design, London, pp. 291-311
- Fuller, B. (1963), **Ideas and Integrities**, MacMillan, New York
- Henderson, L. D. (1983), **The Fourth Dimension and Non-euclidean Geometry in Modern Art**, PrincetownUniversity Press, Princeton
- Holl, S. (1996a), **Stretto House**, Monacelli Press, New York
- Holl, S. (1996b), **Intertwining**, Princetown Architectural Press, New York
- Holton, G. (1998), **The Scientific Imagination**, Harvard University Press, Cambridge, Massachusetts
- Indurkha, B. (1999), “Creativity of Metaphor in Perceptual Symbol Systems”, **Behavioral and Brain Sciences**, Vol. 122, No. 2, pp. 621-622.
- Jadav, R. U. (1998), **Eastern Regionalism and Indian Identity: a Case Study of Charles Correa’s Inter University Center for Astronomy and Astrophysics’ and Raj Rewal’s Central Institute of Educational Technology**, Kansas State University, Master Thesis
- Johnson, M. (1987), **The Body in the Mind: the Body Basis Meaning and Reason**, Chicago University Press, Chicago
- Krauss, R. E. (1981), **Passages in Modern Sculpture**, MIT Press, Cambridge Massachusetts

- Lakoff, G. (1987), **Women, Fire and Dangerous Things: What Categories Reveal About the Mind**, University of Chicago Press, Chicago
- Ledewitz, S. (1984), "Models of Design in Studio Teaching", **Journal of Architectural Education** (1984- ), Vol. 38, No. 2, pp. 2–8
- Libeskind, D. (1997), "Discussion", in D. Libeskind and A. P. Belloli (Eds.), **Daniel Libeskind, Radix-Matrix: Architecture and Writings**, New York and Munich, pp.112–115
- Norton, B. G. (2002), "Building Demand Models to Improve Environmental Policy Process", in L. Magnani, N. J. Nersessian (Eds.), **Model-Based-Reasoning, Science, Technology, Values**, Kluwer Academic / Plenum Publishers, New York, pp. 191–208
- Pallasmaa, J. (2006), "Existential Space in Architecture and Cinema", in B. Uluoğlu, A. Ensici and A. Vatansever (Eds.), **Design and Cinema: Form Follows Film**, Cambridge Scholar Press, Newcastle, pp. 11-20
- Paxton, J., (1850-1), **Transaction of the Royal Society of Art 57**, p.6; quoted in Ersoy, U. (2008) *Seeing Through Glass: The Fictive Role of Glass in Shaping Architecture From Joseph Paxton's Crystal Palace to Bruno Taut's Glass House*, unpublished Ph.D. Dissertation, University of Pennsylvania
- Perronet, J. R. (1770), "Letter to Mercure de France", quoted in Steadman, P. (2007), **The Evolution of Designs, Biological Analogy in Architecture and the Applied Arts**, Routledge, London and New York
- Pertuiset, N. (1990), "The Floating Eye", **Journal of Architectural Education** (1984-), Vol. 43, No. 2, pp. 7-13
- Ricoeur, P. (1991), **A Ricoeur Reader in Reflection and Imagination**, M. J. Valdes (Ed.), University of Toronto Press, Toronto
- Rittel, H. W. J., Webber, M. M. (1973), "Dilemmas in a General Theory of Planning", **Policy Sciences**, Vol. 4, pp. 155–169
- Rothenberg, A. (1976), "Homospacial Thinking in Creativity", **Archives of General Psychiatry**, Vol. 33, No. 1, pp. 17–26
- Rothenberg, A. (1980), "Visual Art, Homospacial Thinking in the Creative Process", **Leonardo**, Vol. 13, No. 1, pp. 17–27
- Rothenberg, A. (2008), "Rembrandt's Creation of the Pictorial Metaphor of Self", **Metaphor and Symbol**, Vol. 23, No. 2, pp. 108–122
- Samuel, F. (1999), "Representation of Mary in the Architecture of Le Corbusier's Chapel at Ronchamp", **Church History**, Vol. 68, No. 2, pp. 398–416.
- Sarkis, M. (2002), "Constants in Motion: Le Corbusier's "Rule of Movement" at the CarpenterCenter", **Perspekta**, Vol. 33, pp. 114-125
- Schuyler, M. (1894), "Modern Architecture", **Architectural Record**, Vol.1, No. 4, pp. 1-13, quoted in Steadman, P. (2007), *The Evolutions of Designs, Biological Analogy in Architecture and the Applied Arts*, Routledge, London and New York
- Schwartz, L. (1987), "Leonardo's Mona Lisa", **Art and Antiques**, Vol. 10, pp. 50–54, quoted in Rothenberg, A. (2008) "Rembrandt's Creation of the Pictorial Metaphor of Self ", *Metaphor and Symbol*, Vol. 23, No. 2, pp.108-129
- Simon, H. A. (1973), "The Structure of Ill-Structured Problems", **Artificial Intelligence**, Vol. 4, pp. 181–201
- Stuart, K. M. (1993), **On Architecture, Nature and Man**, Rice University, Master Thesis
- Tanyeli, U., Yücel, A. (2007), **Turgut Cansever, Düşünce Adamı ve**

- Mimar**,Osmanlı Bankası Arşiv ve Araştırma Merkezi ve Garanti Galeri Press, İstanbul
- Thompson, D. W. (1948), **On Growth of Form**, MacMillan, New York
- Tschumi, B. (1981), **The Manhattan Transcripts**, Academy Editions, St. Martin Press, London
- Tucker, B. I. (1994), **The Role of Metaphors in the Shift to a Quantal Paradigm**, The University of Texas, unpublished Ph.D. Dissertation
- Uluslu, T. (1990), "Mimari Tasarımda 'Concept' ", **Yapı**, Ekim
- Vitruvius (1960), **Ten Books on Architecture**, Trans.: M. H. Morgan, Dover Publication Inc., New York
- Wakkary, R. (2005), "Framing Complexity Design and Experience: a Reflective Analysis", **Digital Creativity**, Vol. 16, No. 2, pp. 65–78
- Waks, L. J. (2001), "Donald Schön's Philosophy of Design and Design Education", **International Journal of Technology and Design Education**, Vol. 11, No. 1, pp. 37–51
- White, W. (2006), "How do Buildings mean? Some issues of Interpretation in the History of Architecture", **History of Theory**, Vol. 45, No. 2, pp. 153–177
- Wright, F. L. (1954). **Natural House**, Horizon, New York

### **Mimari kimliğin oluşumunda metaforların rolü**

Diğer sanat alanlarında olduğu gibi mimarlığın da temel amacı, insanoğlunun duygu, düşünce ve imgelem dünyasını genişleten, o güne kadar hiç deneyimlenmemiş, kendine özgü bir durumu ortaya çıkarabilmektir. Kimlik kavramı ile kendine özgülük kavramları aynı anlamda kullanılabilir kadar birbirlerine yakındırlar. Bu bakımdan mimarlığın temel amacı, belirli bir kimliği olan bir binayı tasarlamak şeklinde de tanımlanabilir. Mimari tasarlama süreçlerinde bu temel amacın nasıl başarılacağı büyük oranda belirsiz, açık ve kesin yöntemi ortaya konmamış bir konu olmakla birlikte, mimarın bir şekilde mutlaka çözmesi gereken önemli bir meseledir. Bu makalenin birbiriyle ilişkili iki amacından birincisi, geçmiş ve günümüz mimarlığında güçlü kimliği olan, bu nedenle de belleklerde iz bırakan binaların tasarım süreçlerini irdeleyerek bu güç problemin çözümü konusunda metaforların oynadığı etkin rolü belirleyebilmektir. İkinci amacı ise, toplumların bir yandan yenileşme, öte yandan da mevcut kültürel kimliğine ve bu kimliğin bir ögesi olan mimari çevreye yabancılaşmama gibi birbiriyle çelişkili görünen iki ihtiyacına metaforları esas alan bir tasarlama yaklaşımının aynı anda cevap verme potansiyeline işaret etmektir.

Metaforun yaratıcı çalışmalardaki etkin rolüne işaret eden ve bu kavramı tanımlayan bilinen en eski düşünür Aristotle'dır. Sadece sanatta değil bilim ve teknolojiye de yaratıcılık üzerinde metaforların oynadığı etkin rol üzerinde Aristotle'da bu yana pek çok düşünür ve araştırmacı durmuştur. Metaforun esası bir şeyi başka bir şeyin koşulları ile anlamak, deneyimlemek, tasavvur etmek ve tasarlamaktır. Bunun imgelemin etkinliğini artırdığı dolayısı ile yaratıcı çalışmalarda olumlu rol oynadığı ve yeni gerçeklikleri ortaya koyma kapasitesinde olduğu konusunda araştırmacılar genel bir görüş birliği içinde görünmektedirler. İnsan zihninin yaratıcı süreç sırasında nasıl işlediğini çözmeye girişen araştırmalar, Leonardo'nun Mona Lisa tablosunda örneklendiği gibi, iki veya daha fazla imge arasında zihnin sürekli gidip gelmesinin ve bunların zihinde üst üste örtüşmesinin yaratıcılığı tetikleyerek, sanatçıyı başarılı sonuçlara götürdüğü ve dolayısı ile yeni ve güçlü kimliği olan sanat eserlerinin bu yolla ortaya konulabileceğine işaret etmektedir. Rothenberg'in "homospacial thinking" diye adlandırdığı bu durum metaforik düşünce tarzının bir başka şekilde anlatımıdır.

Mimari tasarım problemleri, "iyi huylu" bu nedenle de rasyonelliği esas alan doğrusal metotlarla çözümlenebilecek doğal bilim problemlerinden farklı, karmaşık "kötü huylu" veya "kötü yapıdaki" problemlerdir. Bu nitelikteki tasarlama problemleri tamamıyla lineer, rasyonel, mantıksal metotlarla çözülemeyecek kadar karmaşık, objektif ve sübjektif yönlerin her ikisinin de aynı anda gözetilmesini ve yaratıcılığı gerektiren problemlerdir. Lakoff ve Johnson tarafından "imgelemsel rasyonelite" olarak tanımlanan metaforların, bu tanım çerçevesinde objektif ve sübjektif gereklilikleri aynı

anda karşılama potansiyelinin mimarlıkta fark edilip, kullanılmasının geçmiş hayli eskidir; Vitruvius'a kadar uzanır. Bu kapasiteleri nedeniyle, metaforlar daha önce deneyimlenmemiş kendine özgü bir durumu ve bu anlamda yeni bir gerçekliği ortaya koyma peşinde koşan, bunun için de hem rasyonel düşünceye ve hem de imagination'a aynı anda ihtiyaç duyan tasarımcının karşı karşıya bulunduğu güç problemin çözümünde çok değerli bir araç olarak görünmektedir. Mimarlar antik çağlardan bu yana bu araca başvurduklarında belleklerde iz bırakan, güçlü bir kimliğe sahip mimari eserleri yaratmayı başarmışlardır. Geçmişteki örnekler yanında, günümüzün önde gelen pek çok mimarının da giderek artan oranda tasarım süreçlerinde metaforlara başvurma veya aynı anlamdaki "homospacial" düşünce yoluyla, özellikle proje konusu veya yeri ile ilgili bir veya daha fazla imgeyi zihinlerinde örtüştürüp, imgelemlerini tetikleyerek güçlü kimliği olan yeni imgelere ulaştıkları görülmektedir.

Bu makalede incelenen Gotik Mimarının konstrüktif başarısı ve ayırt edici kimliği onun doğayı metafor olarak kullanarak strüktürel sistemi doğal kuvvet akışına göre senkronize etmesine ve bu anlamda da doğal süreçleri metafor olarak kullanmasına borçlu görünmektedir Joseph Paxton tarafından 1851 yılında tasarlanan Crystal Palace'ın da mimarlık tarindeki ayırt edici etkin kimliği metaforlara dayanan bir tasarlama anlayışının sonucudur. Nilüfer çiçeği yapraklarının sap kısmından yayılan ışınal damarların yaprağın kenarındaki kemer şeklindeki ana damarı destekleyerek güçlü bir strüktürel sistem oluşturması Paxton'da hafif, ancak güçlü bir çatı strüktürünün tasarlanabileceği düşüncesini uyandırmıştı. Eiffel Kulesi'nin de etkin kimliği onun metaforik genlerinden gelir. 1850'ler başında anatomist Herman von Meyer insan gövdesinin yüklerini iki bacağa aktarma konusunda önemli bir işlevi olan "femur" olarak adlandırılan uyluk kemiği başının iç strüktürünü inceleyerek onun içindeki kafes gibi bir örüntünün varlığını keşfetti. Eyfel Kulesinin strüktür tasarımında görev alan Carl Cullman daha sonra bu örüntüyü Eiffel Kulesi'nin tasarımına da uyarlayarak "femur"daki gibi eğrisel örüntüdeki kafes sistemi Eyfel'de de üst kısımdan gelen yüklerin zemine iletilmesini sağlayacaktır. Bu makale kapsamında Wright'ın doğayı metafor olarak kullanması ve bazen de Üniteriyen Topluluğu Toplantı Merkezi'nin tasarımında olduğu gibi teolojik kökenli metaforlara baş vurması, Bruno Taut'un Cam Pavyonu, Mendelson'un Einstein Kulesi, Tatlin'in Üçüncü Enternasyonal Anıtı, Buckminster Fuller'in Jeodozik Kubbesi, Le Corbusier'in Villa Savoy'u ve Ronchamp Şapeli, Turgut Cansever ve Ertur Yener'in Türk Tarih Kurumu, Correa'nın Jawahar Kala Kendra Sanat Merkezi, Holl'ün Stretto Evi, Tschumi'nin Parc de Villette'i ve Libeskind'in Yahudi Müzesi gibi günümüze daha yakın farklı örnekler üzerinde de durulmuştur. Tüm bu örnekler mimari metaforlar aracılığı ile tasarım süreçlerinde güçlü bir mimari kimliğe ulaşılabilmesinin kanıtları olarak görünmektedirler. Bu makalede işaret edilenlerin yanında mimari tasarım süreçlerinde metaforlara başvurma ile etkili bir mimari kimlik arasında kuvvetli bir korelasyonun varlığına işaret eden daha pek çok örnek sıralanabilir.

Böyle bir yaklaşımla mimarlar, çok katmanlı, sofistike ve güçlü anlamsallıkları yaratma imkanını bulabilmektedir. Burada önemli olan nokta, bu güçlü anlamın tamamıyla yeni bir anlam olmayışı, esasen mevcut bir veya daha fazla anlamın "homospacial thinking" yoluyla metamorfoza uğratılmasıdır. Bu bir anlamda mevcut anlam veya imajların reenkarne olarak yeni bir kimlikle genç bir bedende vücut bulması halidir. Dolayısıyla, bu şekilde ortaya konan mimari çevreler, toplumların bir yandan yenileşme, öte yandan da mevcut kültürel kimliğine yabancılaşmama gibi birbiriyle çelişkili görünen iki ihtiyacını aynı anda karşılama kapasitesindedir. Günümüzde toplumsal kimliğin oluşturulması ve geliştirilmesinde mimari giderek daha önemli bir araç haline gelmektedir. Çünkü toplumlar globalleşmenin kontrol dışı gücünün yol açtığı sıkıntı veren tek düzelik yerine kendi gerçeklik ve kimliklerini yansıtacak, mevcut maddi ve maddi olmayan kültüre yabancı olmayan bir mimari çevreyi giderek daha fazla talep etmektedir. Bu makalede incelenen örneklerde görüldüğü gibi, metaforları esas alan bir tasarlama yaklaşımı, hem insanları alışık oldukları anlam ve değerlerden, paylaşılan kodlardan tamamıyla koparmadan, hem de yenileşme ihtiyacını göz ardı etmeden, mevcut kimliğin zamanın ruhuna uygun bir reenkarneasyonunu gerçekleştirebilmekte, yepyeni ve güçlü anlamlara ulaşılması olanağını mimarlara vermektedir.