Phenomenology and Space in Architecture: Experience, Sensation and Meaning

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Abstract: Until recently, architecture has been mostly evaluated over its stylistic and visual characteristics. Whereas, the architectural space is primarily vital and therefore, it should not be evaluated independently of its environment and users. Pallasmaa emphasizes on the significance of experience and connection with the environment in architecture.

Phenomenology, which aims to create sensory perception, is about creating an abstract experience beyond tangibility. Sensing beyond physical entities in spatial experience deepens meaning. Buildings and cities, essentially provide the necessary view to understand and confront the human existence. It is, therefore, important for architecture to be seen as the subject of phenomenology. This paper explores the relationship between phenomenology and architectural space through experience, sensation, and meaning. It argues that the relationship between human and built environment will be strengthened to the extent that the mentioned features could participate in the space.

Keywords: Phenomenology, Space, Architecture, Experience, Meaning, Sensation, Environment.

1. ARCHITECTURAL SPACE

After Bruno Zevi, who defines architecture as the art of creating space, the features and necessities of the architectural space have been discussed. The definition of space and how it should be, have been expressed in different ways depending on the relations of architecture with art, industry, building technology, economy, philosophy, environmental sciences, psychology, and politics.

It is known that throughout the history of architecture, space has been discussed in terms of forms and styles. Until recently, architectural theory and criticism have been almost exclusively concerned with the mechanisms of vision and visual expression. The perception and experience of architectural forms have been often analyzed through gestalt laws of visual perception. The philosophy of education has understood architecture primarily in terms of vision and emphasized on the construction of three-dimensional visual images in the architectural space [1].

Lefebvre defines the characteristics of mental, social and physical spaces in his *Production of Space* [2]. David Harvey defends the rights of city dwellers concerning the socio-political aspect of space [3].

Beyond all these different thoughts, architectural space is for living in it and our experiences occur while living in space; Therefore, designing experiences in space is one of the most important responsibilities of architects. Our experiences could be mental, physical and sensory, and are largely subjective. This study deals with our experiences and sensations of space, and the sensory meaning of spaces as the research subject. For this reason, it examines the issue of phenomenology and architecture.

2. PHENOMENOLOGY AND ARCHITECTURE

Husserl set out to establish phenomenology as a new discipline in philosophy and in science generally: a science of consciousness, distinct from psychology, from epistemology, and from other traditional fields of science and philosophy [4]. The term “phenomenology” appeared in Lambert, Herder, Kant, Fichte, and Hegel’s work in the 18th century. The first documented use of the term as such is by Lambert, by which he means “the theory of illusion and of its varieties”. According to Spiegelberg, there is no concrete form of teaching which would give a precise answer to the question “What is phenomenology?” [5]. The conception of phenomenology means “back to the things themselves” in Husserl, “a way of seeing” in Heidegger, “the essence of perception” in Merleau-Ponty and “multi-sensory experience” in Pallasmaa. Moran says that phenomenology is more of an experiment and practice than a system [6]. Steven Holl explains phenomenology as concerning the study of essences that architecture has the potential to put essences back into existence [7].

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Phenomenology in architecture gives importance to the perceptual dimensions of our spatial experiences and deals with the lifeworld of human. The lifeworld is an inexpressible circumstance and is the flow of everyday life that includes routine and unusual, ordinary and surprising situations within itself [8]. Vesely states that phenomenology is an attempt to understand the whole spectrum of the present experience that is called reality, not with a critical view from outside, but from inside [9]. Norberg-Schulz considers phenomenology as a method well suited to penetrate the world of everyday existence [10].

Spatial experience, which has been reduced to the numbers and rules in the rational viewpoint, is considered together with its environment in the architectural phenomenology; and human being is considered as a whole entity with his environment. Phenomenology in architecture is summarized below with its features related to experience, sensation, and meaning of space.

2.1. Experience

Since an architectural space is not an independent entity from its environment; separations and integrations between the space and its environment shape experiences. It is known that the essence of the spatial experience based on the relationship between subject and object, is revealed by our reactions to space; in this sense, our body and somatic experience play a major role in the formation of spatial image.

Pallasmaa explains the importance of body in the spatial experience as follows: “I confront the city with my body, my legs measure the length of the arcade and the width of the square; my gaze unconsciously projects my body onto the facade of the cathedral, where it roams over the moldings and contours sensing the size of recesses and projections, my body weight meets the mass of the cathedral door, and my hand grasps the door pull as I enter the dark void behind. I experience myself in the city, and the city exists through my embodied experience. The city and my body supplement and define each other. I dwell in the city and the city dwells in me.” [1].

The body, which has considerable importance in the experience of space, allows us to touch our environment; and as a result, it causes measurement and perception. The sense of touch ensures the integration of human with his surroundings and can remove the subject-object distinction.

Every sense we perceive calls others [11]. We perceive the world through our sensory systems; our senses cooperate, and interact continuously with our environment [12]. Thus, we obtain the invisible dimensions of the space. For example, the footsteps of the person walking in the space are grasped by the material walking on it; the sound reflected in the space allows us to measure the space. The experience of space in this way reveals the true meaning of measurement.

Therefore, the basic architectural experiences consist of approaching or confronting a building. The experience consists, for example, of the act of entering, not just of the visual design of a door; as a material object consists of the looking inside or outside of a window, not the window itself. Moreover, as a visual design object, it doesn't consist of a fireplace but of the occupation of the temperature space. The architectural space is more than a physical space, and it always exceeds geometry and measurability [1].

2.2. Sensation

Maurice Merleau-Ponty has initiated a criticism against disembodied subject; he has seen an osmosis relationship between the subject and the world, penetrating and defining each other. He has expressed the simultaneity and interaction of the senses and the importance of integrity in perception as follows: “my perception is not the sum of visual, tactile and auditory data, I perceive with my whole being in a holistic way; I comprehend a unique structure, a unique entity that speaks to all my senses simultaneously.” [11].

Merleau-Ponty has described the human body as the beginning of human perception. According to this approach, all significations related to environment begin in the body. Approaches based on the body and bodily movement in architecture could find meaning in the architectural phenomenology in terms of the experience of space with the body [11].

In The Poetics of Reverie, Bachelard speaks of the interaction of eye with other senses and the polyphony of the senses [13]. Continuous collaboration between senses strengthens our sense of reality. Architecture is not an isolated artifact, it leads our attention and our existential experience to wider horizons by providing us experiences and by the understanding of the world. It concretizes the cycle of the year, the course of the sun and the passing of the hours of the day [1].

Architectural work is not experienced as a series of isolated retinal pictures, but in its fully integrated material, embodied and spiritual essence. A distinctive exchange happens between human and space in the experience of architectural work; we lend our emotions and associations to each other. Space integrates physical and mental structures, gives solidity and meaning to our existential experience [1].

Like birds forming nests with movements of their bodies, the human body in the traditional cultures has been providing the formation of the architectural space [14]. This kind of architecture has been addressing muscles and the touching sensation. As a result, people had been able to be in touch with their environment by obtaining a sensory perception. This feature is one of the most important factors that must be included in each architectural work.

2.3. Meaning

The sense of self, strengthened by art and architecture, lets us engage fully in the mental dimensions of dream, imagination, and desire. Architecture not only creates visual staging objects, but it also causes to meanings and reflects them. The ultimate meaning of any building is beyond architecture; it directs our consciousness back to the world and towards our own sense of self and being. Meaningful architecture leads us to experience ourselves as full bodily and spiritual entities; in fact, this is the most important function of any meaningful art [14].

Architectural space represents the world; therefore, our perception of the world begins in space. Substantially it is possible to sense and understand the space with body and senses. According to these discourses, the responsibility of architecture and built environment is of great importance in our understanding of our existence in the world.

Heidegger believes that human feelings must be prioritized in architecture. In his scheme, the mathematical measurement of space was a tool rather than an end in itself. Beyond it was the way in which individuals perceive the world, as it seems to them, in terms of places [15]. In this sense, our body and senses enable us to understand and make sense of our environment.

In summary, as Pallasma stated; body, sensation, and meaning are related. Our bodies and movements are in constant interaction with the environment; the world and the self, inform and redefine each other constantly. The perception related to the body and the image related to the world turn into a single continuous experience. There is no body separate from its domicile in space; in the same way, there is no space unrelated to the unconscious image of perceiving subject [1]. It would be inaccurate to evaluate architecture separate from these principles.

3. ARCHITECTS AND EXPERIENCES

While we examine the architectural practice, we see that some architects attach importance to emotions in the spatial experiences and consequently to the meaning ascribed to the space in their design thinking. In the following, the thoughts of some of those architects were examined through their works.

3.1. Tadao Ando

The sensory experience of space approaches to the limit of extinction as the experience of architecture is overloaded with the mental dimensions. Tadao Ando argues that architecture should not be limited to the spatial organizations and the numerical imperatives, but should pay more attention to the emotional and spiritual issues. Ando builds spaces with an attitude that emphasizes on bodily experience; he aims to enable people to experience the space with their body and not with a technological tool.

Ando thinks that rational and functional modern architecture is detached from nature and experiences; he criticizes the modernity in the sense that it forgets the connection with nature, the true feelings of life, the breeze of the wind and the sound of the rain. He takes abstract geometric forms, fills the interior with daily activities of man, thus enriches the architecture [16]. In the Church on the Water (Figure **1**), the nature

Figure 1: Church on the Water, Tadao Ando [17].

surrounding the structure shapes the experiences in the space. The surrounding water and greenery, together with the holiness within the church, create a unique atmosphere in the space to be experienced the spiritual dimension of the place.

3.2. Peter Zumthor

According to Zumthor, we make sense of space through our feels towards it. Our senses that are formed by space, create the feel of a place; the feel of place directs us primarily to look at emotions. We understand the feel of the place in the process of experience; experiences are stored in the memory [18].

Peter Zumthor's Therme Baths (Figure **2**) is a prudent architecture in terms of form that has sensory wealth and addresses to all senses simultaneously [1]. The subjective experience of the user is manifested by transitions between spaces and the provided different perceptual effects [19]. In the forming of bathing experience, it has been inspired by old rituals and places, where bathing experience take place together. In this context, Zumthor refers to the bathing experience as not bathing in any gymnasium hall, but as an act of purification in serenity. He relates the thoughts of bathing and purification with the conditions of being safe and feeling belong; by using material and light, and the relationship between the structure and its location [20].

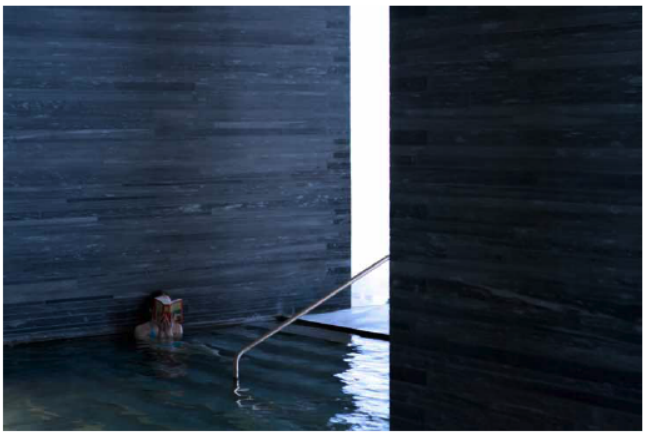

Figure 2: Therme Baths Vals, Peter Zumthor [21].

3.3. Frank Lloyd Wright

Wright's free plan is not an expression in architectural volume, but a success that tracks down the gaps in all directions starting from a central core [22]. Wright has established a completely different relationship between space and its components in his architecture [23]. His designs combine continuity and integrity in the organic architecture, which is the harmony of parts with the whole and the whole with the parts and includes human, nature, material and even industry in Wright's designs [24].

The holistic relationship between the building and its environment could be seen in the Fallingwater House (Figure **3**) with its material and spiritual presence. The smell of the surrounding forest, the sound of the river, the touch of the sun on the surfaces and the contact of the natural light with the interiors offer a uniquely integrated spatial experience. In this way, by the touch of daily life around the structure, it destroys the gap between time and space. Although the building is made by man, it almost feels like a part of nature.

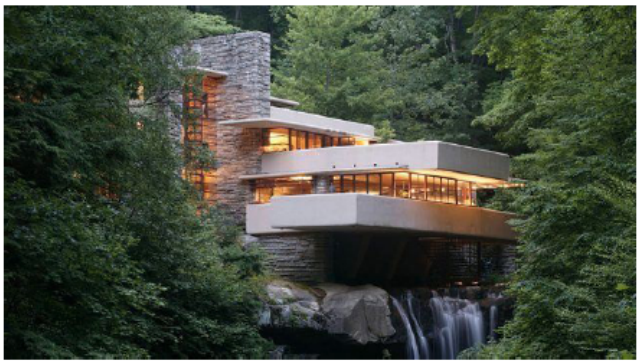

Figure 3: Fallingwater House, Frank Lloyd Wright [25].

3.4. Kengo Kuma

Japanese architect and theoretician Kengo Kuma sees that not being able to escape the legacy of classicism as the biggest problem of modernism. Because in Classicism, the proportions of the object are also held with the object itself. Whereas, he thinks that the most important thing is to use gaps in a good way [26].

He looks for continuities. In other words, old and new are part of a continuum. New creations always come out of continuity, out of an attitude of trying to find peace. It is not about copying the past, but about finding new ways forward while understanding the past values. This is distinct from modernism, which stands in opposition to history for the most part-finding a battle with the past. It is always possible to find new things even within the older principles [27].

Kuma’s designs are very tactile, often resembling hand-woven fabrics or an ornate beehive [28]. He expresses the essence of his works as follows: “I want to design spaces that offer opportunities to connect

man to the world." [29]. In the Great (Bamboo) Wall Hotel (Figure **4**), the horizontal planes are emphasized by stratified elements and space is opened to the outside. The structure transcends itself and tries to connect with its environment and become a single being with nature. Thus, the boundaries that define the object are blurred and disintegrated.

Figure 4: Great (Bamboo) Wall, Kengo Kuma [30].

3.5. Mies Van der Rohe

Mies Van der Rohe, in his own words "by looking for almost nothing" has always supported plainness and has formulated his ideology with the famous words "less is more". He is one of the most successful practitioners of Purism principles, which is away from all kinds of decorations and includes purity, plainness, and simplicity [31].

David Harvey thinks that the loss of temporality and looking for instantaneous impacts in the contemporary expression has concluded to the loss of experiential depth [32]. A tension between conscious intentions and unconscious drives is necessary for architectural work in order to open up the emotional participation of the observer [1].

The task of art and architecture is to make visible how the world touches us [33]. We capture the essence of experience by embodying the course of the sun, feeling the seasonal changes, wind, rain, and sky in the architectural space. We connect to a place by feeling time and natural conditions, then we begin to live it. At the Barcelona Pavilion (Figure **5**), by taking the sky with transparency and simplicity into space; and making feel of nature, Mies provides the sensation of the space.

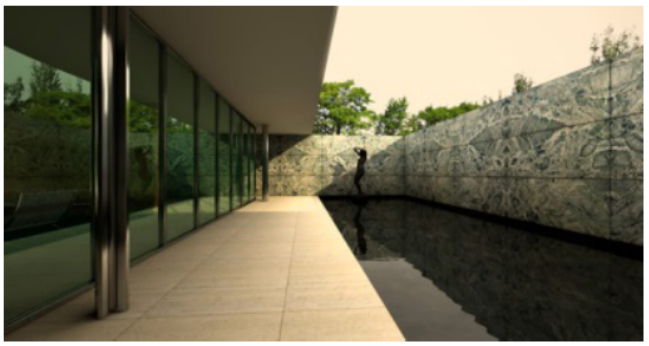

Figure 5: The German Pavilion in Barcelona Expo 1929, Mies Van Der Rohe [34].

CONCLUSION

Architectural space serves life. To see architecture as a relationship between forms has been seen important throughout the history of architecture, but it must be left behind. Because an architectural structure is a whole being with its abstract and concrete presence; it should not be reduced to separated visual images. Therefore, designing experiences in architectural space should be one of the main goals of architects.

The rupture between man and his artificial environment is a fundamental problem in which architecture encounters and sometimes even creates; Therefore, the relationship between subject and object should be the subject of care. Phenomenology, which has an important place in the research of architectural space, aims to create spaces that are based on experiences and to address the senses in the architectural design in order to prevent alienation towards the environment. The formation of abstract and intangible experiences between human and space, create the richness of meaning in the architectural space. Simultaneous triggering of the senses would also make space a viable and imaginative environment. There are no starts and end points in these places; therefore, it could visualize infinity to users. The spaces that wrap up the user's senses in this way, could make individuals feel his existence, as space can touch the existential structure of human.

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