





Research Article

The Role of Physical Factors in the Spirituality of Space-Human Relationship



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Abstract

Human being, as a spiritual being, has been in communication with places since the moment he/she came into the world. This communication is not only to realise the act of sheltering; it can also be defined as a journey that one embarks on to make sense of the quality of life. Emotions, thoughts and reactions accompany the journey and this situation makes the concept of spirit visible. Getting to the essence of the meaning in the space and perceiving it in a spiritual dimension is a situation unique to the individual. Besides being special, it preserves its uniqueness and the person involves himself/herself in a dynamic process. Because understanding, interpreting and feeling is not a temporary process, it reveals its permanence with a difference each time.

The aim of the study is to discover the visibility of the spiritual state in the communication between human and space. During this discovery, the factors that help spiritual interaction have been extensively investigated; it has been seen that this hidden state is related to the visible physicality. However, as a result of the researches, the physical factors that stand out to play an active role in the spiritual effect were categorised. Afterwards, the study, which is dominated by abstractness, was supported with concrete examples and analysed with the determined factors. In line with these analyses, certain findings were examined and the physical factors that affect the spiritual situation in the space-human dialogue were evaluated.

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1. Introduction

The concept of human is indispensable in the design of a space and human being is a creature that has a place in the world not only with its physical existence but also with its spiritual existence since the spiritual existence of man reveals his own world of feeling. This shows that the uniqueness of human communication with life is closely related to his/her spiritual being. In this way, the person starts a dialogue with the space by reaching the meaning dimension of the space he encounters and experiences. Therefore, it is thought that the spiritual state plays a great role in the human-space relationship.

Spending time in places where people feel comfortable increases the quality of life. Because space is not only an area where a person spends a certain period of time in order to fulfil a function or an act of shelter, it is actually a concept that influences the person and leaves certain traces on him. In addition, the person personalizes the space, separates it from other spaces and begins to organize the perception of space according to himself/herself. This customizes the traces that space leaves on the person, activates the soul and creates a strong interaction. Thus, the person feels close to that space; for this reason, the spiritual existence of the human being is a criterion that should be taken into consideration in the space design process. Based on this situation, Melek, who investigated the factors that help the spiritual interaction of space and humans, stated that the process of meaning is shaped according to the perceptual state of the person and expressed that the first category of the classification is perceptual factors. In the same study, it was suggested that the perceptual factors examined include sub-headings such as time, memory, movement and experience. Secondly, sensory factors, which are at the forefront in making sense not only of space but also of life, were stated as another category of the classification. The fact that each of the senses, which are seen as an intermediary in the bond established with the space, has its own receivers and creates interaction differences has caused the senses of sight, hearing, smell-taste and touch to be handled separately. Finally, the idea that the tangible presence of physicality on the space gives rise to abstract concepts in the dimension of meaning has led to the category of physical factors (Melek, 2021). Considering that each category of this classification made by document/text analysis method is the subject of a comprehensive study, only physical factors were considered in this study. This choice was influenced by the fact that concepts such as spiritual, soul, mystical, which are defined as beyond physicality, are concepts that nourish the spirit. Thus, in order to discover the existence of the inner world, the visible physical factors in the outer world have created contrasts such as concrete-abstract, and visible-invisible. This relationship shows that opposites can also be mutually nourishing. While a physical factor can strengthen the spiritual effect, a meaning is attributed to that factor itself through the spiritual effect.

Qualitative research method was used in this study, which focused on concepts and theoretical framework. The studies and literature researches were effective in determining the subheadings of physical factors suitable for the purpose. Factors such as form, space, light, colour, texture, which we frequently encounter within the scope of architecture, were handled within the framework of spirituality and this situation was supported by concrete examples. Thus, it

was thought that concrete examples would strengthen the narrative in this study, which is dominated by abstractness.

2. Spirituality and the Relationship between Spirit and Architecture

Spirituality is an internal state, and it makes its presence felt as a visual expression by means of experience and discovery rather than being directly visible. Even if one has knowledge about all aesthetic effects in a dialogue with a work of art, the dialogue would be incomplete without a spiritual orientation (Schmarsow & Fiedler, 2019). With the awareness that spirituality is a word that comes from the concept of spirit, various definitions of spirit have been encountered as a result of many researches. Firstly, the word spirit is defined as soul in the dictionary of the Turkish Language Association. Then, the Turkish Language Association, which also includes the philosophical definition of the concept, emphasises the spiritual state of the concept by describing it as 'essence, foundation, constructive non-material entity' (Turkish Language Association, n.d.). The definition or description of spirit, as a concept that includes both intellectual and sensory faculties that reveal human value and its uniqueness, has continuously developed throughout history. This is also supported by Aristotle's view that a human being who does not have a soul is no different from a pile of flesh and bones (Eroğlu, 2017). Not only Aristotle but also many philosophers such as Socrates, Plato and Plotinus included the concept of spirit in their works and thoughts.

Spirit and soul, known as two close concepts, have been presented as different concepts in contemporary philosophy. Studies have been carried out in the direction that the soul is a sublayer of the spirit, a concept that feeds the spirit; thus, the view that the spirit is actually a concept beyond the soul was born. Hegel, one of the proponents of this view, drew attention to the concept of self-consciousness and argued that the spirit sheds light on a different discovery each time (Konur & Toprak, 2016). Thus, the different states of essence arising from the spiritual being of every human being will bring about a dynamic process and bring about a freedom of thought without end. It is thought that this free state can be summarised in the following sentences of Hegel.

"The country of the spirit is the country of freedom. Whatever constitutes the bond of human life, whatever is of value to human, is all of a spiritual nature" (Hegel, 2011).

Studies on spirit in the historical process have also shaped the ontological studies of Nicolai Hartmann, one of the 20th century philosophers. Arguing that existence is a product of the formation of matter and soul, Hartmann puts forward the theory of layers of existence. It is stated that each layer contributes to the formation of the upper layer and as a result, a direct relationship is established (Hartmann, 1968). According to Hartmann, the lowest layer is the matter (inorganic) layer. What comes after this layer, which is the basis of everything, is the organic layer, which can also be defined as the place where living beings are located. The situation where these living beings are a little more specialised is seen in the third layer, the psychic (soul) layer. The psychic layer is a more restrictive layer than the two layers below it, which includes humans and animals and does not include other living beings. Hartmann tells us that this specialised state is not the final point. This fourth layer (spiritual layer), which is fed by the state of the soul but carries a deeper meaning, is the last part of the layers of existence.

In this layer, the focus is on the spiritual aspect of the human being, such as his/her thoughts, perceptions, curiosities and emotions, rather than his/her physical existence. Each layer can interact with each other and provide a working environment for different disciplines. For example, while the first layer, the inorganic layer, is the subject of physics, the organic layer, which includes living beings, is the subject of biology. The soul layer, where living beings are limited and consciousness is at the forefront, is often the subject of psychology. Lastly, the fact that the field that deals with the spiritual layer is philosophy proves that the concept of spirit brings out the abilities of thinking, questioning and interpretation (Çelebi, 2014).

As a result of the researches done, it has been seen that the concept of spirit, which originates from philosophy, plays an important role in situations that appeal to the human soul. This situation has established a connection between spirituality and art. The artist, who aims to appeal to the human soul, creates an interiority with his art, thus achieving a meaning. Kandinsky, who carried out his works with this idea, argued that the sine qua non of art is spirituality and exemplified the relationship between interiority and soul by likening it to the beneficial relationship between the body and sports (Eroğlu, 2017). This inner state that exists in art allows for a spiritual state in architecture because it should not be forgotten that architecture is not only a formal discipline such as producing forms but also an art that can add meaning to space, provide people with an inner experience, and arouse various emotions such as excitement, peace, curiosity with the messages it gives. This situation creates the spiritual dimension of architecture (Figure 1).

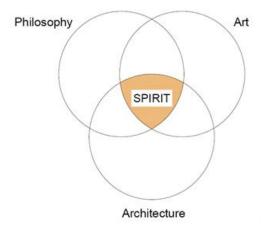


Figure 1. Common Concept in Philosophy-Art-Architecture Relations: Spirit (Created by the Author).

Rudolf Steiner, one of the important philosophers who includes the relationship between philosophy-art-architecture in his works, argues that the physicality of human beings is visible, but the existence of the soul is hidden as you go down to the essence. By associating this hidden state with the secrecy in art, Steiner states that the soul is the art in the essence of human, and according to Steiner, the perception of this art is realised through spirit because human exists in the concrete world with his/her body and in the inner world with his/her soul. With his/her spirit, he has an openness in both worlds (Steiner, 1987). Although Steiner did not have an architectural education, he worked as an architectural consultant for many buildings between 1908 and 1925. According to Steiner, who expressed architecture as an intuitive art, the form of the building serves as a shell and should give clues about the hidden power within

this shell. This hidden power is the spiritual expression in the perception of space (Geçer, 2010).

In addition to philosophers such as Steiner, architects who advocate this relationship were looked for in order to help comprehend the issue of spirituality in architecture. As a result of the researches, many examples for such architects were found and it was thought that their comments on the subject were supportive of each other. For example, Louis Kahn, who is world-renowned and has signed many important buildings, defined architecture as a spiritual quality and argued that this quality is a state of perfection (Tanrıyar, 2017). Juhani Pallasmaa, one of the world-famous names who shed light on the theoretical aspect of architecture not only with his buildings but also with his books, also supported this situation by saying that we define ourselves as full beings with embodied spiritual and that we can experience this definition in depth through meaningful architecture (Pallasmaa, 2018). Meaningful architecture, adding meaning to the space, dialogue established with the space, etc. are all expressions in which the spirit adds value, causing the person to establish a bond with the space where he spends time and to feel safe and peaceful. Considering this situation, there have been factors affecting the spiritual situation in the human-space relationship. The physical factors that help the realisation of this spiritual expression have been classified as a result of literature researches. Thus, it is aimed to draw attention to the abstract-concrete relationship by showing the existence of concrete factors to transfer an abstract situation.

3. Physical Factors in the Spirituality of Architecture

The exterior appearance of a building sometimes gives clues about the interior, and sometimes it may have a form that will make the interior even more intriguing. With this in mind, the physicality of the building can be defined as the first acquaintance with the building. This first acquaintance should contain a meaning, and this meaning is made visible by the shaping of the form. The concept of emptiness, which plays an important role in the formation of the form, sometimes indicates fullness and sometimes shows that absence can also mean something, which led to the concept of emptiness to be addressed in a separate sub-heading in this study. The concepts of light, colour and texture, which are parameters that directly affect human psychology and produce meaning and emotion in spaces, were determined as other sub-headings in line with the research conducted.

3.1. Form

Form is the formal expression of architecture and is a phenomenon that can carry meaning according to different views. This form of expression dates back to ancient times and has been evaluated from many different perspectives such as psychological, sociological, political, anthropological, cultural and religious. An example of this is that holistic thinking according to human measurements can be interpreted anthropologically, and soft/sharp etc. lines and geometry can be interpreted psychologically. Although it varies according to many factors such as period, time, culture and climate, form always aims to tell something, and the designer who is aware of this can freely transfer with form (Ünügür, 1989). With this freedom, the expression of spirituality can manifest itself even before entering the structure. The rate of this is determined according to how much curiosity the designer wants to arouse in the person.

Curiosity increases a person's desire to learn more about a place. Therefore, it can be said that this first encounter opens the door to positive or negative emotions. Along with curiosity, many contrasting emotions such as grandeur/simplicity, gloom/peace can be highlighted with form as an expression of the feeling in the interior.

When we talk about architecture, it is possible to talk about an art formed by forms. This art is fuelled by the strong bond established between form and essence (Eriç, 2011). Thus, each detail such as proportion, symmetry, rhythm, hierarchy, style, balance, which gives the form a character, establishes a relationship with the interiority of the form. Among these details, the concept of emptiness, which depicts the existence of absence, can strengthen spirituality by showing a mystical effect at the end of the internal relationship it establishes.

3.2. Emptiness

The definition of the concept of emptiness, which is often referred as absence and nothingness in architecture, is not so limited. Emptiness can be experienced, interpreted and even evaluated. The emptinesses that exist both on the facade plane and in the interior spaces of an architecture are actually parts of the design. In the design of a space, not only surfaces and objects but also emptinesses are designed. It can be said that the design of the emptiness is an extremely important and meticulously realised situation. Many factors such as location, size and shape affect the meaning of the emptiness. In the history of philosophy, especially in Eastern philosophy, the mystical characteristic of emptiness has been emphasised and concepts such as motion and interiority have come along with it. The definition of human in the philosophy of Taoism founded by Lao Tzu supports the mystical state of emptiness. According to Taoism, it is insufficient to describe human as a being consisting only of flesh and blood because the human being is a being that hides the concept of emptiness in itself and at the same time is a source of spirit and inspiration (Cheng, 2006). It is seen that there is a similar view in Yin Yang philosophy. Emptiness and fullness are concepts that support and complement each other. Each of them creates a motion by expressing the visibility of the other (Topala, 2018).

Emptiness, a word we see in various definitions of space, is frequently encountered in architectural language. Zevi's (2015) definition of space as 'architectural emptiness' and Rasmussen's (2018) definition of emptiness as 'architecturally shaped space' show that there is a mutual communication in the space-emptiness relationship. While this dual relationship shapes the dimension of meaning, it also makes spirituality visible. While this visibility can sometimes be associated with emptiness within the experiencer, sometimes it characterizes holiness, hope and peace. The concept of emptiness, which indicates the presence of fullness, brings with it various emotional states and expects the experiencer to attribute meaning to it with their spiritual being. Light, colour, texture parameters, which are among the other factors that are effective in making spirituality visible, also emphasize the message that architecture wants to give in its physicality.

3.3. Light

Light appears as a design input with much deeper meanings besides its illumination feature. The concept of light, whose existence, use and even diversity of use dates back to ancient times, is indispensable for the realisation of the ecological cycle and the continuity of life.

The direct relationship between light and life has caused it to take its place in architecture. Sometimes natural light and sometimes artificial light has provided legibility in architecture and affected the dimension of meaning. It is because light in architecture, in addition to its basic function, provides spiritual and mystical character gains to the atmosphere of the space by creating spatial dynamics. This spiritual value touches people's world of feeling (Kutlu, 2001). Many architects who realised their designs with this consciousness gave a special place to light in their buildings. In fact, light has been frequently included not only in buildings but also in the definitions of architecture, such as in the sentence addressed to an architect by saying 'the man who plays with light' while introducing Louis Kahn or in Le Corbusier's statement 'Architecture is the correct, skilful and marvellous play of masses under light' (Corbusier, 2013).

In addition to the individual role of light on the space, it also strengthens the aesthetic perception with its cooperation with shadow. This combination activates different emotions of the human being and leads to a variety of meanings attributed to the space. Since the proportional use of light and shadow will create a balance belonging to that space, soul identity comes to the fore and spirituality is strengthened (Altan, 1983).

3.4. Colour

The concept of colour, which exists in every moment of our lives, in everything our eyes see, sometimes in our sentences, sometimes in our thoughts, has always manifested itself in architecture. Colour also appears in the transfer of different emotions. While we use more vivid and contrasting colours in energetic, dynamic, accentuated spaces, in calm spaces we prefer softer colours that do not put pressure on each other but are in harmonic relationship. In this way, the colour palette is determined according to the function of the space, as well as the colour choice which depends on variables such as gender, age and culture. In addition to these, it also has a feature that affects the human soul even in the first encounter. In many psychological studies, it is seen that colours are an effective factor in conveying various feelings such as excitement, fear, peace, happiness and mourning. In general, colours have the power of expression and architects use this as an important tool in their buildings.

Eroğlu (2017), based on Kandinsky's relationship with colour, states that colour is noticed through the sense of sight and that this realisation turns into short-term physical sensations with a sense of curiosity. Then he adds to his conclusions that this superficial state can get rid of superficiality and deepen with the openness of the soul and thus leave permanent feelings in the person. Thus, the transformation of soul openness into spiritual sensation contributes to the architect's expression in space.

3.5. Texture

The concept of texture, which evokes a concrete contact while recognising the space, activates both visual and physical sensation as it brings along the material factor in space design. The

texturality of the material used integrates with the space and provides information about the space to the experiencer such as soft, hard, medium-hard, rough, and slippery. Thus, while texture offers a visual dynamic, it also makes sense of the space with the sense of touch (Erkartal & Ökem, 2015). This situation shapes the perception of the experiencer, and when evaluated from an architectural perspective, the texture of the space gives it a sense of identity. Thus, a space with essence acquires an identity. For this reason, it can be said that texture is not only a design element but also a feature that shapes the character of the space and directly affects its atmosphere (Kılıç, 2020).

The interaction of texture with colour and light within a space can also be observed. Strengthening the effect that the texture aims to convey is possible through the correct use of colour. Otherwise, the perception of the intended message may remain weak. In the relationship between texture and light, the structural expression of the building is also present. Most often, reflections arising from the combination of natural light and form occasionally make room for shadows, creating a textured effect in the space. This, in turn, provides visual depth and a mystical effect (Erkartal & Ökem, 2015).

4. Analysis of Examples

Since the subject of the study generally encompasses spirituality and deals with a situation where feeling is prominent, concrete examples were looked for to strengthen its comprehensibility. The research was conducted within the framework of the spiritual condition in the relationship between architecture and humans. In the selection of examples, firstly, it was paid attention that the designer has a certain philosophy. It is because the architect who tries to convey his philosophy with his structure sheds light on the richness of meaning. This meaning comes to light with the spiritual existence of the person. Therefore, the architects of the selected sample structures were also investigated separately. Details such as the designer's perspective on architecture and the concept of living space were at the forefront in the selection of examples. After creating a certain sample pool in this way, the effectiveness of the factors which are determined as form, emptiness, light, colour and texture considering literature researches made the sample selection a little more specific. Finally, the analyses of these determined examples were made and the analysis tables were named as Table 1, Table 2, Table 3, Table 4 and Table 5 respectively.

In the example analyses, the architect's philosophy was first addressed, and an attempt was made to understand the philosophy that influenced the creation of the building. Then, the physical factors that were thought to be influential in the spiritual relationship were interpreted in terms of their roles on the building. Finally, it was considered that the building 'breathes' with its experiencers, and thus, attention should be given to visitor comments. This is because it is humans who make the spiritual relationship visible, and the feelings of the person experiencing the space are very important in this context. For this research, visitor comments on the building analysed on the certified website tripadvisor.com.tr were examined. The steps of collecting data and analysing data using qualitative research method were carried out. In the comments reviewed, it was observed that opinions on the traces left by the building on its experiencers are a form of expressing spirituality. Based on this, a concept map was created using words related to spiritual expression, according to their frequency of use in the comments of

experiencers. The statements that contributed to the formation of concept maps were determined from the comments of 453 participants in Ronchamp Chapel, 1690 participants in Kimbell Art Museum, 4585 participants in Jewish Museum Berlin, 44 participants in Bruder Klaus Field Chapel and 299 participants in Kolumba Museum.

Table 1. Analysis table of Ronchamp Chapel (Created by the Author).

T1 RONCHAMP CHAPEL

Le Corbusier / Ronchamp, France / 1955

DESIGN PHILOSOPHY

"Architecture, outside and beyond construction problems, is an artistic reality, an emotional phenomenon... Architecture is the pure creation of the soul" (Corbusier, 2013).

Le Corbusier

Form



This chapel, with an exterior sculptural rigidity and an interior softness of spirituality, hides its essence for those who experience it inside. The strikingness is created by softening the rigid planes with small openings (Figure 2: Ronchamp Chapel, Le Corbusier, n.d.).

Emptiness



The minimal-sized openings on the facade, varying in dimensions and depths, guide the light that enters. Additionally, the gaps left between the wall planes cause the structure to reject stability, pushing the experiencer towards infinity (Figure 3: Ronchamp Chapel, Le Corbusier, n.d.).

Light

PHYSICAL FACTORS AFFECTING SPIRITUALITY



Light is the focal point for this chapel. The concept of light, which is small in quantity but effective, produces a dim environment with shadow plays and feeds the mystical atmosphere intended to be created inside (Figure 4: Ronchamp, 2017).

Colour



The limitation of the small but deep emptinesses opened on the facade with coloured glass causes the light that enters the interior to play with colour, and the spiritual dimension of the light-colour combination emerges (Figure 5: Pinterest, n.d.).

Texture



In order to emphasize the spiritual appeal of the softness of the use of light, a hard texture is preferred and the strikingness of contrasts is seen in the texture and light combination (Figure 6: Ronchamp, 2017).

CONCEPT

art mysticism harmonic atmosphere masterpiece

magical influential exciting attractive amazing

instil peace contemplation meditation calm/relaxing

Table 2. Analysis table of Kimbell Art Museum (Created by the Author).

T2 KIMBELL ART MUSEUM

Louis Kahn / Texas, ABD / 1972

DESIGN PHILOSOPHY

"The poet thinks about beauty and existence. But poetry is only a donation, a less poetic donation... The product of architecture is nothing more than a gift of the spirit of architecture and its poetic beginnings" (Tanrıyar, 2017).

Louis Kahn

Form



The soft, curved lines and juxtaposition of the units that make up the form show that the building has a serene character, far from chaotic perception (Figure 7: Fracalossi, 2011).

Emptiness



The museum, which is generally seen to have a closed form, has thin emptiness details between the wall and the roof. This detail balances the existing rigid and fixed attitude by giving the building a sense of freedom and lightness (Figure 8: Kimbell Art Museum, Louis Kahn, 2015).

Light

PHYSICAL FACTORS AFFECTING SPIRITUALITY



The use of light within the structure is at a level that does not tire the eye but makes its presence known and turns it into a work of art, almost exhibited (Figure 9: Daylight & Architecture, n.d.).

Colour



The calm colour on the exterior of the building gives way to a silver colour on the interior, extending from the top plane to the wall plane. The brightness of the silver colour surprisingly emphasizes the perception of dynamism in the interior combination emerges (Figure 10: Kimbell Art Museum: The original Louis Kahn building, 2014).

Texture



The diversity of materials that influence the character of the building also shows the unity of different textures. Textural materials such as concrete, glass, metal and oak play a common role in conveying the calmness and elegance of the building (Figure 11: Kimbell Art Museum, Louis Kahn, 2015).

ONCEPT

influential **Gem** great atmosphere treasure peace breath-taking fascinating unbelievable masterpiece contemplation amazing art architectural the calmness of the place admirable

Table 3. Analysis table of Jewish Museum Berlin (Created by the Author).

T3 JEWISH MUSEUM BERLIN

Daniel Libeskind / Berlin, Germany / 1999

DESIGN PHILOSOPHY

"The language of architecture is mysterious because, like any other language, it is composed of a material reality, but it speaks a spiritual language and this spiritual language is the world itself. It is about the sky, it is about the earth and memory. It is about the fire of dreams" (Şenol, 2005).

Daniel Libeskind

Form



The strikingness of the concept of the building is also expressed formally. The zigzag form of the building, with its sharp lines, refers to the sharp meaning in the interior space (Figure 12: Jewish Museum Berlin, n.d.).

Emptiness



The emptinesses encountered in the structure expresses the emptiness left by emotions such as helplessness and uncertainty (Figure 13: Bianchini, 2024).

Light

PHYSICAL FACTORS AFFECTING SPIRITUALITY



The small illuminations in the structure dominated by darkness convey the meaning that there can be hope even in desperate situations (Figure 14: Jewish Museum Berlin, 2017).

Colour



The pessimistic atmosphere of the building is supported by the colour factor. The darkness dominated by black and its tones bring negative emotions to the forefront combination emerges (Figure 15: Bianchini, 2024).

Texture



In one of the corridors that must be travelled through in order to progress through the building, there are many iron plates in the shape of faces, and the experiencer consciously causes an uncomfortable contact by stepping over them (Figure 16: Avcı, 2013).

CONCEPT

spatialization of emotions splendid enormous spooky atmosphere extraordinary

dramatic effective appalling inspiring blood-curdling

a living museum

Table 4. Analysis table of Bruder Klaus Field Chapel (Created by the Author).

T4 BRUDER KLAUS FIELD CHAPEL Peter Zumthor / Mechernich, Germany / 2007

DESIGN PHILOSOPHY

"I like the idea of constructing spatial sequences that guide and accompany, but at the same time release and seduce, the internal organisation of my buildings" (Zumthor, 2010).

Peter Zumthor

Form



The structure, which has simple, plain and clear lines, aims to focus on the feeling by preferring not to give a clue about the interior (Figure 17: Bauza, 2018).

Emptiness



The emptiness at the top allows contact with the sky, while the many small gaps in the facade allow light to enter the interior, inviting a play of light in the interior (Figure 18: Bauza, 2018).

Light

PHYSICAL FACTORS AFFECTING SPIRITUALITY



The sacred effect of the light filtering in through the emptiness on the hill and the mystical effect of the light filtering in through the gaps on the facade show that the light factor establishes an association with the function of the building (Figure 19: Aydın, 2007).

Colour



The first encounter with the building reveals the modesty of the light sand colour, while the interior is dominated by the dark colour with a contrasting effect. This emphasises the mystical atmosphere in the interior (Figure 20: Moody, 2019).

Texture



This chapel, which has undergone many processes such as gathering tree trunks together, moulding, pouring concrete, burning the wood during the construction phase, has finally created its own texture with the fumigation method and emphasised the concept of essence (Figure 21: Fahey, 2020).

ONCEPT

peace fascinating the mental rest a special atmosphere unique

silent power extraordinary
the connection between heaven and earth
influential
re breath-taking deep

calm

inner beauty

Table 5. Analysis table of Kolumba Museum (Created by the Author).

T5 KOLUMBA MUSEUM

Peter Zumthor / Cologne, Germany / 2007

DESIGN HILOSOPHY

"The buildings that impress us always transmit a strong emotion to us through their space. They surround and activate in a special way the mysterious emptiness we call space" (Zumthor, 2010).

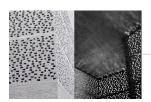
Peter Zumthor

Form



In addition to its imposing structure, its special form, which continues the old, hints that the interior blends history with modern lines (Figure 22: Kolumba Museum, Peter Zumthor, 2010).

Emptiness



The emptinesses opened on the facade to invite natural light inside serve to distribute the light in the interior space. In addition, this detail, which softens the hardness of the concrete, facilitates the realisation of internal balance (Figure 23: Peter Zumthor, Kolumba Museum, Cologne, 2012).

Light

PHYSICAL FACTORS AFFECTING SPIRITUALITY



Thanks to a proportional and shaded lighting, the visible/invisible parts of the history in the interior meet the experiencer in a dim way. While accompanying the experiencer, the light also reinforces the theme of tranquillity (Figure 24: Cordan, 2019).

Colour



The colour scale preferred in the building was chosen in a way not to suppress the ruins. Thus, the old-new unity dominant in the building is tried to be conveyed to the experiencer with the colour factor (Figure 25: Kolumba Museum, Peter Zumthor, n.d.).

Texture



Texture integrity has been realised with the new additions without disturbing the texture in the ruins. In addition, the natural light filtering in through the emptinesses in the facade offers a distinct texture effect that can be felt, but not tangible, to those who experience the interior space (Figure 26: Kolumba Museum, Peter Zumthor, 2010).

ONCEPT

very attractive harchitectural jewel matchless peaceful and refreshing fascinating special

hidden meaning deep stunning mixed feelings
I incredibly impressive

5. Findings

Within the scope of the study, 5 sample buildings were evaluated in which the physical factors determined within the scope of the study affect the spiritual effect in the relationship between space and people. Similar and different impressions were obtained in these 5 examples selected as a result of extensive research. For example, while some buildings reveal the experience they will offer at the first encounter, some buildings do not give any clues from their external form, preparing the person for a complete surprise. Thus, it was observed that the spiritual state in the buildings is sometimes visible and sometimes preferred to be more hidden.

It is also the case that even structures with different functions can resort to the same factor in order to offer a certain feeling to the experiencer. For example, while light exists as a metaphor of sacredness in a religious structure, it can appear as a product that instils feelings such as peace and hope in a museum structure, and in some cases it can appear as a product that shows that the exhibited thing is almost itself.

It is seen in the analysis of the examples that one factor is much more effective by combining with other factors. For example, it can be said that the effect of light on the building shows its effect much stronger by combining with the factor of emptiness and sometimes even with the factor of colour. This situation can also be seen in many relationships such as form-emptiness, light-texture, and colour-texture.

The architect's design philosophy, which is also included in the analysis of the examples and is considered to have an important place within the scope of this study, shows how the abstract situation becomes concrete. This situation leads to thinking, interpretation and evaluation. In the concept map consisting of visitor comments in the last part of the analyses, it was seen that the person used words as a means of expression in his/her spiritual state and it was striking that different people frequently used the same words. It was also observed that the visitor comments coincided with the philosophy of the architect. Thus, the importance of the architect's philosophy in the communication between space and people was emphasised once again. As seen in the concept maps, sometimes a place was likened to a valuable object such as jewellery. This shows that the person wants to strengthen the strong emotional state he/she experiences in his/her expression. It should not be forgotten that every experience is a unique situation, and feelings and expressions support this uniqueness.

6. Conclusion

The depth of the concept of spirit and thus the fact that people experience spaces not only with their physical existence but also with their spiritual existence is the starting point of this study. With this starting point, some physical factors that allow the meanings waiting to be discovered in the spaces to be more visible have guided the study and some inferences have been made based on the analyses made within the framework of the determined factors.

Emotions and thoughts play an active role in the perception of space. This active situation brings about a rapprochement and a spiritual interaction. With the spiritual effect, meaning production is realised. In the study, it is argued that understanding and being understood is not only a human-specific situation, but the space is also in such an expectation. The person approaches the space with the predominance of curiosity and dialogue begins. This dialogue

takes place in the form of an abstract and mutual communication. What the space wants to tell the person is hidden in the details and these details are discovered with the spiritual being of the person. It is possible to talk about a cycle created by a mutual dialogue in the form of the feelings that the space conveys to the experiencer and the meanings that the experiencer attributes to the space. This situation proves that the space is opened to rediscovery every time and exhibits a dynamic attitude.

An environment consisting of meaningful architecture allows the person to establish a bond with the space, to improve the quality of life and to discover the concept of self-consciousness in the dialogue established in the space. Otherwise, the person feels himself/herself in an insecure environment and becomes disconnected from the space. However, experiencing the space not only causes various emotions in the person, but also adds spirit to the space. Therefore, spirit is indispensable in the dimension of meaning in places.

This study, which shows that there is originality in external expression, subjectivity in interpretation, and essence in the main purpose, aims to understand the importance of spirituality in the human-space relationship. In the realisation of this goal, various perspectives and different external expressions were presented with architectural examples, and in this case, the factors determined within the scope of the study drew attention to the effective and striking role of spirituality in addition to their functional roles on the building.

Many buildings, such as the examples analysed in the study, aim to touch the soul of people and try to be memorable. Places that first call people, then welcome them inside and then leave themselves completely to interaction, have existed so far and should continue to exist. As the number of these structures increases, more experiences will come along with them. Thus, more interpretations, more diverse analyses will bring architecture closer to human beings, and the embrace of human and space spirits will be made more visible.

Declaration of Ethical Standards

The article complies with national and international research and publication ethics.

Ethics Committee Approval was not required for the study.

Conflict of Interest

There was no conflict of interest during the research process.

Authors' Contributions

The author contributed alone to the article and takes full responsibility for the content and any modifications made during this process.

Declarations

The author takes full responsibility for the content and any modifications made during this process.

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