

## 3 C's of Architectural Space

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**Abstract:** Architectural space has mainly two forms: spatial and corporeal. Within this context, the main purpose of the study is re-theming and interpreting the new connections within these two forms of architectural space by the help of three concepts; Conciseness, Continuity and Compatibility, called as the 3C's of Architectural Space. The subjects of these three are presented as an open system in order to extract transferable ideas for re-theming the meaning of space. These concepts are evaluated with their reality in built forms through on-site observation inside the selected buildings. This study approaches architectural space clarifying the relevance of design elements and providing a reference framework for them.

**Keywords:** Architectural space; Conciseness; Continuity; Compatibility

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### 1. Introduction

Part from its sheltering function, architecture acts in its own way as a mediator and horizon within the human living environment. It enables people to locate and orientate themselves and also it has mental and physiological foundations and associations (Buchert, 2014: 46). Michael Hays (2010:12) examines architecture as a way of negotiating the real, by intervening in the realm of symbols and signifying process at the limit of the social order itself. Architecture is also a specific kind of socially symbolic production whose primary task is the construction of concepts. Architecture that is always charged with the task of shaping the human habitat and has a fundamental influence on people's daily physical environment has different possibilities than the fine arts due to its degree of freedom and its constructive and technical restrictions. (Buchert, 2014 , p. 46). Space, as the medium of all these interactions, is created by natural and artificial settings that architecture involved in this process.

Beginning from Plato and Aristotle, there are so many definitions and studies on the meaning of space. The nature of the relation between architecture and space raises a number of philosophical questions in diverse disciplines like, perception (Pallasmaa, 2005; Edward, 1990), phenomenology (Merleau-Ponty, 2004; Heidegger, 1993; Bachelard, 1964) methodology (Buchert, 2013). Heidegger (1993: 358) defines space, as it is neither an external nor an inner experience; it is not something predetermined and fixed. On the other hand, Lefebvre (1998) defines space as a social product and hypothesized that `day-to-

day` life is itself alienated that it is through daily life in particular that social relationships are reproduced. (Cited in Busquet & Lavue, 2013:2). Research on architectural space often merges of with that of place. According to Tuan, (2001) the ideas "space" and "place" require each other for definition. Author particularly states that `from the security and stability of place we are aware of the openness, freedom, and threat of space, and vice versa... Moreover, while space is an open and abstract area, place is deliberated as a location, a part of space achieves its particular identity through the factors inside it. (Parsaee, Parva & Karimi, 2015,p. 370).

Architectural space, it's meaning as a part of architectural design; principles and values are the main concern of this study. Architectural space has two forms: spatial and corporeal, and space is the integrated entity of all these two forms. In this way, the main purpose of the study is re-theming and interpreting the new connections within these two forms of architectural space by the help of three concepts; Conciseness, Continuity and Compatibility, called as the 3C'S of Architectural Space. These three concepts are considered as the integrated concepts for analyzing the meaning of architectural space. The subjects of these three are presented as an open and atypical system in order to extract transferable ideas for re-theming the meaning of space. These concepts are evaluated with their reality in built forms through on-site observation inside the selected buildings. This study approaches architectural space clarifying the relevance of design elements and providing a reference framework for them.

## 2. 3C'S of Architectural Space

"Architecture is 'art' when the design of space is clearly takes precedence over the design of the objects. Spatial intention is the living soul of architectural creation."

—August Schmarsow, 1897; Cited in (Meiss, 2013, p. 130)

As the core of architecture, space is about everything related to the life itself. It is the crucial part of a very fundamental and universal form of communication. (Lawson, 2001, p. 6) In particular in this study the main concern about space is that it is an entity that is created in and around architecture. For Lawson (2001:6) architecture manages space, and its interiors and the objects covering and inhabiting its rooms can enable or inhibit our activities. Spatial form of space is defined by the influence of social practices, sociality, and also the contextual surrounding, as historicity. (Grobler & Le Roux, 2006). This dimension also covers the idea of perception, sense and experience. Additionally, corporeal form of space is not just to structure the topology of the design form, but also rather to give it a coherent and intelligible form. It carries this function by operating within the context of a symbolic system (Bafna, 2005). Moreover consideration of corporeal form in building is not merely a matter of giving visual shape and meaning to buildings, but is central to the making and understanding of spatial form as well'. (Bafna, 2003). The term also deals with the visual elements like, shape, color, texture, and size.

In this study the architectural space is discussed through these two basic forms of space by utilizing three concepts; Conciseness, Continuity and Compatibility; as a whole and overarching architectural space analyses. These three concepts called as 3C's of Architectural Space, which are considered as the integrated structure for analyzing the meaning of architectural space. They proposed as the key concepts in defining the essence of space not only as a building envelope, but also as a sociological, cultural and ideological entity that are all considered as the main features of spatial and corporeal form of space. The first concept Conciseness is about the quality of being clear and understandable that reflects the clarity and lightness of the space. The second concept Continuity is mainly about the connection of the objects, actions that have a proximity or similarity in space. Term covers integrity and movement. Compatibility is about integration of the design form with its physical settings considering the ideological and historical values, principles. The concept covers the terms; harmony, ensemble and palimpsest.

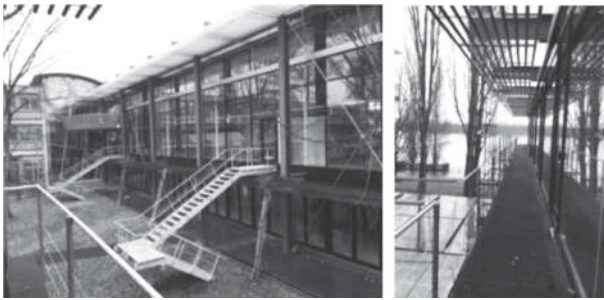
## 3. Conciseness

The term conciseness is about the quality of being clear and easy to understand: clarity, intelligibility, (Macmillian dictionary, 2018).<sup>①</sup> This term has chosen for to state the essence of use and form, clarity, lightness, openness, accessibility, simplicity and transparency. The term refers to program, function, atmosphere, but also about the meaning of the architectural solution. Moreover, the concept is also about integration of the reality in the abstraction of the form. Günter Behnisch Vogelsang Elementary School in Stuttgart/ Germany is an example, as it is the expression of purity and clarity of material and tectonic expression that the expression of this absence creates a quiet impressive feeling. (Picture 1). The simplicity of construction, clarity of material and spatial emptiness is quiet stimulating. It also conveys plural beauty, with simple geometric shapes and demonstrates that simple can be beautiful. A building is simple not because its shapes conform to elementary geometry, not because all of it is immediately visible, or because the logic is evident in its connections.



**Figure 1.** The Main Entrance (photo on the right) and Entrance Hall from inside (photo on the left) of Vogelsang Elementary School, Stuttgart Germany, Architect: Günter Behnisch, 1961 (Source: Author's achieve, 2017)

The concept conciseness is also related to the transparency that is variously attributed to material properties: the literally 'see through' capacity of glass; the necessary structural condition for democratic systems; and positions of intellectual and philosophical engagement (Wainwright, 2011, p. 32). Transparency also brings to the fore the systems and structures of spatial, political and cultural organization which form an invisible base supporting the idea of democratic cultures. According to Forty (2000: 286) literal transparency; meaning to light, allowing one to see into or through a building, was made possible by the development of frame construction and techniques for fixing large areas of glass. Phenomenal transparency; implies more than an optical characteristic, it implies a broader spatial order. (Forty, 2000, p. 287). Besides these two features; transparency approved as a structural condition for democratic systems and positions of intellectual and philosophical engagement. (Wainwright, 2011, p. 32).



**Figure 2.** Plenary Chambers, Bonn, Germany, Architect: Günter Behnisch (Source: Author's Archive, 2017)

As the symbol of democratic architecture Günter Behnisch use transparency as the principal of his architectural analogy. He do so because the ideological thinking supporting transparency posits the new architecture as the antithesis of historic state buildings the embodiment of democratic values, and the symbol of the open society. (Barnstone, 2006) (Picture 2) His transparency is a metaphor for the desired condition, as in political discourse where it is equated with openness, accessibility, and pluralism.

#### 4. Continuity

Continuity is an uninterrupted connection, succession, or union (Merriam-webster dictionary,2018).<sup>②</sup> The term refers to the connection of the objects, actions that have a proximity or similarity in space. A spatial continuity is about creating a sequence of motion systems, connection points, and spatial relations making the promotion and modifications in the metaconscious sense of order possible (Ardalan & Bakhtiar, 1973). Additionally, continuity is a principle that structures the reading of spaces that make it to construct a coherent and continuous mental image of the world and the situation. (Vinot & Conversy, 2015). Moreover, Sözmener (2012: 41) states that objects in space couldn't design independently from another, whether fixed or portable, moreover relationship between in each other should be forefront. Elements that setup the structure (walls, floors, columns, beams, etc.) have to be parts that complete each other, not parts that coupled each other. The continuity of these elements from the interior to exterior and exterior to interior, expanding the detection limit of space and create integrity between interior and exterior. Accordingly Vinot & Conversy (2015) declares that, the idea of continuity refers to a subject's ability to "link" objects, actions or events that exhibit a proximity or similarity in space or in time, to make it the parts of a whole.

Phaeno Science Center, Wolfsburg , in Germany is an



**Figure 3.** Phaeno Science Center, Wolfsburg, Germany, Architect: Zaha Hadid (Source: Author's Archive, 2017)

example to the continuity ,where circulation is stimulated by free space between the stanchions, as well as by the dynamic pointed form of the building (Buchert, 2013, p. 142). The interior space is a continuous formation with platforms, countered and inclined adjoining level formations for an overall spatial constellation, allowing people to move freely. (Buchert, 2013, p. 142). Here continuity refers to the fluidity of the design form that is integrated with the movement and links in the space. Movement through the building is a way of organizing one's experience of it, of orienting the body in relationship to something outside of itself. And also movement through the space is offering a discrete scheme that creates a dialogue and connection with a particular context.

#### 5. Compatibility

Compatibility is the capable of existing together in harmony'. (Merriam-Webster dictionary,2018).<sup>③</sup> The concept is about integration of the design form with its physical settings considering the ideological and historical values, principles. The term refers to harmony, ensemble and palimpsest in spatial and corporeal form of the building. The term ensemble comes from French word—ensemble and it means —mutually harmonious composition (Bahronovich, 2015, p. 109). Olympic stadium in Munich is an example of an architectural space that has an excellent integration, ensemble between natural environment and the design structure itself. Lin (1989) asserts that in Behnisch's work (Olympic Park), the continuous built-up roof exaggeratedly shelters a recreational area. This led to the idea of creating an atmosphere of openness, clarity and ensemble. The design idea was developed to embed the buildings in the landscape (Picture 4) . The aim was not individual buildings, but an architectural landscape that covers different forms of use. (Eckart, 2016, p. 149). Moreover the facility offers a closed appearance and be closely interwoven with the urban fabric: the urban functions coming from outside - green corridors, waterways, roads, footpaths, cycle paths

- are grasped and intensified in the terrain. The powerful movement of the existing hill is absorbed and guided through the area as a defining, three-dimensional form. (Eckart, 2016, p. 150).



**Figure 4.** Olympic Stadium, Munich, Germany Architect: Günter Behnisch (Source: Author's Archive, 2017)

Compatibility of space is also about connecting the past, present and future of the building itself being as a socio-cultural entity. As the powerful idea of compatibility, palimpsest is about an ongoing process of rewriting through time, thus linking the past with the present and future. Particularly in the contemporary architecture the idea of palimpsest becomes important for designers because it works throughout all scale levels. "Regarding buildings as palimpsest implies to read them as processes." (Verheij, 2015, p. 20).

Sandler (2016: 105) declares that the theme palimpsest is related to but identical to the concept of multi-layering. It is a constant process of erasure and rewriting scraping, and reinscription. Palimpsest was used in the works of the architects such as Daniel Libeskind, Zaha Hadid that interpreted at field of architecture including social, historical, and physical ground. This group of architects believed in context, which is living, and dynamic entity with unique ability to record the events that could have acted like continuation of peripheral memory (Rapoport, 1982; cited in Arbabiyazdi & Pisheh, 2012: 1634). Having a sophisticated coincide with the roles of museum, monument and memorial, Jewish Museum has contemplation on the museum's role in both representing and covering memory. (Stead, 2000, p. 2) (Picture.5) . Libeskind expresses the purpose of the museum as below;

"The museum attempts to give voice to a common fate: common to both what is being and what are other than being. The museum must not only inspire poetry, music, drama, etc. but also give home to the contradictions of the ordered/ disordered, the chosen/ unchosen, and the welcome / unwelcome the vocal / silent. In this sense the particular urban condition becomes the spiritual site wherein the nexus of Berlin's destiny is at once mirrored, fractured and transformed". (Libeskind, 1990, p. 48)

Libeskind calls the project 'Between the Lines', which

is the expression of two intersecting 'lines'. These lines signifying German and Jewish histories that are integrated within. (Libeskind, 1990 ). As the building has a multi-layered structure, it has an intention to link the past and present by the means to construct a bridge through the time with its fractured and transformed entity. Briefly, the building has a strong discourse reflects how landscapes, buildings and objects are layered through the passage of time. It makes us aware of the integration of many different layers with its spatial and corporeal feature.



**Figure 5.** Jewish Museum, Berlin, Germany, Architect: Daniel Libeskind (Source: Author's Archive, 2017)

## 6. Conclusion

This study is an attempt for reconsidering the meaning of architectural space where it is interpreted by three new concepts: Conciseness, Continuity and Compatibility. The reason for developing these three concepts is about remedying the deficiency in literature on architectural space that is mostly concerning the particular facets of the space. By the contents and intentions of these three concepts, architectural space could be interpreted as a whole structure that covers all two main dimensions of architectural space as spatial and corporeal form. Through the help of these key concepts, the essence of space is discussed not only as a building envelope, but also as a sociological, cultural and ideological object that are all considered as the main features of the architectural space. More importantly, these conceptions assessed the design as a form of associated ideas of the work as a vigorous commodity.

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## Annotation

- ① [https://www.macmillandictionary.com/dictionary/british/concise?q=Conciseness#concise\\_4](https://www.macmillandictionary.com/dictionary/british/concise?q=Conciseness#concise_4), Accessed May 28,2018
- ② <https://www.merriam-webster.com/dictionary/conciseness>, Accessed May 28,2018
- ③ <https://www.merriam-webster.com/dictionary/compatibility>, Accessed May 28,2018