

Developing Architecture Atmosphere and Indoor Landscape Through Proper Use of Fabrics and Construction Elements

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Abstract — This paper investigates the architectural philosophy in terms of interior design elements and its effect on the creation of architectural atmosphere through the proper use of fabrics and floor coverings, by some of the different examples that have made a unique atmosphere for each space of its design.

Keywords— *Interior design; Architecture atmosphere; Landscape; Fabrics; Interior textiles; Construction elements.; Indoor, Inside; Outside; Materials; Gardens; Curtains.*

I. INTRODUCTION

Architecture is one of the most important techniques that is applied to the buildings to achieve aesthetic satisfaction of a special atmosphere and a unique experience for each building individually. Taking advantage of all the details, materials and spaces can achieve subjectivity special to the building. The architecture has expanded to include art, philosophy, psychology and finally fashion, in an attempt to develop and create strategies that can prompt buildings' designs from a place for work and residency to a modern building, like a painting that includes many colors, details, harmonious shapes, meanings and symbolism in the internal space, taking into account its ideal compatibility with the exterior. As the buildings and spaces are a small part of its neighboring environment part, so it is important to take advantage of the natural characteristics of the environment within these designs, and attempt to link the interior with the exterior and landscapes to create a distinctive architectural atmosphere. One of the technologies that link the interior

with the exterior have been applied through the integration of textiles and fabrics within the interior designs, which contributes to the acquisition of place its historical context or meaning that could increase the experience of the place and stir the senses, by the flexibility of textiles as a structure and a surface. In addition, that it gives a space power and a unique spatial visualization, thanks to the color, texture and shape. Some of the buildings where the textile system was applied for the purpose of strengthening the relationship between the micro and the macro scale, greatly contributed to linking the architecture, decor, and the landscapes, which created a fluid atmosphere that hold many colors, details and experiences.

Organized interior design that is mixed with carefully selected textiles could represent a large and hanging internal gardens, thus create overlapping nature, but within the limits of human control over the natural properties. This paper focuses on the importance of textiles as an artistic and aesthetic objects, and tries to discover some secretly structure in the formation of the relationship between the

interior and landscaping, also the creation of an internal architectural atmosphere that contribute with the exterior nature through the organized internal environment and some details and materials of textiles such as curtains, and the floor covers that are different in the weight, size and structure, which can be controlled depending on the weather conditions, time, and the need, which bodes of architecture that excites the feeling and the senses. Also, create intimate spaces within the framework of the formation of the aesthetic and architectural atmosphere. The study has been done by studying previous references and discussing some of the examples that have adopted this concept in interior design.

II. INTERIOR ARCHITECTURE ATMOSPHERE

Spaces and buildings are a small part of its surrounding environment, where limits are usually established between them, such as walls and others, for the privacy and controlling of the physical properties of air, such as heat, sound and light. Architecture seeks achieving the relationship between the inside and the outside, which can increase the aesthetic and architectural results and helps in the ideal design processes. The Dutch designer Petra and Lois Weinthal tried to link the architecture with clothes, when they added textiles within the internal design, taking advantage of the structure of these textiles to create architectural internal atmosphere of the space, which shares the exterior through the cognition and the senses [1]. Petra said: "curtains and floor coverings are as clothing for Architecture" [2], which circumvents the body to create harmony with it, but here the curtains are attached and let free, falling, moving and don't touch the wall except with movement. In addition, she was interested in the scale and the details of the big engraving that could suggest something from nature. Perhaps because she was interested in fashion, she notes the existence of a strong relationship between the body and the art in terms of textiles and this is what drove her to the integration of textiles into the architecture as a means to create larger space and private touch. In addition to a space power, by enabling the bigger floor coverings and curtains to achieve certain effects on the blanks [2]. Here, the intention is not curtains and coverings used in conventional internal architecture, rather, it's the use of these textiles that can give meaning, but at the same time do not describe something in particular, in a try to link the interior design, landscapes and architecture, to create an architectural integrated impression. Here's the metaphor is to create new time-space relationship, and more importantly is its impact is a landscape, considering it as spaces

emerging side by side [3], and it raises our mental and tactile perception. This concept enhances the support of blanks and internal details, it also expresses the identity of the place through the forms and materials used [1]. Taking advantage of some places in the static architectural structures by adding textiles such as curtains and covers can contribute to re-refine the structure of spaces, decorations and walls to kinetic, as Sanga and Purnell said: "an imagined space that exists within the walls of a building" [1]. Textiles and structures can express themselves as if they were a unified system and there is no priority to one without the other [4].

To get the best results of the internal architecture, one must know the body's ability to understand the senses, because the design of the interior spaces depends significantly on the senses to realize interior elements, such as the light, the sound, and the used materials [5], Juhani Pallasmaa said, "The sense of touch is an integral part of our understanding of the world " [1]. The quality of texture in architecture is of great importance, an importance that may be equivalent to the visual quality, so an addition like curtains, fabrics and coverings contribute to increasing the understanding of the internal spaces as soft, malleable, and fluid, which represent a diverse and harmonious large internal garden with decoration and design that achieves a fluid atmosphere of the micro and macro scale. This is the intersection with nature in terms of color and texture, but with a different scale, and here the difference point between the concepts of a design that gives meaning and some other traditional designs in the structures. The architectural atmosphere includes the interior and exterior, so that each of them supports the other, in terms of some common communication within a large environment. Thus, both of them must be taken into consideration, without any separation. Everything should seek to attract the eyes and the senses from any perspective, whether internal or external. Promoting the dialogue between the inside and outside, by textiles creates diversity in the space that is part of it, in addition to creating different aesthetic quality of the object through the near and far distance, and this in turn increases the viewer experience to two different trials of the same object [2]. Textile is in a strong relationship with the light, sound, scenery, and creates a combination. The curtains can pick up time and chapters that are outside by absorbing the light and the sound waves, or passing it, or reflecting it. Thus enhancing an atmosphere that ensures high-quality of visual and audio experience, and the confluence of the micro and macro scale, as if it creates a nature from the internal and external [2]. "The fabric can

regulate the sound through its shape and spatial position" [6]. Therefore, a proper regulation of sound waves can be created. The colors used in the textile could increase the variation of the rest of the elements. For example, when using the black, then the white will look whiter. In addition to its movement with the wind, which makes it look lighter weight, also adds symbolic through strengthening of each other [1]. Textiles are able on creating space and spatial structures through their interaction with its surrounding space [6]. Here, the most important role for designers in terms of appropriate choices for the weight of the cloth, the structure, and the composition. Not only for aesthetic reasons, but also to pick up the light and the sound waves and the possibility of allowing it to pass or reflecting it. In addition to the functional features of the textiles that affect the experience and tell that there is something special to the place, such as its history or its importance. Gerriets has created a curtain for the Chazen Museum of Art at the University of Wisconsin in Madison, it was a good opportunity to achieve the vision and the concept of Petra on the inside and landscapes. The transparent hanging curtains allow the entry of mild light and create interaction between the shadow and the light, as well as the sound and sharing the outside, as a diverse garden of dissimilar trees, which let the light enter through its scattered branches. In turn, it creates a great opportunity to create an architectural atmosphere that's harmonious with the design elements, time and climate, as shown in Figure 1.



Fig. 1. The Chazen Museum of Art at the University Of Wisconsin in Madison. [7].

Another example, which succeeded in integrating textiles and interior architecture is the Rothschild Bank, London. It proves that textiles can support the design and atmosphere through simple emboss and the ideal materials, which make the domination of the curtain that connects the exterior with the interior and adds the finishing touches to the building. The use of golden and silver glistening pieces

gives a value and a meaning to the bank. In addition to its function in reflecting light and creating colors that achieve delight. Here the holistic design integrates the design language with the wall and the ceiling to create an architectural atmosphere that is uniform between the elements in space, the interaction of design elements, lighting and unclear vision to the outside could stir feelings and makes space catch the eyes from every angle or place inside it. In addition to, the outer part represents a unique experience for pedestrians than inviting them to enter the bank to complete aesthetic image, as seen in Figure 2.



Fig. 2. The Rothschild Bank, London [8].

There are several projects for the Dutch designer Petra where she tried to apply these techniques in the design to get an aesthetic satisfaction and a fluid atmosphere. Such as Hackney Theater in London, Casa de in Portugal and the Netherlands Embassy in Berlin and the most important example is the central library in Seattle as in Figure 3 [2], where this building proved that there is no separation between the inside and the outside and that the relationship between them could achieve a parallel aesthetic perspective by interpreting each and every one of them to the other. The threshold of the glass has been exploited to create an internal garden by photosynthesis, facing and touching the natural outside garden. This enhances the visual fluidity for the two tangled spaces, side to side, which are similar in gardens and vary in temperature, climate, sound and light [2], creating two gardens: internal and external as a mirror that reflects the corresponding image and prevents all boundaries. By this unique and new idea one can think more about adding elements like coverings to mimic the nature or the harmony of interior and exterior.



Fig. 3. Central Library in Seattle [2].

Alexandra Kehayoglou was interested in the carpet industry that reflects the nature, in an attempt to create a nature experience within indoor spaces. One of his works is a carpet that represents a diverse garden filled with plants of different colors and contrast, details and texture. The existence of the carpet in the room with an external garden which can be seen through the glass wall, creates mirror to reflect the symbolism and meanings that are involved in the real garden. Achieving a continuation of exterior garden, which has been separated by glass. Using textiles is in itself a work of art contributed connecting the external and internal relationship, as in figure 4.



Fig. 4. Carpet Gardens in the Inner Space [9].

Tempo Fair Suites is a hotel in Istanbul/Turkey, due to the large number of hotels in that region, additional to the best opportunities for this hotel in the labor market, designers must think in a unique design to get the best opportunity for bringing visitors. Since the hotels rooms are usually small, they must create a design that gives the place a greater breadth, providing comfortable rooms for visitors, as in figure 5.

The hotel has succeeded in following the modern design

approach with the integration of covers and textiles that contain the perception of nature, in an attempt to make a unique experience of the internal atmosphere, through walls' covers and floor matting in the rooms, which connected nature. Incorporating contemporary design and interior landscape in the hotel, creates the erosion of the border, adds a bigger spatial perception, additional to stirring the senses and perception, which in turn leaves the harmony between design elements and external nature by exploiting parts of static walls and adding textiles.



Fig. 5. Tempo Fair Suites hotel In Istanbul [10].

III. CONCLUSION

Architectural spaces are characterized by their own unique experience, their interior elements contribute significantly to the creation of architectural atmosphere for each space. The use of details, materials, views and other factors can boost the space power and the spatial perception by contacting with the visual, auditory and tactile sense. The sharing with nature in the light, the sound, and symbolism is one of the most important elements in the formation of the architectural atmosphere for the spaces. So, the establishment of a threshold between interior and exterior for the purpose of controlling the natural properties of the space can reduce the aesthetic experience.

Thus, it is possible to get benefit from the textiles that have been applied in architecture and internal decoration in an attempt to strengthen the internal atmosphere through its composition and properties that make it a multi-sensory. Curtains and wall coverings and floor matting have been used in some designs to represent broad internal gardens with multiple details and colors, in addition to breaking the dominant immobility in the walls and decor, thanks to the flexibility of textiles as a structure and the expression of covers, as well as the movement of textiles that create quality and different views, which in turn increases the chances of expressing different experiences of the same

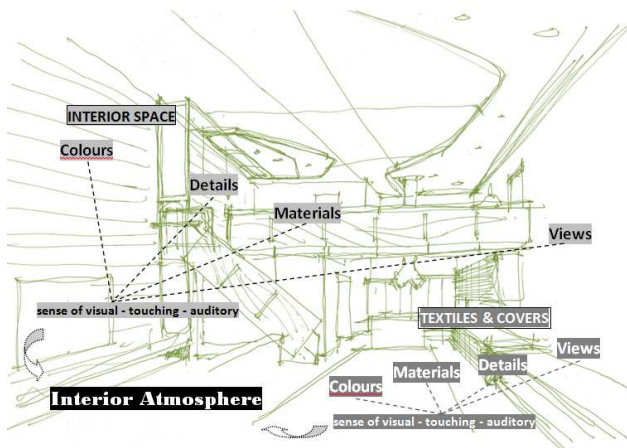


Fig. 6. The properties of design space and properties of textiles. The harmony of the space elements and the achievement of multiple senses and internal atmosphere

object, also regulating the sound and light before the reception inside the space with design elements creates a new space-time relationship and space diversity. The effect on the visual, tactile, and auditory senses with the expressions, meanings and symbolism in the internal spaces through textiles creates architectural atmosphere and unique experience of space, and makes it earn its historical context or significance through proper organization, that is harmonized with the design elements.

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