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# IMPACTS OF ARCHITECTURAL DESIGN ON QUALITY OF LIFE AND SOCIETY

## Meshal Abdulaziz Alharbi\*

Islamic Architecture Department, Umm Al-Oura University, Makkah, Saudi Arabia.

\*Correspondence: Malhrbi7@gmail.com

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#### **ABSTRACT**

Spaces are created by architecture, which gives us a language to express ourselves through our feelings. The saying that we lack the soul of our civilization with the absence of our architecture is widely accepted by academics despite the contests throughout the history of the value of architecture. Architecture like most interdisciplinary fields constantly struggles to balance between the expertise it learns from various areas that can apply in the construction process and the idea of producing anything new for the benefit of the entire community. The idea of architecture design focuses on the constituents of a construction. The goal of architectural style is to physically record human footsteps on the planet. A location's architecture reveals the local way of life, therefore, is made in a way that tells tales of those individuals from a time in the distant past. Beautiful spots have two things that make them so. The first is the natural scenic appeal of a location, and the second is a man-made design that enhances the organic stunning scenery demonstrating the value of architecture to society and the global community. The significance of architecture is discussed in this article. The journal starts with an introductory section, an insight into materials and methods applied to get this journal researched, written, and published, results, discussions, and conclusion section then a reference section. This demonstrates the value of architecture to society and the global community in terms of quality

**KEYWORDS**: Architectural design, Quality of life, Architectural Development, Culture, Architecture

# تأثير التصميم المعماري على جودة الحياة والمجتمع

مشعل عبدالعزيز الحربي\*

قسم العمارة الإسلامية ، جامعة أم القرى ، مكة المكرمة، المملكة العربية السعودية

\*البريد الاليكتروني للباحث الرئيسى: Malhrbi7@gmail.com

## الملخص

تخلق الهندسة المعمارية المساحات، مما يتبح لنا لغة للتعبير عن أنفسنا من خلال مشاعرنا. يتفق الأكاديميون على نطاق واسع على المقولة التي تفيد بأننا نفتقر إلى روح حضارتنا مع غياب الهندسة المعمارية، على الرغم من التنافسات طوال تاريخ قيمة العمارة. تكافح الهندسة المعمارية مثل معظم المجالات متعددة التخصصات باستمرار لتحقيق التوازن بين الخبرة التي تكتسبها من مختلف المجالات التي يمكن تطبيقها في عملية البناء وفكرة إنتاج أي شيء جديد لصالح المجتمع بأكمله. تركز فكرة التصميم المعماري على مكونات البناء. يتمثل الهدف من الأسلوب المعماري في تسجيل خطوات الإنسان فعليًا على هذا الكوكب. يكشف معمار الموقع عن طريقة الحياة المحلية، وبالتالي، فهو مبني بطريقة تحكي حكايات هؤ لاء الأفراد في قت ما في الماضي السحيق. تحتوي الأماكن الجميلة على شيئين يجعلانها كذلك، الشيء الأول هو الجاذبية الطبيعية الخلابة للموقع، والشيء الثاني هو تصميم من صنع الإنسان يعزز المناظر الطبيعية الخلابة والمذهلة بشكل يظهر قيمة الهندسة المعمارية للمجتمع المحلي والعالمي. ثناقش أهمية العمارة في هذه المقالة. تبدأ المقالة بقسم تمهيدي،

ونظرة ثاقبة على المواد والأساليب المطبقة بغرض بحث هذه المقالة وكتابتها ونشرها، والنتائج، والمناقشات، والخاتمة، ثم قسم مرجعي. يظهر هذا قيمة العمارة للمجتمع المحلى والعالمي من حيث جودة الحياة.

الكلمات المفتاحية: التصميم المعماري ، جودة الحياة ، التنمية المعمارية ، الثقافة ، العمارة.

## 1. INTRODUCTION

Interactions between architectural design and human psychology are critically important for today's level of social life, yet these interactions have not been used or considered in the field of design before. Furthermore, architecture and the relationship of psychology have two sides: on the one hand, successful design has distinct psychological and physiological effects on people, and on the other hand, psychology, human experience, and the nervous system influence function, and Successful design plays an important role in things. In general, the earliest examples of architecture were created as a means of protecting lives from the environment [1]. Gradually, architecture became an art form that embraced notions of subjectivity, creativity, and beauty. Today we can see architecture evolving around the world. The current state of architectural development is referred to not only as an art form but also as a subject area of psychological and spiritual well-being. For this reason, it is of great importance to study the psychological impact of architecture and interior design on the development of this industry, as it greatly affects people's emotional and psychological states [1]. The concept of optimal perceptual value is associated not only with the presence of perceivable signs, but also with perceptual recruitment, spatial discrimination, and the activity of searching for messages in the environment. Resistance can be an oversimplification and "lack of measurement".



Fig. 1: Burj Khalifa, Dubai

Fig. 1 is an illustration of the main architectural and spatial aspects found in constructions. This is an illustration of the variety in degrees of dynamism that a structure has to offer. The building above achieves its monumentality through its outstanding height. The advantages of the main architectural and spatial components with the nature of opposing subjectivity are sparse - dense, closed - open, vertical - horizontal, right plane - left the plane, and plane - bottom plane. The visual-emotional appraisal of the environment in the human mind is determined by the degree of plasticity, the degree of comfort, the degree of complexity, the degree of enterprise, the degree of dynamism, the lightness, the superiority, the degree of monumentality people develop standard

images in the process of environmental perception -environmental archetypes [2]. That is, the image of a person's place acquires typical features. Against this background, the conditions of construction of structures involved in the formation of the composition of the architectural and spatial environment include Architecture and art and themed locations of complexes in the area.



Fig. 2: Hagia Sophia, Istanbul

Architectural complexity is a major aspect that is applicable in building to achieve monumentality. This means that the building is able to achieve a degree of complexity and uniqueness that makes it stand out from other surrounding constructions. Monumental buildings like Hagia Sophia often have cultural or religious significance, as shown in Fig. 2.

In addition, in this process, the visual types of surrounding configuration are Various levels of middle accent. Background elements; large and small arrows in the composition help psychologically perfectly reflect the architectural complex in the human mind [1]. Orientation, location, and dynamics also help connect these processes. Secondary features of the composition as an addition to the building complex are Composition structure.

## 2. MATERIALS AND METHODS

A literature review of previous studies was conducted to critically analyze the impacts of architectural design on quality of life and society. We now have a far better scientific understanding of the kinds of environments people prefer thanks to numerous contemporary psychology studies. With smartphone apps that ask participants about their emotional states throughout the day and, in some cases, EEG headsets that monitor brain activity about mood, stress, and state of mind, some of these research have attempted to quantify participants' physiological responses [3]. We now know for certain that architecture does alter our mood and well-being as a result of this research and others like it. Additionally, it has been discovered that certain cells in our brains' hippocampus regions are sensitive to the organization and geometry of the areas we occupy. It is impossible to overstate the ramifications of this research for all architecture.

The design of the Caring Environments projects evaluated 38 senior care facilities in Sheffield and Rotherham while also looking into the quality of life of a representative sample of the facilities' occupants. Quality of life was assessed using well-established methods, which were compiled in a multivariate analysis against building characteristics. The nursing homes registered with Sheffield Health Authority and the residential care facilities registered with Sheffield City

Council were grouped in May 2000 into three almost similar size categories: small (less than 31 beds), medium (31 - 40 beds), and big (41 or more) [3]. The sample was roughly representative in terms of ownership and kind of residence (residential, nursing, or dual registered) thanks to stratification by size.

To connect structures and the spaces between them with human requirements and scale, the architect who designs the architectural-spatial environment must comprehend the relationships between people and buildings as well as those between buildings and the environment. Project assignments are made to appear faultless by an architect's expertise and understanding, which takes into account societal roles and social variables in particular. Open and closed form, space, image, general source of information, dominance-flexibility, heavy-light, monumental-elegant, simple-complex, urological-rational, curved-right, significant-insignificant-these are the fundamental psychological notions of the architectural spatial environment [4]. Architectural compositions that provoke emotions like happiness or sorrow focus our attention, curiosity or apathy, or calmness or tension, are also instances of architectural compositions in architectural complexes [3]. There is also, of course, a subjectively assessed scale of architectural settings that express human emotions, such as sadness, heaviness, weakness, pain, depression, discomfort, boredom, indifference, curiosity, acceptance to do something, feelings of ease, joy, recovery, activity, relief, strength, and happiness.

They pick or avoid particular aspects of the environment based on the knowledge they are given and the habits they develop. These include huge open spaces and small enclosed spaces, light-saturated light and total darkness, natural beauty and technological artifice, ceremonial official (public), and a warm, cozy dwelling atmosphere [3]. The following psychological feelings are induced by architectural tools: constancy, serenity, a certain specialization of the environment; mobility, variability, and adaptability of the environment; infinite order of the environment - a recreational area of entertainment; efficiency and environmental friendliness - production. A mechanism for capturing and describing the study's structures had to be established because they differ greatly in form, size, and age. For this goal, the Sheffield Care Environment Assessment Matrix (Scream!) tool was created [5]. This matrix was created to describe buildings in terms of their architectural style and user requirements. The method, which is based on current environmental assessment tools, especially the Multiphasic Environmental Assessment Procedure, was created after a review of design guidelines and regulatory requirements for residential care buildings [6]. The latter was created especially to evaluate nursing and residential care facilities as well as the Professional Environmental Assessment Protocol, which was created to investigate dementia care settings.

Universal, those elements of a house that every individual requires: seclusion, autonomy over where one lives, and the ability to make their own decisions, as well as the chance to engage with others beyond the home. Physical, a safe and healthy environment, comfort, and assistance for people with physical disabilities [4]. Cognitive, is the way a structure can improve the quality of life, particularly for individuals who depend heavily on assistance and may be completely restricted inside their homes. The degree to which the home can be recognized as a typical and familiar setting, as well as the support it provides to persons with special needs, are all included.

Human behavior in a given setting is psychologically dictated by the scale of architectural objects, including - large-scale environments - labor, and public space; - small-sized environments - recreation, and individuals. Three reasons why people experience emotions have been determined by several scientists in this discipline. These include the following: - kind of behavior; physiological state; and the aesthetic appeal of the surroundings [2]. There are other additional causes of emotions: Emotions that develop in response to behavior and the functional arrangement of the built environment; Emotions that develop in response to the comfortable or uncomfortable

state of the environment; Emotions that develop in response to the environment's aesthetic expression; Emotions that develop in response to "their" recognizable forms; Emotions that serve as an activator of human vitality. To comprehend the psychological effects of architecture and interior design, it is necessary to at least have a fundamental understanding of how the brain responds to various stimuli.

Joy, or the emotion of happiness, contentment, and delight, is one such component. The methods for achieving these sentiments, however, are arbitrary and have changed as human interests and the resources at our disposal have changed. An individual's attitude toward an architectural setting is revealed by their emotional response to that engagement. Without emotional stimulation, it is hard to imagine the entirety of human existence. An evaluation of emotional attributes is a generalization of a person's perspective on their surroundings, their characteristics, and the features of external stimuli. Stress has emerged as the most significant aspect of modern life in a period of rapid economic and social development. Since it is now recognized how these traits affect health, techniques such as psychedelic therapy, meditation, medicine, etc. are needed to counteract it [2]. Everyone agrees that stress may be lessened, at least in part, even though there are divergent views regarding which of the aforementioned techniques is the most effective. As a result, a lot of research is being done on how architecture and interior design might reduce stress and have other good psychological impacts.

# 3. RESULTS AND DISCUSSION

Architecture is the study of building planning and construction methods. It is a vocational degree that educates people on how to incorporate expertise and artistry into the design of homes, structures, bridges, and other structures. To elaborate further, a place's construction and equipment are typically represented by its architecture. So, when a nation is called to have "amazing architecture," it refers to its impressive and lovely infrastructure. A country or location's architectural style may include structures like mosques, galleries, bridges, playgrounds, and educational institutions, among other things [7]. Particularly, nations invest resources and attention in their infrastructure to make it as visually pleasing as feasible.

# 3.1 Architecture In Relation To Man

People are influenced by daily architecture in a variety of ways. Every element of our life is influenced by architectural styles, from the homes we reside in the lovely cafes and eateries we frequent to the workplaces we go to and the tourist attractions we visit when on vacation. Without our understanding, architecture consists of a vast range of experiences that it offers and helps us navigate through life. The architectural style is more than just a mere enclosure or place to stay safe. One should be able to feel calm, excited, and inspired by it [7]. By granting them a particular character, architecture endows the spaces with a perspective of how it requires to be used. The fundamental ideas that informed a structure's design direct how a user navigates through it [8]. In the Karla Caves, for example, a specific rhythm is created by the recurrence of columns that conclude in arches in flawless harmony, similar to how a powerful axis drives the user towards the construction in a linear fashion as seen in the Eiffel Tower, Salk Institute, and Taj Mahal. Even in our own houses, we navigate rooms in a particular way because of the fundamental layout and arrangement of those areas [9]. In a mosque, we immediately feel the urge to be calm or disciplined, yet we instantly feel at rest in our homes.

We are attracted by the beauty of famous structures and yearn to travel to new locations in search of novel experiences. People must change. Architecture creates settings that evoke feelings or jog memories, breaking up the routine of daily existence. We wouldn't be able to appreciate the beauty of variation if all areas were intended to be used in the same way. Here, it's also crucial to cast a critical eye on what constitutes good architecture, which can only be determined by discussing how it's made [9]. Due to the many different styles and functions that architecture has had to accommodate throughout history, including those of the Renaissance, Art Nouveau, Baroque, and Modernism movements, it has undergone extensive reformation and molding. Each aesthetic fad altered how people reacted to buildings and their surroundings [10]. We came to understand that recurrence may be just as beautiful as change. Because of its straightforwardness and minimalist style, a structure may appear attractive and enthralling to one person while appearing dull and repulsive to another. Even though it is created to be a work of art, a building may not serve its occupants adequately.



Fig. 3: House: Villa Savoye, 1931, Architect: Le Corbusier Style: Modernist

As was the case with Le Corbusier's Villa Savoye, as shown in Fig. 3, it would solely respond to individuals who pass by or visit it by aesthetically appealing to them but not allowing them to live there. Although it has been claimed that Villa Savoye's architectural style substantially inspired contemporary design, it also has a sinister side that very few people are aware of. After it was finished, the family did not experience the tranquility the country estate was supposed to give them. The home had a leaky roof and inadequate heating, which kept the interior damp and chilly. Due to the big glazing, it also lost a lot of heat.

# 3.2 Architecture In Relation To The Context

It is evident that individuals often unintentionally link architecture to its surroundings. When you consider the location, an image of something incredibly strange about that location immediately appears in your mind. By connecting them to recollections of a picture we have in mind, we frequently relate the places we have visited or wish to see. Unless it's an important structure that provides the place's identity, the image doesn't just show a building by itself; we also consider the surrounding urban environment. For instance, when one thinks of Makkah, they are reminded of the holy mosque and Hajj and Umrah; when one thinks of Paris, one is reminded of the charming cafes and charming streets; when one thinks of New York, one is reminded of the pathways lined with skyscrapers; when one thinks of Greece, one is reminded of the blue and white

houses on Santorini; when one thinks of Goa, they are reminded of the vibrantly colored facades; and when one thinks of Mumbai, they are reminded of the conflicting urban fabric of urban slums [10]. The concept of a critic's task by Anatole France is eloquently translated by Paul Goldberger that the greatest pleasure of construction is in the revelation of its potential, at least occasionally, to be art.

# 3.3 Architecture As A Feeling

Architects, including Pritzker Prize-winning architect BV Doshi, have frequently stated that architecture is more than just a structure in the past. He shows that those who claim that architecture is merely a means of constructing settings, moods, and narratives are incorrect. Geoffrey Bawa also claims that one can only experience architecture; it cannot be articulated. John Ruskin concludes by saying that we expect two things from our buildings. We want them to protect us and to speak to us about anything we think is crucial and that we need to be reminded of [11]. Architecture leads us, enthralls us, and serves as a constant reminder to pay attention to the world around us. Architecture can arouse emotions such as nostalgia for distant history or vivid fantasies of a better tomorrow. All we need to do is sit and pay close attention to the murmurs of the spaces, for it is by listening and paying attention to them that we both consciously and unconsciously conduct our lives.

# 4. THE ESSENCE OF ARCHITECTURE IN SOCIETY AND THE MODERN WORLD

# 4.1 Quality Of Life

Not simply the frames, roofing, entrances, and windows make up architecture. It includes numerous intricate elements that ensure people have an excellent quality of life. Buildings' aesthetic appeal draws people in and calms them. Similar to how architectural elements have changed over time in response to human comfort and life quality [11]. The usage of an elevator in place of stairs is one such straightforward illustration.

# 4.2 Architecture Shapes A Community

The architecture of a society is designed to meet all of the fundamental requirements of its members and create a sense of community. Hospitals, schools, universities, neighborhoods, markets, etc. are all necessities for leading a proper existence. In addition to that, a civilization may have expensive architecture that adds a little entertainment value for people [7]. These consist of theaters, recreational places, museums, dining establishments, etc. These factors work together to shape a neighborhood.

# 4.3 Flow Of Economy

The advancement of architectural style and the establishment of infrastructure are ways to assure the smooth operation of the economy in contemporary economic systems. Architecture is one of the industries that generate the highest profits today and benefits both individuals and nations [9]. Additionally, developed nations make investments in the buildings and infrastructure of less

developed or emerging nations. Additionally, this demonstrates the positive trade linkages and political ties between nations.

# 4.4 Architecture is a Representation of Societal Development

Infrastructural development and architectural styles are indicators of a society's overall success. People are constantly in awe of the stunning buildings [10]. People are drawn to it for a variety of reasons, including the fact that stunning architecture demonstrates the modernism and advancement civilization has attained.

## 4.5 Cultural Presentation

A place's architecture and infrastructure are a direct indication of its culture. Each structure exhibits various aspects of the local culture, ecology, and other external factors. The most noticeable cultural reflection throughout history has been in architectural styles. The Empire State Building, Christian churches, mosques, the Taj Mahal, and the Roman Coliseum are a few examples of structures that represent several cultures [7]. The civilizations and histories underlying each of these structures are reflected in the structure itself.

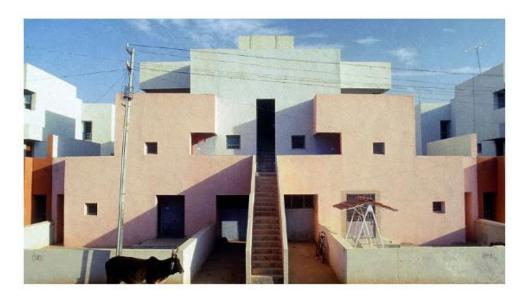


Fig. 4: Sangath, BV Doshi's Office, Ahmedabad

For instance, the shown above building in Fig. 4 is structure made from a modernist approach but with a fuse of Indian lifestyles. For this reason, the building has become a sanctuary for sustainability, art and an expression of culture. This building is unique because it can go through mutation while keeping the order of its making.

## 4.6 Trademark

Although architecture may appear to be just a neighborhood's assemblage of buildings, it is a distinct discipline that calls for the application of scientific principles and innovation for improvement. The use of antiquated methods in the present era is inappropriate and automatically eliminates people from the competition [11]. Modern architecture is necessary for a country's development in other sectors like tourism, education, health care, etc. Separate funding is given to the research and development department to help them come up with innovative ways to improve facilities and architecture.

## SUMMARY AND CONCLUSIONS

From the aforementioned illustrations, it can be inferred that every inanimate object we come into contact with, including the fundamental elements of man-made architecture and interior design, is derived from the human body or a living thing. These characteristics are also connected through these features. We can observe that it has a connection to and affects overall. In turn, this can improve the psychological effects of scale, pattern, and even color in the architecture and interior design produced by architect-designers, improving people's sense of enjoyment in their social lives and assisting them in overcoming sadness. Regulation of residential care facilities for vulnerable individuals is necessary and appropriate. The fact that residents should have a choice in their living environment is undeniable, yet there are some areas where it can be claimed that a restrictive regulatory regime is stifling innovation and resulting in a uniformity of design. Access to facilities used for food preparation and laundry handling is limited to employees only because of the sensitivity of users to infection and disease, which necessitates strict health and hygiene requirements. A risk-averse culture is fostered by concern for individual safety, pressure from family members, and litigation fear. Design and briefing guidelines, particularly for facilities specialized in dementia care, emphasize the necessity of supervised settings that limit freedom of movement.

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## **CONFLICT OF INTEREST**

The authors have no financial interest to declare in relation to the content of this article.

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## **APPENDICES**

- 1. Fig 1: Burj Khalifa, Dubai Retrieved from:

  <a href="https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&cad=rja&uact=8&ved=2ahUKEwjw17S2n577AhUTVPEDHT8PCKEQFnoECBEQAQ&url=https%3A%2F%2Fwww.burjkhalifa.ae%2Fen%2F&usg=AOvVaw216pFDBg0Is-8T6hS43w12</a>
- 3. Fig 3: Villa Savoye: Retrieved from: <a href="https://www.architecturaldigest.in/content/iconic-house-villa-savoye-le-corbusier/">https://www.architecturaldigest.in/content/iconic-house-villa-savoye-le-corbusier/</a>
- 4. Fig 4: Sangath, BV Doshi's Office: Retrieved from:
  <a href="https://www.architecturaldigest.in/content/photos-9-iconic-buildings-designed-by-architect-bv-doshi/">https://www.architecturaldigest.in/content/photos-9-iconic-buildings-designed-by-architect-bv-doshi/</a>